Information Builders

WebFOCUS

Performance Management Framework

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Preface

This manual describes how to install and use Performance Management Framework (PMF). It is divided into chapters designed for authors, administrators, and users.

How This Manual Is Organized

This manual includes the following chapters:

	Chapter/Appendix	Contents
1	Performance Management Framework Overview	Provides background information on PMF capabilities, components, and rollout process.
2	Performance Management Framework User	Describes signing in to the system, navigating PMF, viewing scorecard performance reports and associated drill downs, inputting user-entered measures, entering feedback, utilizing gadgets, and scheduling alerts.
3	Performance Management Framework Author	Describes how to design a strategy for a PMF application and support it through a scorecard, create a Strategy Map that shows cause-and-effect relationships, and work with perspectives, objectives, themes, projects, processes, and measures.
4	Performance Management Framework Administrator	Describes administrative capabilities of PMF, including setting up users and their access rights, performing dimension and measure loads, and establishing system default settings.
A	Tips for Administrators and Authors	Describes tips and troubleshooting techniques to aid Administrators and Authors.
B	Catalog of Available Gadgets	Lists all of the available gadgets for PMF dashboards, along with a brief description of each.

Documentation Conventions

The following table describes the documentation conventions that are used in this manual.

Convention	Description

`THIS TYPEFACE`
or
`this typeface`
	Denotes syntax that you must enter exactly as shown.

`this typeface`	Represents a placeholder (or variable) in syntax for a value that you or the system must supply.
`underscore`	Indicates a default setting.
this typeface	Represents a placeholder (or variable), a cross-reference, or an important term. It may also indicate a button, menu item, or dialog box option that you can click or select.
Key + Key	Indicates keys that you must press simultaneously.
`{ }`	Indicates two or three choices. Type one of them, not the braces.
`[ ]`	Indicates a group of optional parameters. None are required, but you may select one of them. Type only the parameter in the brackets, not the brackets.
`|`	Separates mutually exclusive choices in syntax. Type one of them, not the symbol.
`...`	Indicates that you can enter a parameter multiple times. Type only the parameter, not the ellipsis (...).
`.` `.` `.`	Indicates that there are (or could be) intervening or additional commands.

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To learn about the full range of available support services, ask your Information Builders representative about InfoResponse Online, or call (800) 969-INFO.

Information You Should Have

To help our consultants answer your questions effectively, be prepared to provide the following information when you call:

- ❑ Your six-digit site code (*xxxx.xx*).
- ❑ Your WebFOCUS configuration:
  - ❑ The front-end software you are using, including vendor and release.
  - ❑ The communications protocol (for example, TCP/IP or HLLAPI), including vendor and release.

- The software release.
- Your server version and release. You can find this information using the Version option in the Web Console.

- The stored procedure (preferably with line numbers) or SQL statements being used in server access.
- The Master File and Access File.
- The exact nature of the problem:
  - Are the results or the format incorrect? Are the text or calculations missing or misplaced?
  - Provide the error message and return code, if applicable.
  - Is this related to any other problem?
- Has the procedure or query ever worked in its present form? Has it been changed recently? How often does the problem occur?
- What release of the operating system are you using? Has it, your security system, communications protocol, or front-end software changed?
- Is this problem reproducible? If so, how?
- Have you tried to reproduce your problem in the simplest form possible? For example, if you are having problems joining two data sources, have you tried executing a query containing just the code to access the data source?
- Do you have a trace file?
- How is the problem affecting your business? Is it halting development or production? Do you just have questions about functionality or documentation?

User Feedback

In an effort to produce effective documentation, the Technical Content Management staff welcomes your opinions regarding this document. Please use the Reader Comments form at the end of this document to communicate your feedback to us or to suggest changes that will support improvements to our documentation. You can also contact us through our website *http://documentation.informationbuilders.com/connections.asp*.

Thank you, in advance, for your comments.

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Chapter 1

Performance Management Framework Overview

This chapter describes the capabilities, components, and rollout process of Performance Management Framework (PMF).

These topics are relevant for administrators, authors, developers, analysts, and consumers, including executives, managers, and workers.

In this chapter:

- Introduction to PMF
- Working With PMF
- WebFOCUS Components Used by PMF
- Finding It: Authors
- Finding It: Administrators
- Shared Roles for Authors and Administrators
- Finding It: Analysts
- Finding It: Consumers
- Finding It: Developers
- Finding It: Installers
- Milestones in the Performance Management Process

Introduction to PMF

PMF is a WebFOCUS application that allows your enterprise to store and track metrics, and aggregate these metrics into scorecards to evaluate your enterprise goals. It also provides tools to help you keep the metrics updated with current data. PMF metrics are multi-dimensional, which lets employees at all levels track their own progress and see how their work integrates with overall enterprise strategy.

It takes advantage of many of the capabilities of WebFOCUS, including tabular and financial reporting, user configuration, document distribution, and security.

Working With PMF

PMF utilizes standard tools, including tabs, trees, views, and forms, to provide advanced capabilities in three core areas:

- **Strategy.** Your strategy is how you to select, organize, and align your goals, or objectives. Your goals are what you want to have happen. They start with words like improve *or* increase, have specificity, and contain timelines.
- **Metrics.** In PMF, metrics are linked to your business goals, or your strategy. Metrics are seen as the percent achieved towards a target, and not a specific value, such as an individual sum.
- **Actions.** In PMF, Actions, or projects, are your initiatives. Their role is to create a change in goal performance. Projects are linked to your goals and use details such as tasks and milestones to help you successfully reach the goals they are aligned with.

PMF delivers these communication, collaboration, and analysis capabilities through the following functionalities:

Strategy:

- **User-friendly Scorecard Setup.** All work flow for adding, changing, and deleting scorecards and scorecard data, and input of strategies, perspectives, objectives, measures, and themes is done through user-friendly, web-based forms and wizards.
- **Thin-client Strategy Map.** Unlike many other systems, PMF includes a built-in interactive Strategy Map. Based on industry-standard Scalable Vector Graphics (SVG), the Strategy Map has a live relationship to underlying scorecards and data and allows you to save your changes to the underlying scorecard. This gives you an easy-to-use graphical method for updating the strategic flow of your organization.
- **Scorecard Inheritance.** PMF lets you cascade your scorecards so that you can create a top-level scorecard for high-level management, then let your scorecards for other levels of the organization hierarchy inherit one or more aspects of the management scorecard.
- **To-Do Lists.** The Strategy To-Do List enables you to quickly view progress as you assemble and maintain Strategic scorecards. The list analyzes the steps that you have already taken to assemble these scorecards, and shows you what you need to do next to complete your strategies.

Metrics:

- **Planning, Budgeting, and Forecasting.** PMF has the capability to plug in standard budgeting and forecasting applications. These can be Information Builders-produced, or external budgeting or forecasting systems. An open API allows you to integrate any forecasting application with PMF in order to allow PMF data to be used in the forecasting tool, and to allow output of completed forecasts into PMF to create targets.
- **Powerful Analytics.** PMF has a full suite of views that allows analysis of your organization metrics both with and without a strategic component. In PMF, there are many ways you can slice and dice the multi-dimensional metrics. Structured ad hoc tools provide full ad hoc capability, so you can design information presentations in millions of ways. PMF data is easy to integrate with the financial, process, and operational data for your enterprise. These powerful analytic tools enable you to trend, track, and discover the why behind the performance of your organization.
- **Dashboard Designer.** The Dashboard Designer is a design canvas that lets you assemble any Dashboard you want. You can configure and customize different Dashboards using the set of available gadgets listed in the Gadget Catalog. These gadgets provide you with multiple ways to summarize your metrics, communicate performance trends, distribute information to constituents, and show important metrics.
- **Multi-Dimensional Data.** PMF has a built-in, cross-platform OLAP database that can be installed and used with any RDBMS. The database permits assigning measures to relationships with standard dimension types (for example, Location, Product, Customer, Time, Organization). In PMF, you can create up to 15 user-defined dimensions.
- **Standard Analysis Views.** PMF includes a pre-packaged set of financial, user, customer, location, time, and trend views that allows you to be instantly productive with the application as soon as it is deployed. You can also use the powerful ad hoc reporting capability of WebFOCUS to create any other views you need.
- **Customizability.** Every aspect of PMF is developer customizable. The scorecards, windows, forms, style sheets, and the underlying database are built with production WebFOCUS components. You can use WebFOCUS capabilities to change, revise, or extend any part of PMF.

Actions:

- **Alerts.** The PMF Alerts system enables you to set up notifications that warn you if a particular goal or metric is in danger of not being reached. They can also notify you of a positive status change of a particular metric or goal. PMF Alerts can be easily created using the Alert Wizard. You can also create, view, or change alerts from the Actions gadget on your Dashboard.

- **Projects.** The PMF Projects system allows you to measure and manage projects. Using the Project panel, you can easily create, assign, track, and update the status on project-level tasks.
- **Fully Comment Capable.** Feedback blogging enables you to instantly enter feedback comments about measures and objectives in order to explain variances from targets. Each instance of feedback is stored and tracked by the user, and provides valuable data, including Owner ID, the date and time the feedback was entered, percent of target achieved, and indicator color at the time of input. PMF also captures information on how metrics are calibrated, allowing full compliance with audit standards.
- **Loading Data.** PMF built-in dimension and measure loaders allow you to design your data loads and feeds for PMF using the flexible, powerful data extraction capabilities built into WebFOCUS. Scheduling your loads and feeds is an automated process.

Note: You can access and use PMF from a standard web browser, including Mozilla Firefox® Version 2 and higher for any Consumer or Analyst role.

WebFOCUS Components Used by PMF

PMF incorporates nearly every product capability across the WebFOCUS product line. The WebFOCUS system components required for basic operation include the following:

- **WebFOCUS Reporting Server and WebFOCUS Client.** Provides a standard reporting infrastructure, including data access drivers, complex business rules, exports to Excel, HTML, and PDF, graphing capabilities, and drill downs.
- **WebFOCUS Managed Reporting.** Provides user administration, a repository for storing components, and ad hoc and OLAP (online analytical processing) tools, if you choose to expand the PMF application to include these.
- **WebFOCUS Business Intelligence Portal.** Supports the selectable views needed for each distinct role in the PMF user base. Provides a customizable user interface.
- **WebFOCUS Maintain.** Provides a platform for updating all data in the customer framework.
- **WebFOCUS ReportCaster.** Delivers alerts and schedules metric loads. Also offers a library that allows tracking and history.

Optional components include:

- **Adapters.** For data and application access.
- **ESRI.** Allows GIS (Geographic Information System) operations to be performed in the field on a mobile device, on a desktop, and throughout the enterprise.

- **Integrated Search (Magnify) Support.** PMF supports full integration with WebFOCUS Magnify, which enables you to search for feedback, measure tasks, objectives, measures, and dimension-level values.
- **Mapping/GIS Support.** PMF allows you to place Google Maps™ or ESRI in a dashboard gadget, and integrate Google Maps capabilities directly into the PMF dashboard.

Finding It: Authors

The role of author is one of the most important in the PMF design process. The main responsibility of an author is the overall metrics and strategic content of the PMF dashboard. This includes creating and maintaining strategies, scorecards, perspectives, objectives, and the Strategy Map. Authors also have input into the evaluative aspects of metrics.

For more information about the role of the author, see *Performance Management Framework Author* on page 139.

Finding It: Administrators

Administrators are responsible for maintenance of the PMF system, and its structures and controls. Administrators also typically perform the following tasks:

- Load dimensions and measures.
- Schedule and monitor regular loading to ensure that PMF data is current.
- Set up owners and roles in PMF.
- Create various other objects (such as unit of measure) used throughout PMF.

An administrator has access to all functionality in the PMF application, and administers all user access rights and permissions by assigning user roles. An administrator manages all components of the balanced scorecard.

The administrator also defines the source of the data for all the scorecard components for the initial loads and regular updates.

For more information about using PMF as an administrator, see *Performance Management Framework Administrator* on page 217. You may also want to consult the following documentation:

- *WebFOCUS Security and Administration*
- *WebFOCUS Managed Reporting Administrator's Manual*
- *ReportCaster*

- Data adapter documentation for your adapters.

Shared Roles for Authors and Administrators

PMF authors and administrators share the following functions:

- Review sources, datapoints, measures, and dimensions to ensure that the business requirements are met by the tasks being done by the administrators.
- Verify loads of strategies, measures, and dimensions.
- Verify the actual, target, and threshold amounts for each source, datapoint, and measure.

Finding It: Analysts

Analysts have access to all PMF views. They rigorously examine data at the deepest level using the PMF analytical capabilities and tools available to them. They can add comments to a scorecard that describe their analysis of the data.

For more information, see *Performance Management Framework User* on page 27.

Finding It: Consumers

Consumers display their own views, including the Strategy Map in read-only format, and provide comments on the results of a PMF scorecard.

Executives, managers, and workers are consumers. Executives and managers set targets (goals) for business objectives. They can, like all system users, add comments to a scorecard that help clarify variances from norms in measures, and provide additional contextual information about a scorecard.

For more information, see *Performance Management Framework User* on page 27.

Finding It: Developers

Developers customize PMF views and content. Typically, developers create new views against PMF data, transactional data sources, or warehouse data sources to enhance the PMF user experience. Since PMF is a fully customizable application framework, developers may also make minor modifications to PMF forms, trees, or other user interface or data components.

For more information about using PMF as a developer, see *Performance Management Framework Author* on page 139 and *Performance Management Framework Administrator* on page 217. You may also want to consult the following documentation:

- *WebFOCUS Security and Administration*

- *WebFOCUS Managed Reporting Developer's Manual*
- *ReportCaster*
- *Describing Data With Graphical Tools*
- *Creating Reporting Applications With Developer Studio*
- *Developer Studio Application Development Getting Started*
- *PMF Developer Guide*

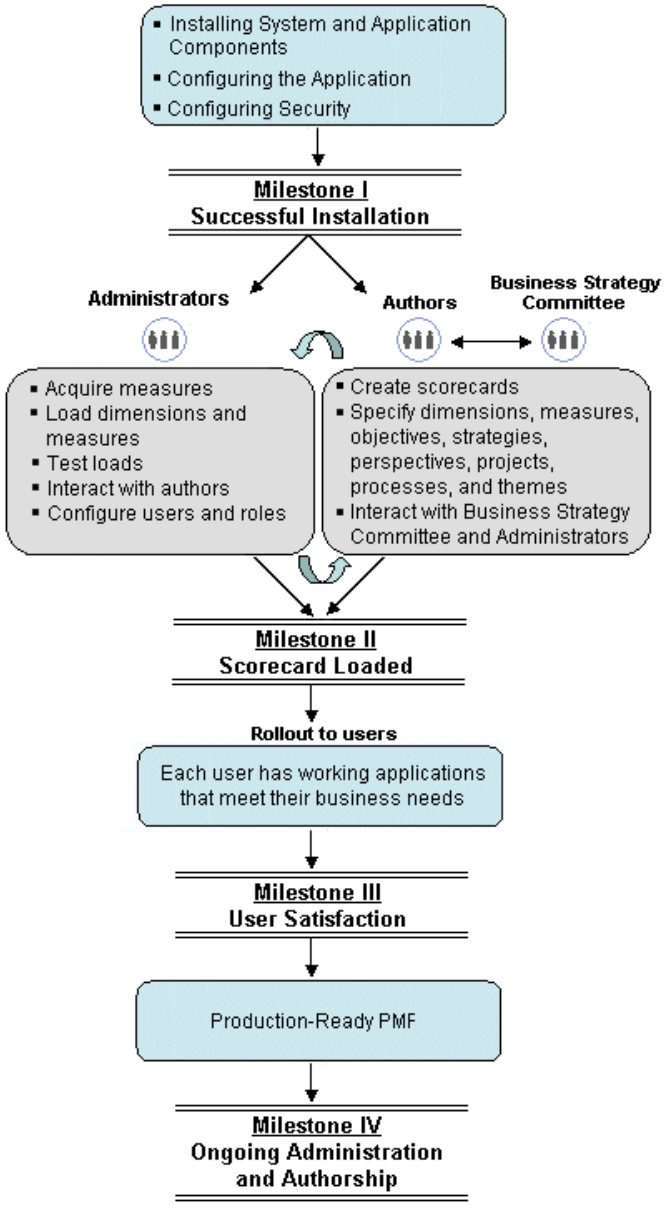
Finding It: Installers

Installers install and configure PMF, and integrate it with WebFOCUS components and any external security systems.

For more information about installing and configuring PMF, see the *Performance Management Framework Installation and Configuration Guide*.

Milestones in the Performance Management Process

The PMF rollout process usually follows a straightforward pathway, as detailed in the following image.



Chapter 2

Performance Management Framework User

This chapter provides instructions for working with Performance Management Framework (PMF) as a user.

In this chapter:

- PMF Overview
- Working With PMF Views
- Today Page
- Working With Scorecards, Filters, and Content
- Strategy Map
- Previous vs. Current and Prior vs. Current
- Rolling 5 Periods
- Executive Booklet
- Correlation
- Scorecard Views
- Objective Views
- Understanding Compound Objectives and Consequences
- Understanding Risks
- Predictive Analysis Views
- Measure Views
- Project Views
- Process Views
- Performance Views
- Properties Views
- Using the Analysis Designer
- Feedback Blogging
- Scheduling Reports and Views
- Managing Project Tasks
- Managing Alerts
- Working With Measure Tasks
- Inputting User-Entered Sources
- Working with Dashboards

PMF Overview

PMF is a WebFOCUS application that allows your enterprise to track and store metrics, aggregate these metrics into scorecards to clearly evaluate your enterprise goals, and track projects and initiatives across your enterprise. It also provides tools to help you keep the metrics updated with current data. PMF metrics are multi-dimensional in order to let you track your progress and see how your work integrates with overall enterprise strategy. PMF is a standard WebFOCUS application that runs on a WebFOCUS Reporting Server, and takes advantage of many of the capabilities of WebFOCUS.

PMF has a full suite of views that allows analysis of your organization metrics, with or without a strategic component. PMF metrics are multi-dimensional, giving you many ways to slice and dice your metrics. PMF also has structured ad hoc tools and full ad hoc capability to let you design information presentation in millions of ways. PMF data is easy to integrate with all financial, process, and operational data in your enterprise.

Procedure: How to Sign In to PMF

Note: This procedure describes how to access the default PMF sign-in window. Depending on your configuration, your sign-in window or other means of accessing PMF might be different.

1. Navigate to the following URL to launch PMF

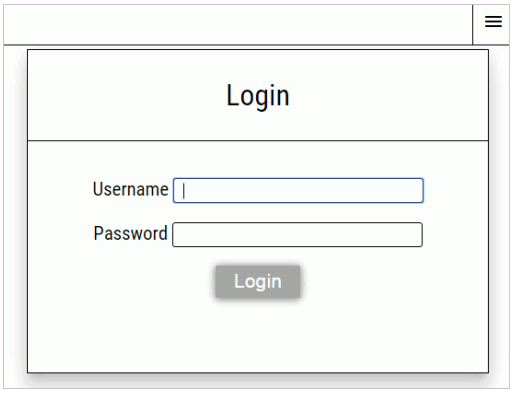
   `http://server_name/ibi_apps/pmf`

   where:

   server_name

   Is the name provided by your administrator.

   A Performance Management Framework Login panel opens.



2. Type your username and password, and click *Login*.

   When you first sign in, the Today page is the active page. For more information about the Today page, see *Today Page* on page 35.

Working With PMF Views

Views in PMF are based on analysis of the metrics contained in PMF. They can also directly focus on any operational data used in PMF and/or related to PMF metrics.

Navigation in PMF views generally uses the following components:

- **Forms,** which enable you to design presentations of PMF metrics data and interact with it in real time.
- **Metric Hierarchy Trees,** which show the dimensional aspects of metrics, enabling you to select the level of aggregated metrics you are viewing.
- **Drill-down menus,** which provide options throughout PMF views to navigate to other related data views or enter feedback by clicking hyperlinked measures, perspectives, objectives, projects, processes, dimensions, and data values.

Accessing Views

If you are a consumer, you can access and select different PMF views using the Today panel in the Content section of the Today page. For details, see *Working With Scorecards, Filters, and Content* on page 40.

If you are an analyst, you can access PMF views through panels, such as Analysis and Measures Detail, in the Content section of the Today page. For details, see *Working With Scorecards, Filters, and Content* on page 40.

Reference: Viewing a PMF Application

The PMF application uses icons in the panel of red/yellow/green stop lights, as well as gauges and charts, to show performance visually.

The following table lists and describes PMF default images and icons. These will vary, depending on how you have configured the PMF indicator sets. For more information, see *Look Settings* on page 382.

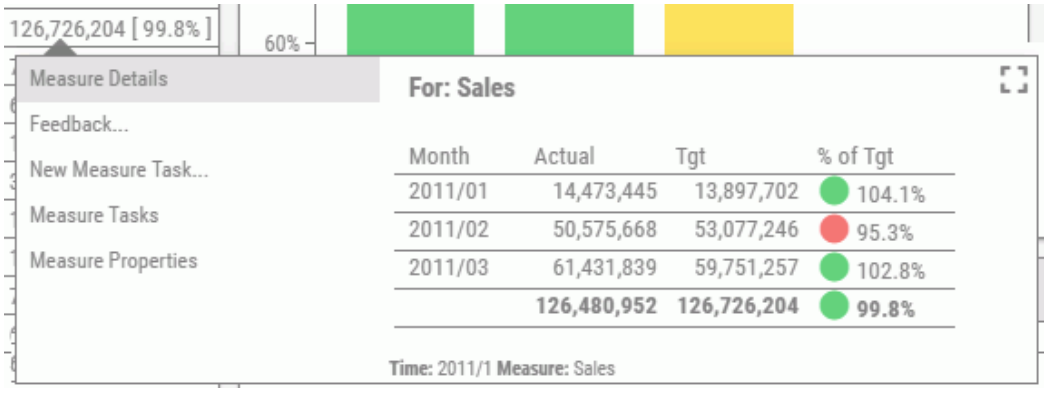
Icon	Name	Description
	Red stop light	Measurement is below the desired threshold.
	Yellow stop light	Measurement is in a satisfactory range.
	Green stop light	Measurement is in a positive range.
	No previous data	No measure is present to draw an indicator.
	Up arrow	Measurement is closer to the target since the last update.
	Down arrow	Measurement is further from the target since the last update.
	Flat arrow	There is no trending change.
	Warning metric icon	Metrics below are lower than the desired threshold.
	Project icon	Projects are aligned with the metric.
	Feedback icon	Feedback has been recorded for the metric.
	Task icon	Tasks are aligned to that metric.

An administrator can change the default indicator set (the stop lights) using the PMF Settings capability on the Manage page. For more information, see *Performance Management Framework Administrator* on page 217.

Universal Drill-Down Menus

The PMF Universal Drill system enables you to drill the same way from charts, grids, and the Strategy Map, and combines all drills seamlessly.

You can click any data visualizer in a chart, or cells in a WebFOCUS Grid gadget, to get a menu appropriate for that kind of data. The following image shows an example of metrics data.



If you right-click an object in the Strategy Map, the Universal Drill opens, and displays the proper items for these objects.

Navigating the Drill System

The following are tips on how to navigate the drill system:

- The top item on the menu, your default Content for that object, always runs automatically when the menu displays.
- You can click other items on the drill menu to run them. The Drill window displays the Content and resizes itself to fit the Content you are displaying.
- You can click the *Back* button in the Drill menu, or your browser, to step yourself backwards along the path you took.

  When drilling into data in a grid or chart, dimensional breadcrumbs display your drill path, making it easier for you to navigate backward through the drill hierarchy. The following image shows an example of a drill path.

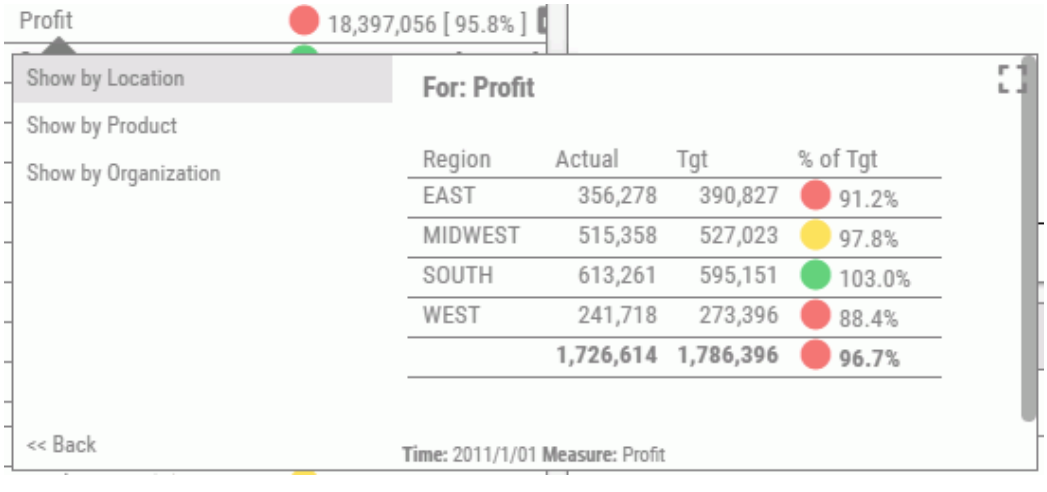
- If the Content is larger than the available screen size, the browser scroll bars will engage, and let you scroll to see more of the Content. The Drill menu stays open while you do this.

- To close the Drill menu system, click anywhere outside the menu. The menu closes automatically.

- To zoom the drill menu window to full screen, click the *zoom* icon in the upper-right corner of the Drill window. To zoom out, click the same icon again.

If you click a drill inside the Universal Drill window, the menus in the drill follow your drill path, as shown in the following image.

For example, if you click *2011/01*, the drill menus, shown in the following image, display Dimensional choices, which are what the Measure Detail grid expect.



If you continue to click new drills, new menus, in turn, replace the menus that were there, as appropriate.

For information on how to control the content visible from a drill, see *Control Drill Menus for Measures* on page 311.

Drill-Down Options

The drill-down options that are available for each hyperlinked item listed under a specific column heading are standardized. For example, all hyperlinked items in the Objective columns of PMF provide the same set of drill-down menu options. The same is true for the other columns. The following topics show the available drill-down options by column heading.

Reference: Perspective Drill-Down Options

The following drill-down options are available from the hyperlink menus in the Perspective column throughout the views in PMF.

- *Show Objectives (Curr vs. Prev)*. For more information, see *Show Objectives (Curr vs. Prev)* on page 64.
- *Causes & Effects*. For more information, see *Causes & Effects* on page 64.
- *Graph: Performance Trend*. For more information, see *Performance Trend* on page 79.
- *Related Properties*. For more information, see *Related Properties* on page 83.
- *Perspective Properties*. For more information, see *Perspective Properties* on page 82.

Reference: Objective Drill-Down Options

The following drill-down options are available from the hyperlink menus in the Objective column throughout the views in PMF. In some views, these drill-down options are also available in the Caused By and Affects columns.

- *Show Measures (Curr vs. Prev).* For more information, see *Show Measures* on page 70.
- *Causes & Effects.* For more information, see *Causes & Effects* on page 64.
- *Graph: Performance Trend.* For more information, see *Performance Trend* on page 79.
- *Aligned Projects.* For more information, see *Aligned Projects* on page 75.
- *Aligned Processes.* For more information, see *Scorecard Aligned Processes by Objective* on page 76.

- *Operational Report.* For more information, see *Operational Report* on page 73.
- *Related Properties.* For more information, see *Related Properties* on page 83.
- *Objective Properties.* For more information, see *Objective Properties* on page 81.

Reference: Default Measure Drill-Down Options

The following drill-down options are available from the hyperlink menus in the Measure and Measure Series columns throughout the views in PMF.

Note: These are the default settings for drill-down options. These menus are configurable. For more information, see *Control Drill Menus for Measures* on page 311.

- *Operational Report.* For more information, see *Operational Report* on page 73.
- *Measure Breakout.* For more information, see *Measure Breakout* on page 72.
- *Graph: Performance Trend.* For more information, see *Performance Trend* on page 79.
- *Graph: Actual vs. Target Relationship.* For more information, see *Actual vs. Target Relationship* on page 80.
- *Graph: % Reached Histogram.* For more information, see *Percent Reached Histogram* on page 78.
- *Graph: Performance Trend (Predictive).* For more information, see *Performance Trend (Predictive)* on page 68.
- *Graph: % Reached Histogram (Predictive).* For more information, see *Histogram (Predictive)* on page 68.
- *Related Properties.* For more information, see *Related Properties* on page 83.
- *Measures Properties.* For more information, see *Measure Properties* on page 81.

Reference: Project Drill-Down Options

The following drill-down options are available from the hyperlink menus in the Project columns throughout the views in PMF.

- *Project Impact.* For more information, see *Project Impact* on page 74.
- *Project Properties.* For more information, see *Project Properties* on page 82.
- *Operational Report.* For more information, see *Operational Report* on page 73.

- *Project Detail.* For more information, see *Project Detail* on page 75.
- *Related Properties.* For more information, see *Related Properties* on page 83.

Reference: Process Drill-Down Options

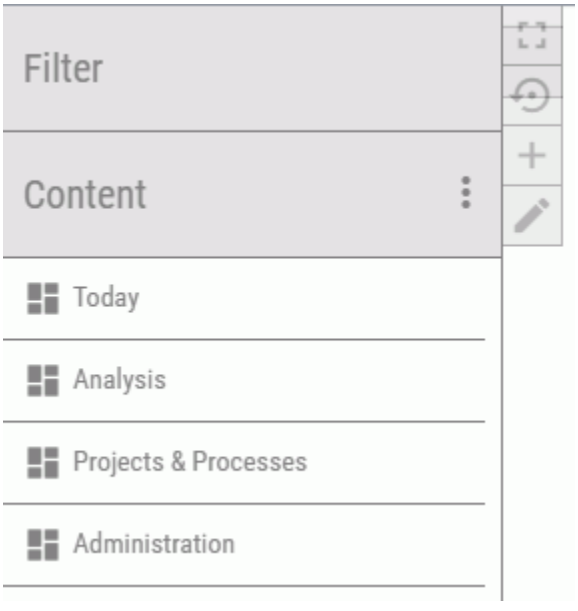
The following drill-down options are available from the hyperlink menus in the Process columns throughout the views in PMF.

- *Operational Report.* For more information, see *Operational Report* on page 73.
- *Related Properties.* For more information, see *Related Properties* on page 83.
- *Process Properties.* For more information, see *Process Properties* on page 82.

Today Page

The Today page provides consumers with a consistent way to navigate through Scorecards and Content. The following image shows the Today page with a sample dashboard.

The menu for the Today page is accessed using the dashboard icon , which is located in the upper-left corner of the page. Clicking this icon opens the drawer, which provides you with access to filters, content, and editing, as shown in the following image. You can use the Content list to change the type of view displayed on your dashboard.



Any changes to Scorecards or Content propagate instantly and display in the main window. PMF also automatically keeps track of the Scorecard or Content selected and will make those selections your default view.

There are several views available for display on the Today page. The administrator sets up the display you desire for your Today page. You can change your default page at any time by selecting different content.

As an administrator, you can set up launch pages for your user from the Manage page.

Changing Dashboard Gadgets and Preferences

PMF displays gadgets and stores Dashboards for each user. PMF Owners, including consumers and analysts, can configure their gadgets to display the exact metrics they want to see from any of their scorecards. PMF enables owners to interactively view and personalize the metrics displayed on a dashboard, and PMF saves the preferences for each user as they use PMF.

For consumers and analysts, a separate Gadget Preferences icon exists for each of the gadgets displayed on a dashboard. These gadgets display performance trend data that you can monitor daily. Each gadget has a Gadget Preferences icon that enables you to change the values being used to display the data for that gadget.

The following four icons are available in the upper-right corner of each gadget:

- Listens to/ignores filters icon . Specifies whether or not a broadcast will affect the selected gadget.
- Download icon . Lets you use your browser to download the grid for that gadget to an Excel file. This icon is only available for the following template-based gadgets:
  - HTML5 - Metric Pct Reached for Perspective
  - Metric - Across Dim by Perspective Grid (508)
  - Metric - Across Dimension Grid (508)
  - Metric - Dimensional Crosstab Across Measure Grid
  - Metric - Dimensional Crosstab Grid (508)
  - Metric - Measure Crosstab Across Dimension Grid
  - Metric - Performance Grid
  - Metric - Performance Trend Grid
  - Metric - Rolling n Periods
  - Metric - Values Grid
  - Metric - Values Trend Grid
  - Objectives - By Perspective Across Time
  - Objectives - By Perspective Grid (508)
  - Objectives - Dimensional Crosstab (508)
- Zoom icon . Zooms the gadget to full screen. To zoom out, click the same icon again. Zoom is not available in Edit Dashboard mode.
- Gadget Preferences icon . Opens the Filters and Groupings sections of the Today page drawer.

- Delete icon . Removes the gadget from the dashboard. This icon is only available in Edit Dashboard mode.

Note: These four icons are removed from the view when you click anywhere outside the gadget.

Procedure: How to Change the Display of Your Dashboard

1. From your Today page, click the dashboard icon .

   The drawer opens.
2. Select a different dashboard view by clicking *Content* and then clicking *Today* to see the list of dashboards available.
3. Select the desired dashboard from the list available. The previous view of your dashboard is replaced with the selected view.
4. Do one of the following:

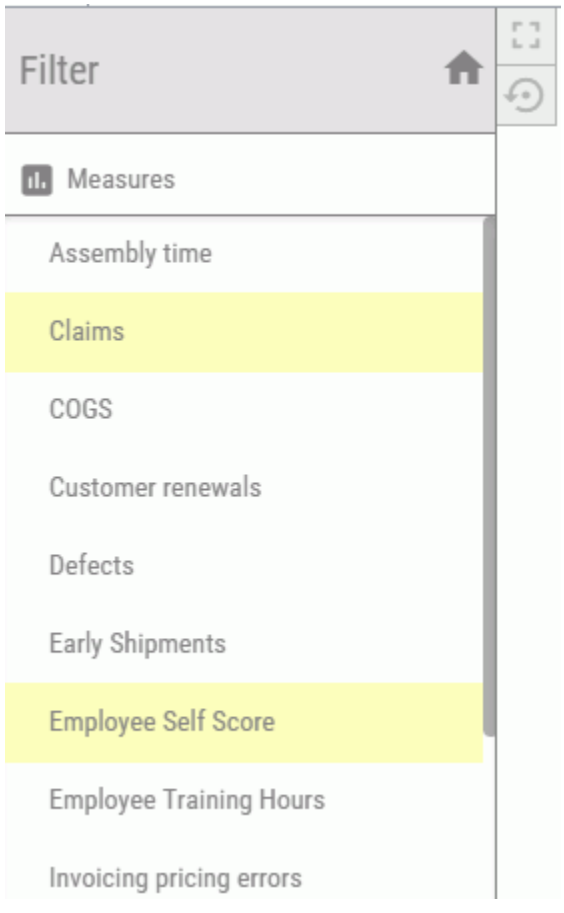
   - To reset the dashboard to its default preferences, click the *Reset dashboard* icon .
   - To add a dashboard, click the *Add Dashboard* icon .
   - To edit the dashboard, click the *Edit Dashboard* icon .

   For more information, see *Working with Dashboards* on page 118.

Procedure: How to Change Your Gadget Preferences

1. Select any of the gadgets displayed on your dashboard, then click the *Gadget Preferences* icon , which is located in the upper-right corner of the gadget.

The drawer shows the available groupings and filters for the gadget. Metrics that are currently displayed in the gadget are highlighted, as shown in the following image.



2. To change values, select or clear the metrics that will be shown in the gadget. The highlighted items indicate that they have been selected.

   Depending on how the selected gadget was designed, you can change preferences using any of the available metrics, which can include Groupings and one or more Filters.

3. The changes are saved automatically and displayed immediately. If you refresh the page or sign out and sign back in to PMF, the modified gadget continues to display your changed preferences.

   Note: You can click the *Reset Dashboard* icon to restore the previous gadget settings.

For more information on how to change metrics for multiple gadgets on a dashboard, see *How to Change Multiple Gadgets in a Broadcast Group* on page 136.

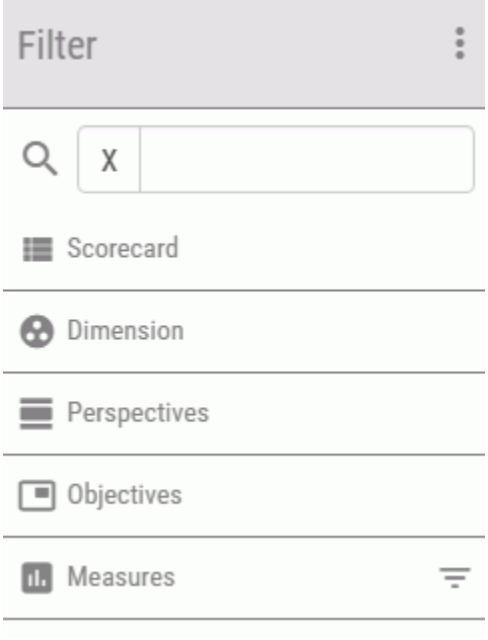
4. Click the *Close* icon to exit the gadget preferences mode and save your changes.

Working With Scorecards, Filters, and Content

The Today page drawer is where you can change your scorecard, set filters for the dashboard, and perform analysis in PMF. This drawer hosts the Strategy Map and Analysis Designer, as well as a set of standard dimension and perspective views.

You can open the drawer by clicking the dashboard icon on the Today page.

Clicking the Filters panel button opens a list of filters, as shown in the following image. Here you can make changes to the parameters that are passed to the gadgets on your dashboard.



The filter categories are shown in order of hierarchy and the selections made automatically affect the filters available. The following filters are available:

- **Scorecard.** Selecting a Scorecard clears all filters and refreshes all other filter lists. The content list is reloaded and the current displayed dashboard is updated. The Scorecard panel uses indentation to indicate the parent/child relationship of scorecards, as shown in the following image.

  Note: A Scorecard must *always* be applied as a filter and cannot be removed.

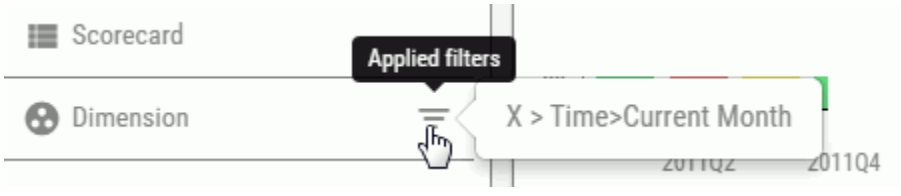
- **Dimension.** Selecting a Dimension name, such as Time, shows the top-level values for that Dimension, such as Current Month. Clicking a Dimension level value applies (or Broadcasts) the filter and removes any existing filter in place for that Dimension. Multi-select is allowed across different Dimensions, except if it is the same Dimension. A new level value selection will replace the old value.

- **Perspectives.** Selecting a Perspective applies the filter and removes any filters that are in place and lower in the hierarchy, such as Objectives, Dimensions, and Measures. Multiselect is allowed.

- **Objectives.** Selecting an Objective applies the filter, removes lower filters, and refreshes the Dimension and Measure filter lists. Multiselect is allowed.

- **Measures.** Selecting a Measure applies the filter but does not remove the Dimension filters. The Dimension names are refreshes and any Dimension filters for removed Dimensions are cleared, as needed. Multi-select is allowed.

An Applied filters icon next to the filter group heading indicates that filters are selected in that group. You can quickly view which filters are selected by clicking the icon, as shown in the following image.



Note: If specific filters are not selected (highlighted) in the group, then no filters are applied and all data will be displayed. Clicking an applied (highlighted) filter removes that filter.

Any changes made to the filters are automatically propagated Dashboard gadgets.

For more information on working with Broadcast, see *What is Broadcast?* on page 135.

To run analysis in PMF and work with different content, click the dashboard icon on the Today page. Click *Content* and select *Analysis*. Select a view from the list provided to display the results. The following are just some of the available views:

- Strategy Map. For more information, see *Strategy Map* on page 44.
- Previous vs. Current. For more information, see *Previous vs. Current and Prior vs. Current* on page 47.
- Last 5 Periods. For more information, see *Rolling 5 Periods* on page 49.
- Executive Booklet. For more information, see *Executive Booklet* on page 49.
- Scorecard Matrix. For more information, see *Scorecard Views* on page 61.
- Correlation. For more information, see *Correlation* on page 55.

For more information about the Analysis Designer, including information about the Metrics Analysis and Metrics Grid views, see *Using the Analysis Designer* on page 83.

Procedure: How to Search for Filters or Content

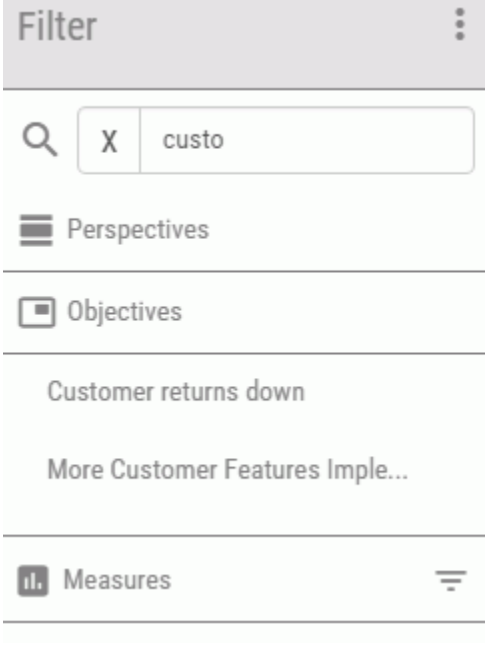
There is a built-in search capability in the Filter and Content lists which makes it easier to find specific filters and views for your dashboard.

To search for filters or content:

1. Click the dashboard icon on the Today page.
2. Click the *Filter* or *Content* panel button.
3. Click the more icon .

   The panel expands, as shown in the following image.

4. In the search field, enter the first few letters of the filter or content type. The following image shows the filters found when entering *customer*.



5. Select the desired filter or content from the search results to be applied to your dashboard.

To clear the search and show all available filters or content, delete the search term in the field.

Drilling to Atomic Measures

You can drill down from any high-level measure in the Objective column of a PMF view to the next level in the dimension hierarchy, and continue drilling down until you reach the lowest atomic measure for that objective. From the lowest atomic measure, dimensional cross-drills are built into the summary row titles.

The dimensional cross-drills follow the same logic used in PMF Analysis Designer views. For any metric, in any dimension, you can perform research by drilling up and down the dimension hierarchy to verify totals, extract information, and determine the root cause of any issue.

Strategy Map

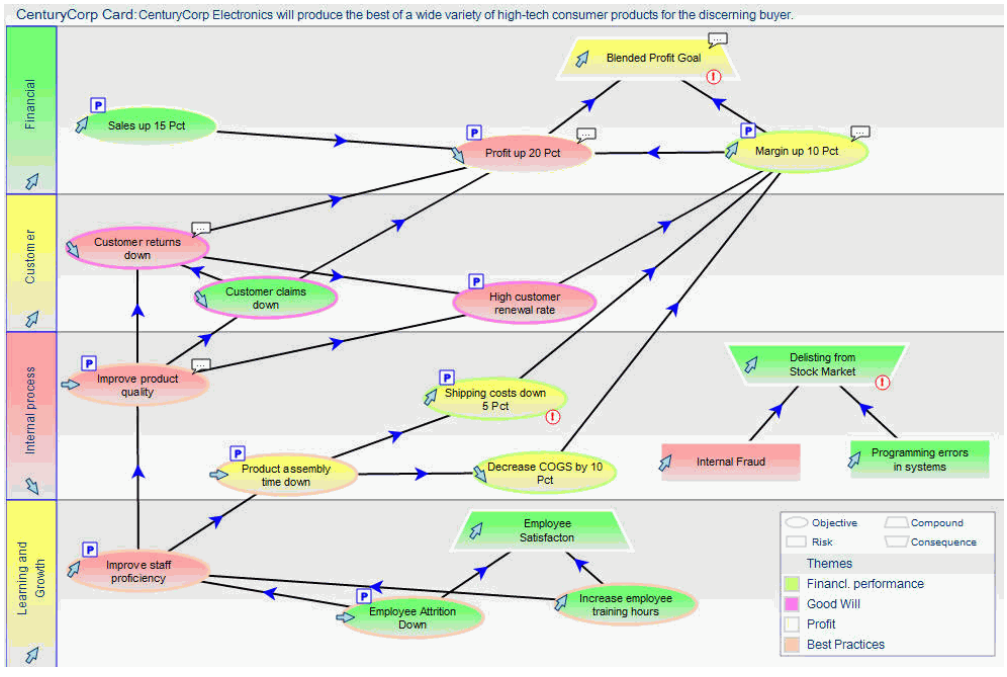
A Strategy Map is a graphical representation of the objectives used in your strategy. It shows the cause and effect linkages between leading and lagging objectives, and places the objectives within the perspectives that are significant for your enterprise.

The PMF read-only Strategy Map displays indicators that show the performance of metrics linked to the objectives displayed. The layout of the Strategy Map shows the relationship between objectives for your operational area of the enterprise. The indicators show an aggregate overall performance of the metrics you own for each of your objectives. The links between objectives for your enterprise represent the strategy of your enterprise.

With the Strategy Map, you can view objective properties, drill down to underlying measures, drill out to operational views, and access the cascade of scorecards using intuitive links and menus.

To display the Strategy Map, click the dashboard icon on the Today page. Click *Content*, select *Analysis*, and then click *Strategy Map*.

The following image shows an example of a PMF read-only Strategy Map.



Right-clicking an Objective on the Strategy Map displays the following options:

- **Operational Report.** Runs the default view associated with the selected objective, set up by your administrator.
- **Show Measures (Current vs. Prev).** Runs the Show Measures view, in which the current measures for the objective are compared to previous measures.
- **Feedback.** Displays the Feedback panel, where you can view the existing comments on the objective or enter a comment of your own.
- **Graph: Performance Trend.** Runs the Objectives Performance view for the objective.
- **Aligned Projects.** Displays the projects aligned to the objective.
- **Aligned Processes.** Displays the processes aligned to the objective.
- **Aligned Tasks.** Displays the tasks aligned to the objective.
- **Objective Properties.** Displays the properties for the objective, such as the theme and date of creation.

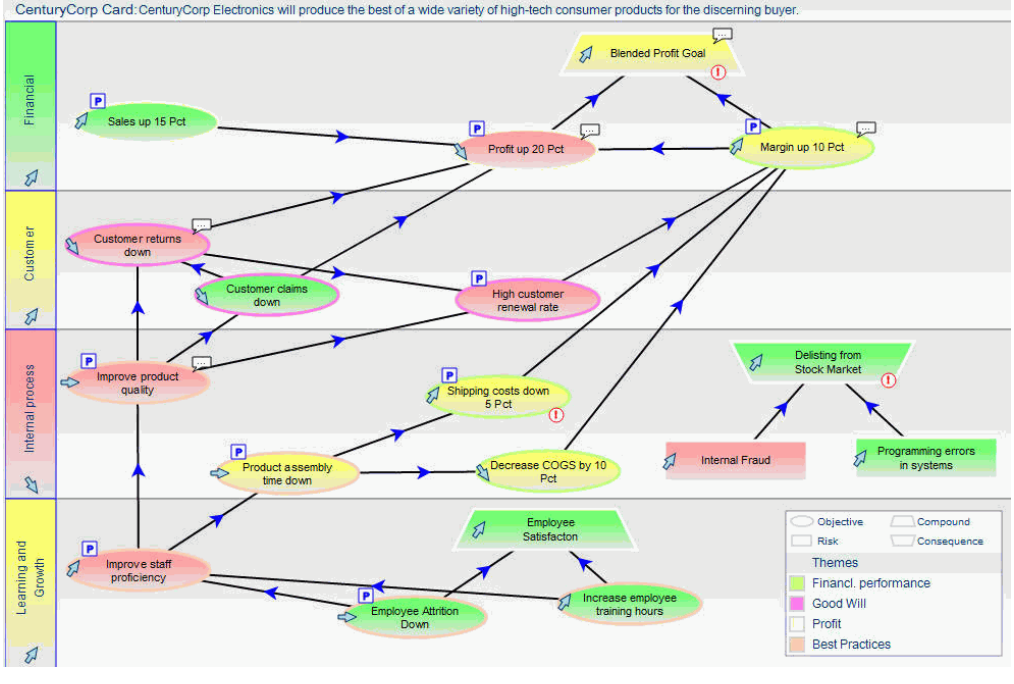
- **Related Properties.** Displays additional properties for the objective, such as the aligned measure series, projects, and processes.

For consumers and analysts, the Strategy Map is read-only. For authors, the Strategy Map can be read/write if it has been configured that way by the administrator. For more information about working with the Strategy Map as an author, see *Performance Management Framework Author* on page 139.

Interactive Highlighting on the Strategy Map

If you have created Themes for a Scorecard, the Strategy Map in PMF displays a legend that lists the Themes and indicates by color, which themes have been assigned, as shown in the following image.

Note: Themes are represented using a color halo around linked Objectives.



In the read/write Strategy map on the Strategy tab, you can drag and place the Theme legend anywhere you want on the surface of the Strategy Map. When you click *Save*, the position for the Themes legend is stored.

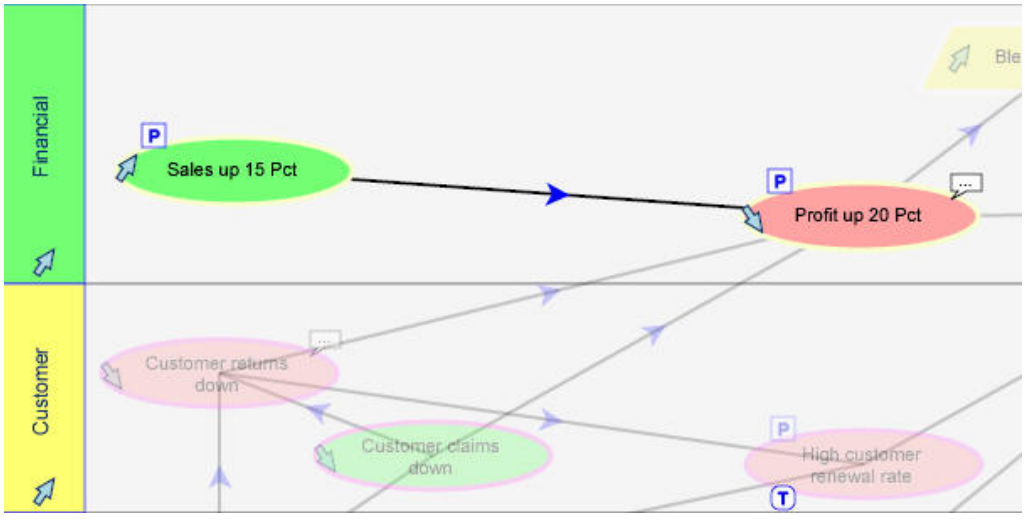
The Themes legend appears in the following locations:

- The read only Strategy Map.

- The read/write Strategy Map (for example, the Strategy tab).
- The embedded Strategy Map graphic as placed in the Executive Briefing Booklet (PDF View).

Cause and Effect Drills

Cause and effect drills are now available in the Strategy Map. Clicking on any Objective, Compound, Risk, or Consequence on the Strategy Map shows the immediate causes and effects, as shown in the following image.



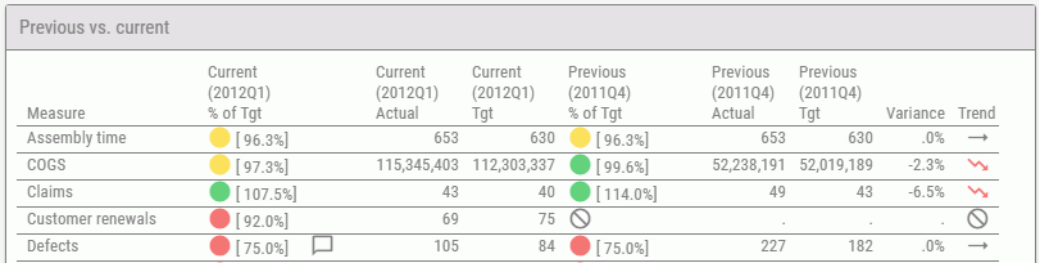
Note: You can also see these drills by right-clicking any Objective, Compound, Risk, or Consequence and selecting *Cause and Effect*.

Previous vs. Current and Prior vs. Current

PMF provides both a Previous vs. current view and a Prior vs. current view. The Previous vs. current view displays current and previous period achievement for all metrics to which you currently have access. The Prior vs. current view displays current and prior period achievement for all metrics to which you currently have access. The prior period is one year before the current date, at the same time of year. The previous period depends on the time dimension that is being measured. If dealing with monthly data, the previous period is the previous month. For both views, metrics are automatically aggregated. These views roll across time, so that the two compared periods are always sensitive to the current date.

To run the Previous vs. Current view, click the dashboard icon on the Today page. Click *Content*, select *Analysis*, and then click *Measures - Previous vs. Current*.

The following image shows an example of the Previous vs. Current view, which displays the heading Metric - Previous vs. current w/Trend.

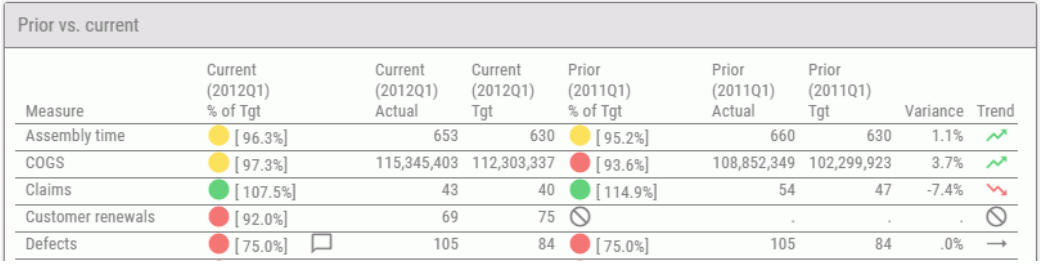


Previous vs. current

Measure	Current (2012Q1) % of Tgt	Current (2012Q1) Actual	Current (2012Q1) Tgt	Previous (2011Q4) % of Tgt	Previous (2011Q4) Actual	Previous (2011Q4) Tgt	Variance	Trend
Assembly time	[96.3%]	653	630	[96.3%]	653	630	.0%	→
COGS	[97.3%]	115,345,403	112,303,337	[99.6%]	52,238,191	52,019,189	-2.3%	↘
Claims	[107.5%]	43	40	[114.0%]	49	43	-6.5%	↘
Customer renewals	[92.0%]	69	75		.	.	.	⊘
Defects	[75.0%]	105	84	[75.0%]	227	182	.0%	→

To run the Prior vs. Current view, click the dashboard icon on the Today page. Click *Content*, select *Analysis*, and then click *Measures - Prior vs. Current*.

The following image shows an example of the Prior vs. Current view, which displays the heading Metric - Prior vs. current.



Prior vs. current

Measure	Current (2012Q1) % of Tgt	Current (2012Q1) Actual	Current (2012Q1) Tgt	Prior (2011Q1) % of Tgt	Prior (2011Q1) Actual	Prior (2011Q1) Tgt	Variance	Trend
Assembly time	[96.3%]	653	630	[95.2%]	660	630	1.1%	↗
COGS	[97.3%]	115,345,403	112,303,337	[93.6%]	108,852,349	102,299,923	3.7%	↗
Claims	[107.5%]	43	40	[114.9%]	54	47	-7.4%	↘
Customer renewals	[92.0%]	69	75		.	.	.	⊘
Defects	[75.0%]	105	84	[75.0%]	105	84	.0%	→

For these views, the navigation tree on the left permits you to drill down and analyze measures at the lowest dimensional level. The view automatically reformats itself appropriately, depending on the dimensional level you select. For example, if you drill down to the Time dimension and choose only the current period, the previous period is automatically omitted from the view.

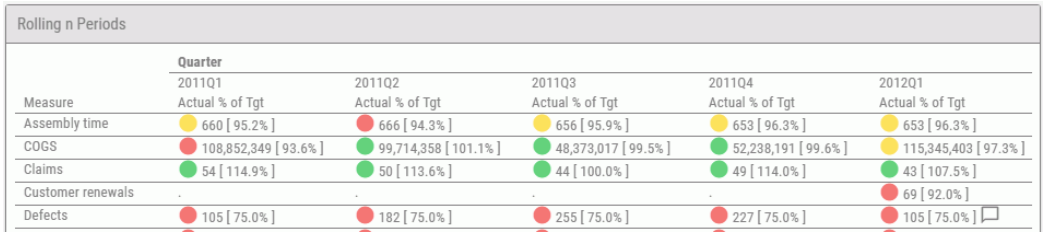
The views also provide the ability to drill down to the properties for any item in the Measure column, to display additional views that show how the measure was loaded, what calculations were used to create it, and so on. To display additional data related to a measure, click a hyperlinked item in the Measure column and select the desired option. For a list of the available drill-down options, see *Default Measure Drill-Down Options* on page 34.

Rolling 5 Periods

The Rolling 5 Periods view displays the current period and four previous periods worth of achievement for all metrics to which you currently have access. Metrics are automatically aggregated. The view rolls across time, so the last five periods are always sensitive to the current date.

To run the Rolling 5 Periods view, click the dashboard icon on the Today page. Click the *Content* panel button in the drawer, select *Analysis*, and then click *Measures - Rolling 5 Periods*.

The following image shows an example of the Rolling 5 Periods view, which displays the heading Metric - Rolling n Periods.



Rolling n Periods

	Quarter				
	2011Q1	2011Q2	2011Q3	2011Q4	2012Q1
Measure	Actual % of Tgt	Actual % of Tgt	Actual % of Tgt	Actual % of Tgt	Actual % of Tgt
Assembly time	660 [95.2%]	666 [94.3%]	656 [95.9%]	653 [96.3%]	653 [96.3%]
COGS	108,852,349 [93.6%]	99,714,358 [101.1%]	48,373,017 [99.5%]	52,238,191 [99.6%]	115,345,403 [97.3%]
Claims	54 [114.9%]	50 [113.6%]	44 [100.0%]	49 [114.0%]	43 [107.5%]
Customer renewals	.	.	.	.	69 [92.0%]
Defects	105 [75.0%]	182 [75.0%]	255 [75.0%]	227 [75.0%]	105 [75.0%]

The navigation tree on the left permits you to drill down and analyze measures at the lowest dimensional level. The view automatically reformats itself appropriately, depending on the level of dimensionality you select. For example, if you drill down to the Time dimension and choose the current period, the previous periods are automatically omitted from the view. If you choose only the current year, only periods that fall into this year are displayed.

The view also provides the ability to drill into the properties for any item in the Measure column to display additional views that show how the measure was loaded, what calculations were used to create it, and so on. To display additional data related to a measure, click a hyperlinked item in the Measure column and select the desired option. For a list of the available drill-down options, see *Default Measure Drill-Down Options* on page 34.

Executive Booklet

The Executive Booklet provides summary views of the enterprise strategy, with critical details provided on breakout pages. These views enable you to examine relationships between all objectives, perspectives, projects, and processes, in one location.

The views in the Executive Booklet, represented by links in the left pane, are as follows:

- **Strategy.** Shows the relationships within a scorecard in the Strategy Relationships view. This is the default view in the Executive Booklet.

- **Objectives Summary.** Summarizes the achievement of overall scorecard goals in the Scorecard Objectives Summary.
- **Objectives Performance.** Graphically displays recent performance trends for all objectives in every perspective to highlight areas that need attention.
- **Projects.** Shows relationships between the projects and objectives within a scorecard in the Scorecard Projects view.
- **Processes.** Shows relationships between the processes and objectives within a scorecard in the Scorecard Processes view.

To run the Executive Booklet, click the dashboard icon on the Today page. Click *Content*, select *Analysis*, and then click *Executive Booklet*.

You can also access the Executive Booklet in PDF or PowerPoint formats, which provide enterprise strategy views plus a view of the strategy map in one PDF or PowerPoint®. For more information, see *Executive Briefing Booklet - PDF* on page 50 or *Executive Briefing Booklet - PowerPoint* on page 51.

Executive Briefing Booklet - PDF

The Executive Briefing Booklet in PDF format provides summary views of the enterprise strategy and a view of the strategy map formatted in a PDF report. This report includes a title page, and a table of contents that displays when the report opens. To access the Executive Briefing Booklet in PDF format, click the dashboard icon on the Today page. Click *Content*, select *Analysis*, and then click *Executive Briefing Booklet - PDF*.

The views in the PDF version of the Executive Briefing Booklet are represented by the following links in the table of contents:

- **Strategy Map.** Shows a full-color graphical image of the Strategy Map.
- **Strategy.** Shows the cause-and-effect relationships within the selected scorecard.
- **Objectives Summary.** Shows a summary overview of all of the objectives in the selected scorecard including descriptions and comments.
- **Projects.** Shows a summary overview of all of the projects aligned to the selected scorecard including details and performance data for the aligned objectives.
- **Processes.** Shows a summary overview of all of the processes aligned to the selected scorecard including details and performance data for the aligned objectives.

There are no drill-down options available in the PDF version of the Executive Briefing Booklet.

Executive Briefing Booklet - PowerPoint

The Executive Briefing Booklet in PowerPoint format provides summary views of the enterprise strategy and a view of the strategy map formatted in a PowerPoint report. To access the Executive Briefing Booklet in PowerPoint format, click the dashboard icon on the Today page. Click *Content*, select *Analysis*, and then click *Executive Briefing Booklet - PPT*.

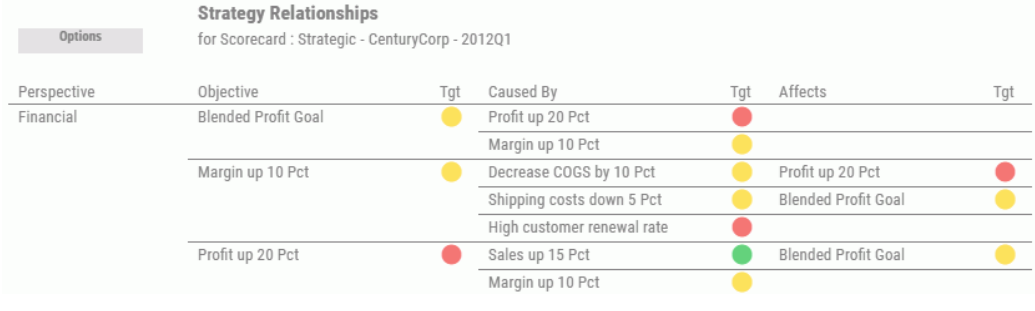
The PowerPoint version of the Executive Briefing Booklet is presented as a slide show that you view by clicking the interface to see each of the following views:

- **Strategy Map.** Shows a full-color graphical image of the Strategy Map.
- **Strategy Relationships.** Shows the cause-and-effect relationships within the selected scorecard.
- **Objectives Summary.** Shows a summary overview of all of the objectives in the selected scorecard including descriptions and comments.
- **Projects - Objectives.** Shows a summary overview of all of the projects aligned to the selected scorecard including details and performance data for the aligned objectives.
- **Processes - Objectives.** Shows a summary overview of all of the processes aligned to the selected scorecard including details and performance data for the aligned objectives.

There are no drill-down options available in the PowerPoint version of the Executive Briefing Booklet.

Strategy Relationships

When you first run the Executive Booklet, the default view is Strategy Relationships. It shows the relationships between the measures and objectives for every perspective in a particular scorecard. An example of this is shown in the following image.

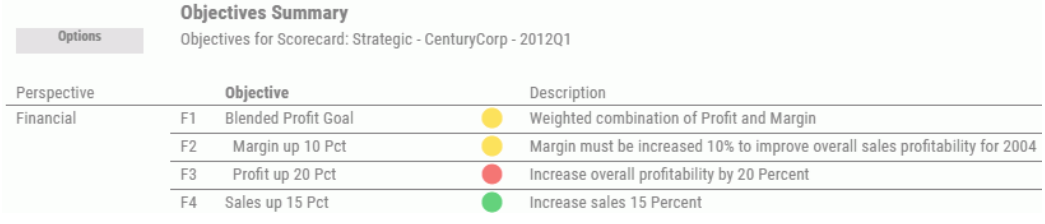


Strategy Relationships displays hyperlinked metrics in each of its columns. To display related data for a perspective, click a Perspective hyperlink and select the desired option. For a list of the available drill-down options, see *Perspective Drill-Down Options* on page 33. To probe deeper into the metrics listed in the Objective, Caused By, and Affects columns, click a hyperlink and select the desired option. For more information, see *Objective Drill-Down Options* on page 33.

To display Strategy Relationships, click the dashboard icon on the Today page. Click *Content*, select *Analysis*, and then click *Strategy Relationships*.

Objectives Summary

If you click *Objectives Summary* in the left section of the Executive Booklet, the Scorecard Objectives Summary opens, as shown in the following image. It displays descriptions for each objective, within each perspective, for a scorecard.



The Objectives Summary displays hyperlinked metrics in the Perspective and Objective columns.

To display related data for a perspective, click a Perspective hyperlink and select the desired option. For more information, see *Perspective Drill-Down Options* on page 33.

To probe deeper into the metrics listed in the Objective column, click a hyperlink and select the desired option. For more information, see *Objective Drill-Down Options* on page 33.

Objectives Performance

If you click *Objectives Performance* in the left section of the Executive Booklet, the Objectives Performance view opens, as shown in the following image. It provides a graphical view of all the objectives for each and every perspective in a scorecard.

There are no drill-down options available from the Objectives Performance view.

To display Objectives Performance, click the dashboard icon on the Today page. Click *Content*, select *Analysis*, and then click *Objectives Performance*.

Projects

If you click *Projects* in the left section of the Executive Booklet, the Projects - Objectives view opens, as shown in the following image. It provides a detailed description of each project and related objective, including the associated start and end dates.

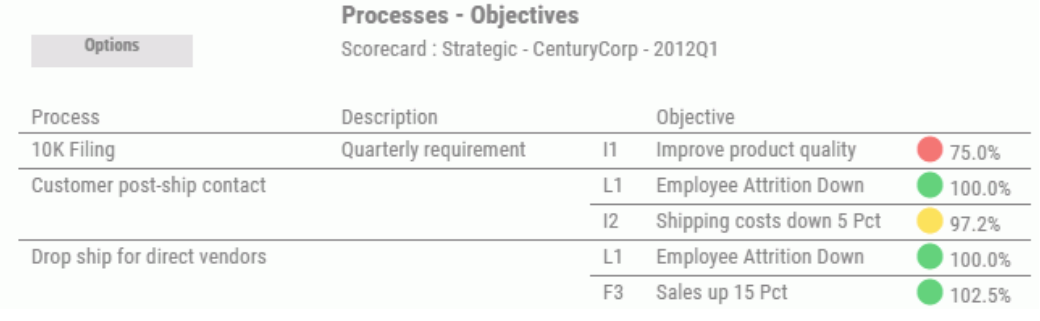
The Projects - Objectives view displays hyperlinked metrics in the Project and Objective columns.

To display related data for a project, click a Project hyperlink and select the desired option. For more information, see *Project Drill-Down Options* on page 34.

To probe deeper into the metrics listed in the Objective column, click a hyperlink and select the desired option. For more information, see *Objective Drill-Down Options* on page 33.

Processes

If you click *Processes* in the left section of the Executive Booklet, the Processes - Objectives view opens, as shown in the following image. It provides a detailed description of each process and related objective.



The Scorecard Processes view displays hyperlinked metrics in the Process and Objective columns.

To display related data for a process, click a Process hyperlink and select the desired option. For more information, see *Process Drill-Down Options* on page 35.

To probe deeper into the metrics listed in the Objective column, click a hyperlink and select the desired option. For more information, see *Objective Drill-Down Options* on page 33.

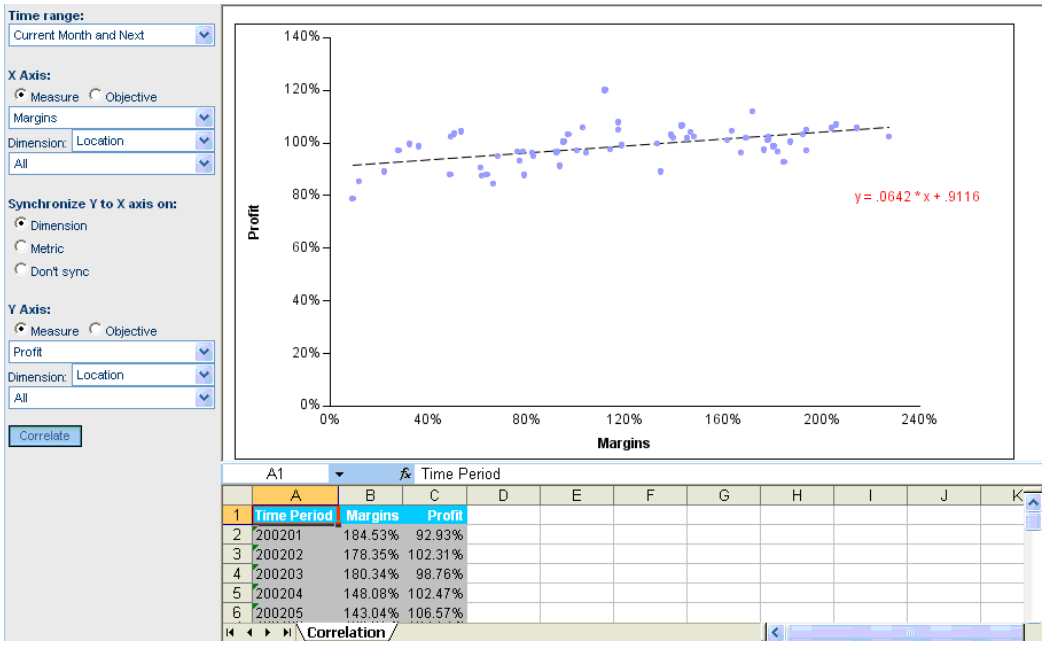
Correlation

You can view any two metrics, two objectives, or one metric and one objective, to determine their relationship, or *correlation*. For example, you can:

- Determine if there is a real cause-and-effect relationship between two measurements, and if so, determine if it is positive or negative.
- Correlate the performance of a single metric in the different areas of your organization to see if the performance is part of a general trend, or is an outlier that is statistically unrelated to the rest of the data.
- Use the correlation results to help you set targets for individual areas in your organization.

There are many ways to correlate data using various statistical methods. PMF uses the percent achieved of an objective or measure to determine how points of data are plotted on the Correlation scatter plot. Each plotted dot represents the intersection of a single point in time for two different metrics. The Correlation view displays a linear plot showing the relationship between all points of data.

The following image is an example of the PMF Correlation view.



The Correlation view also displays the correlation coefficient equation, which indicates the correlation of the data. The following are the three possible types of Correlation:

- **Positive Correlation.** When the correlation coefficient is close to +1, there is a positive relationship between changes in the two measurements. This indicates that when one measurement improves, it causes the other measurement to improve in an equally positive manner.
- **Negative correlation.** When the correlation coefficient is close to -1, there is a negative relationship between changes in the two measurements. This indicates that when one measurement improves, it causes the other measurement to decline in an equally negative manner. For example, if one measurement improved by 10 percent, the other measurement declined by 10 percent.
- **Zero correlation.** When the correlation coefficient is close to zero, there is no linear relationship between changes in the two measurements. This indicates that there is a very low or non-existent level of correlation between the two measurements.

Procedure: How to Run a Correlation View

1. From the Today page, click the dashboard icon .
2. Click *Content*.
3. Select *Analysis*, *Objective*, or *Measures Detail* from the drawer and then click *Correlation*.
4. Select a value from the Time range drop-down menu. When you run the view, it will display data for the selected time range.

   Tip: Selecting the widest possible range of time that is appropriate for your needs utilizes the most data and produces the most accurate correlation results.
5. Specify the X-Axis options.
   - Select the *Measure* radio button to display a measure on the X-Axis, or select the *Objective* radio button to display an objective on the X-Axis.
   - Select the specific measure or objective from the drop-down menu beneath the radio buttons.

     If you selected Metric in the Synchronize Y to X axis on field, the Y-Axis metric will mirror the X-Axis metric that you choose here.
   - Select the dimension and its value from the drop-down menus, or select *All* to display information at the top level of that dimension.

If you selected Dimension in the Synchronize Y to X axis on field, the Y-Axis dimension values will mirror the X-Axis dimension values that you choose here.

6. For the Synchronize Y to X axis on field:

   - Select *Dimension* to compare different measures or objectives on the X-Axis and Y-Axis, with the same dimension value on the X-Axis and Y-Axis. This option causes the Y-Axis dimension value to mirror the X-Axis dimension value.
   - Select *Metric* to compare the same measure or objectives on the X-Axis and Y-Axis, with different dimension values on the X-Axis and Y-Axis. This option causes the Y-Axis measure or objective value to mirror the X-Axis measure or objective value.
   - Select *Don't sync* to suppress automatic mirroring of Y to X.

7. Specify the Y-Axis options.

   - Select the *Measure* radio button to display a measure on the Y-Axis, or select the *Objective* radio button to display an objective on the Y-Axis.
   - Select the specific measure or objective from the drop-down menu beneath the radio buttons.

     If you selected Metric in the Synchronize Y to X axis on field, the metric chosen for the X-Axis automatically appears here.
   - Select the dimension and its value from the drop-down menus, or select *All* to display information at the top level of that dimension.

     If you selected Dimension in the Synchronize Y to X axis on field, the dimension and its value chosen for the X-Axis automatically appears here.

8. Click *Correlate* when you have supplied the criteria.

   Tip: Depending on your browser security, you might be asked if you want to open or save the file. Click *Open*.

   PMF generates two views.

Example: Correlating Sales and Profit in Boston

As manager of the Boston sales office, you frequently research cause-and-effect relationships to find ways to improve the contribution of your office to the health of the company. The Boston sales office in your organization has shown strong sales. You would like to see how sales have affected profit. To correlate sales and profit in the Boston office:

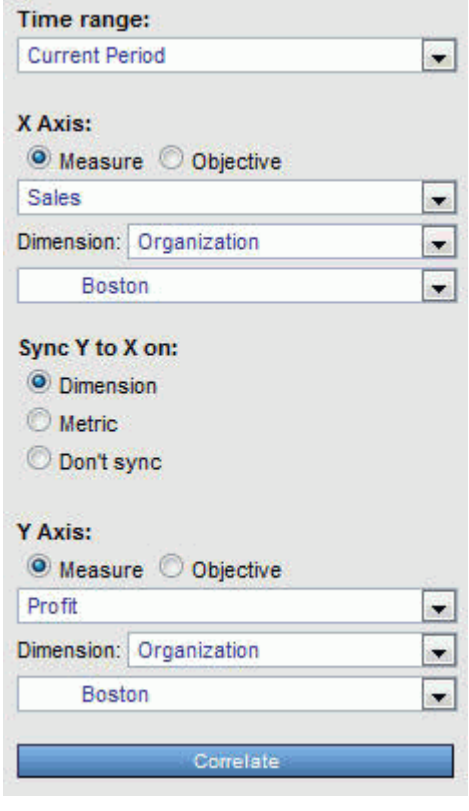
1. From the Today page, click the dashboard icon .

2. Click *Content*.
3. Select *Analysis*, *Objective*, or *Measures Detail* from the side menu and then click *Correlation*.
4. For the Time range field, select *Current Period*.
5. For the X-Axis, select the *Measure* option.

   In the drop-down menu below the Measure and Objective options, select *Sales*. In the Dimension drop-down menu, select *Organization* and select *Boston* in the drop-down menu below that, under Sales, US, and East Coast.

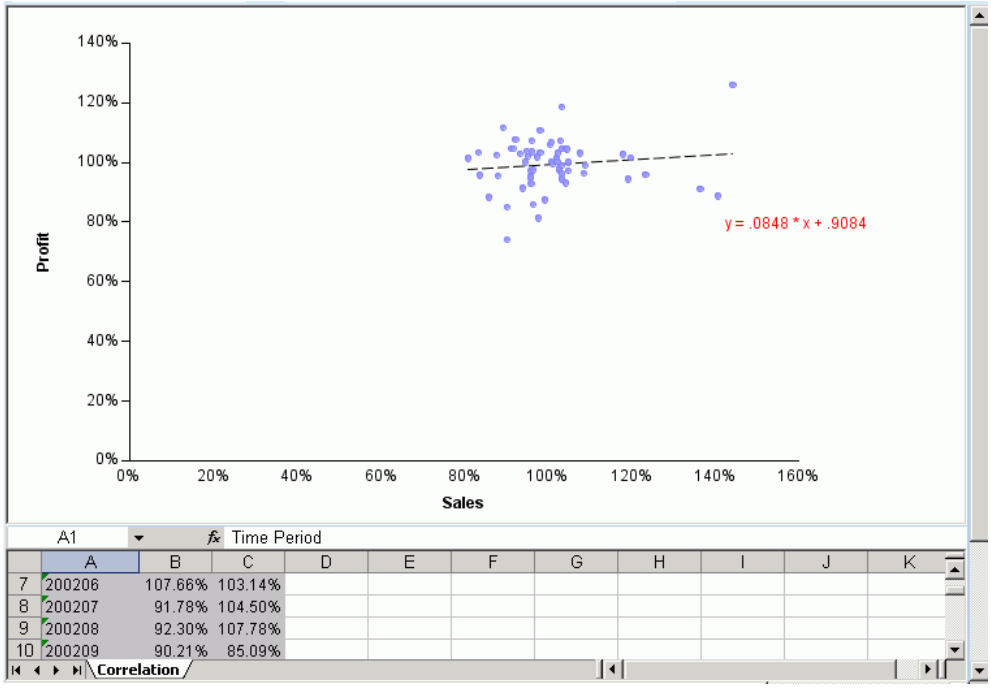
   Notice that the value for the Dimension field Organization and the value for Organization Boston automatically appear in the Y-Axis specification.
6. In the Synchronize Y to X axis on field, select the *Dimension* option.
7. For the Y-Axis, select the *Measure* option.
8. In the drop-down menu below the Measure and Objective options, select *Profit*.

   An example of the completed form is shown in the following image.



9. Click *Correlate*.

PMF displays a scatter plot, and correlation data in an Excel spreadsheet, as shown in the image below, to compare sales and profit for the Boston office.



Correlating Profit in Boston and St. Louis

The Boston stores in your company historically report a profit that reflects a national trend, while the St. Louis stores historically fall below that trend. You need to examine how St. Louis profit is doing compared to the national trend reflected by Boston profit. To correlate profit in the St. Louis stores with profit in the Boston stores:

1. From the Today page, click the dashboard icon .
2. Click *Content*.
3. Select *Analysis*, *Objective*, or *Measures Detail* from the side menu and then click *Correlation*.
4. For the Time range field, select *Current Period*.
5. In the Synchronize Y to X axis on field, select the *Metric* option.
6. For the X-Axis, select the *Measure* option.

7. In the drop-down menu below the Measure and Objective options for the X-Axis, select *Profit*.

   Notice that the Profit measure automatically appears in the Y-Axis specification.

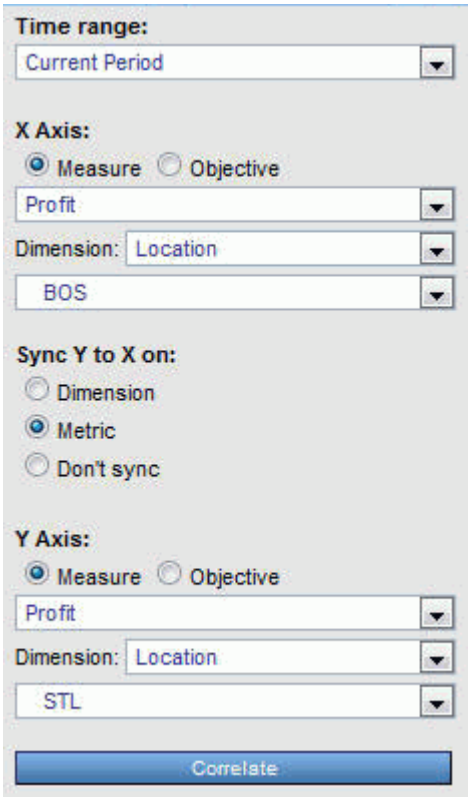
8. For the X-Axis, in the Dimension drop-down menu, select *Location*.

   In the drop-down menu below Dimension, select *BOS* (Boston).

9. For the Y-Axis, in the Dimension drop-down menu, select *Location*.

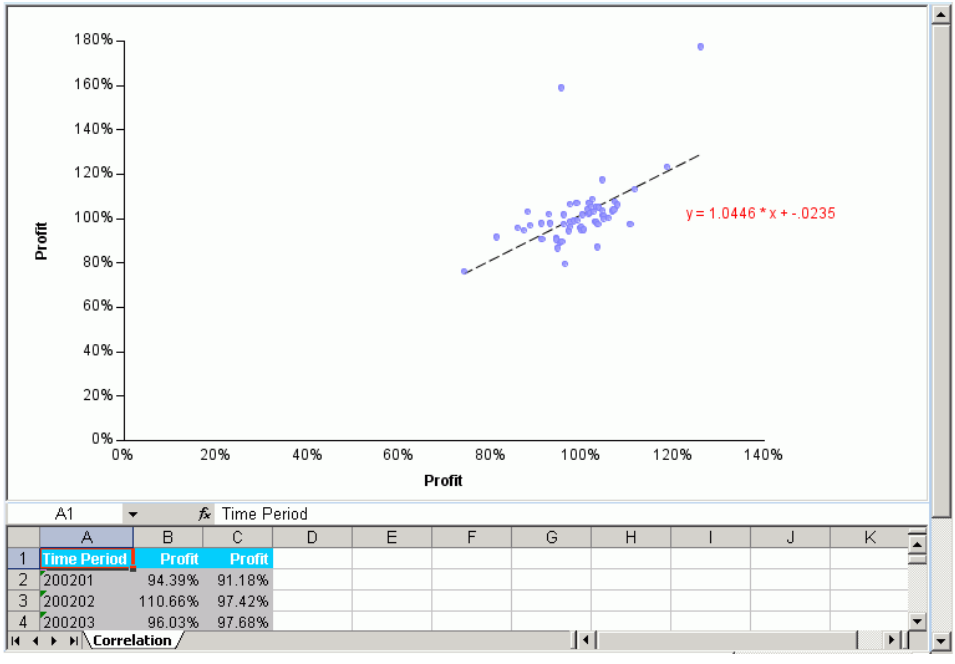
   In the drop-down menu below Dimension, select *STL* (St. Louis).

   An example of the completed form is shown in the following image.



10. Click *Correlate*.

PMF displays two views comparing profit in Boston and St. Louis, as shown in the following image.



Scorecard Views

The following topics describe and show details of the scorecard-related views that are available in PMF.

Scorecard Matrix

The Scorecard Matrix is designed to support the actual practice of strategy determination at your site. It displays all perspectives you have prototyped in the PMF system, and the objectives for each perspective. It also shows the cross-scorecard weights for each objective. This helps you quickly display all your corporate or team objectives with their weighted importance, which will help your executive team approve your overall strategy.

To run the Scorecard Matrix, click the dashboard icon on the Today page. Click *Content*, select *CPM/BPM Practice*, and then click *Scorecard Matrix*.

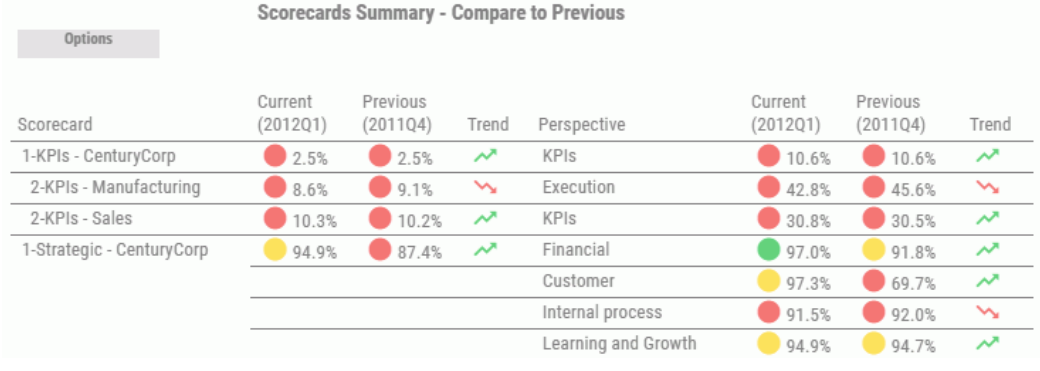
The following image shows an example of the Scorecard Matrix.

There are no drill downs available from the Scorecard Matrix.

Scorecards Overview

The Scorecards Overview displays previous and current statistics for all scorecards. You can also drill down to any of the scorecards and associated perspectives. This view is particularly useful to executive level users as it summarizes achievement of all goals in a scorecard taking into account the individual weights for each objective and their related metrics. The Scorecards Overview is the only view in PMF that works across scorecards.

The following image shows an example of a Scorecards Overview.



Objective Views

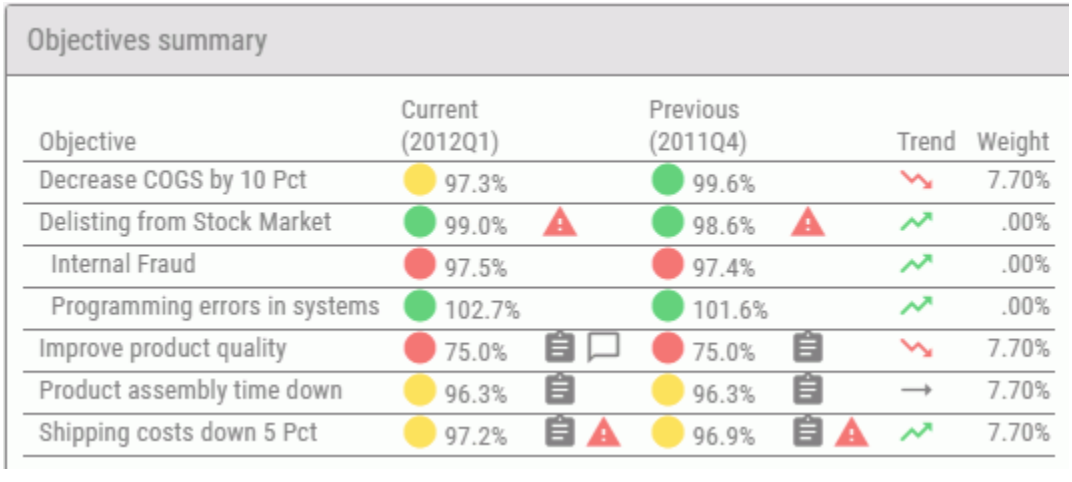
The following topics describe some of the objective-related views that are available in PMF.

Objectives - Previous vs. Current

The Objectives - Previous vs. Current view displays current and previous period achievement and comparative weights for the primary objectives across all perspectives for the selected scorecard. This view displays a dimension tree to the left of the report that enables you to drill into the underlying metrics of any particular area of the scorecard. You can analyze the previous and current period performance of the objectives for any aspect of any dimension.

To run the Objectives - Previous vs. Current view, click the dashboard icon on the Today page. Click *Content*, select *Analysis*, *Objective*, or *Perspective*, and then click *Objectives - Previous vs. Current*.

The following image shows an example of the Objectives - Previous vs. Current view.



Objectives summary

Objective	Current (2012Q1)	Previous (2011Q4)	Trend	Weight
Decrease COGS by 10 Pct	97.3%	99.6%	↘	7.70%
Delisting from Stock Market	99.0%	98.6%	↗	.00%
Internal Fraud	97.5%	97.4%	↗	.00%
Programming errors in systems	102.7%	101.6%	↗	.00%
Improve product quality	75.0%	75.0%	↘	7.70%
Product assembly time down	96.3%	96.3%	→	7.70%
Shipping costs down 5 Pct	97.2%	96.9%	↗	7.70%

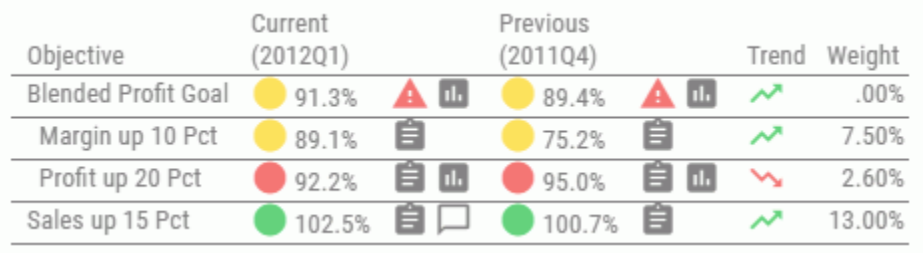
When using the tree to drill into a specific area of the scorecard, the view is refreshed and a summary of the type of objectives you are viewing appears at the bottom of the report.

For example, if you expand the *Organization* folder, drill into the *Sales* subfolder, and select *US*, the following summary information appears below the report data:

Scorecard: CenturyCorp Card
Division: Sales
Country: US
Time Range: Previous vs. Current

Show Objectives (Curr vs. Prev)

When you click a Perspective drill-down hyperlink, for example, in the Strategy view of the Executive Booklet, and select *Show Objectives (Curr vs. Prev)*, the drill down takes you to the Objectives view, as shown in the following image.



Objective	Current (2012Q1)	Previous (2011Q4)	Trend	Weight
Blended Profit Goal	91.3%	89.4%		.00%
Margin up 10 Pct	89.1%	75.2%		7.50%
Profit up 20 Pct	92.2%	95.0%		2.60%
Sales up 15 Pct	102.5%	100.7%		13.00%

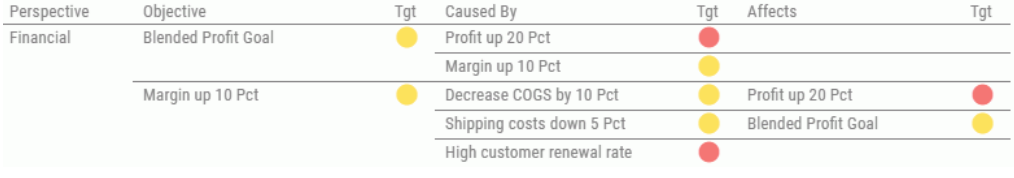
In this view, current metrics for an objective are compared to previous metrics for the selected objective, and the trend, scorecard weight, and perspective weight are displayed.

To display related data for an objective, click an Objective hyperlink and select the desired option. For more information, see *Objective Drill-Down Options* on page 33.

Causes & Effects

When you click a drill-down hyperlink (for example, in the Stop Light view), and select *Causes & Effects*, the drill down takes you to the Causes & Effects view, which contains data showing strategy relationships. If you have a strategy set up in PMF, you can drill down to research strategic relationships for any metric.

Cause and effect relationships cascade automatically as you navigate drill-down hyperlinks for metrics in the *Caused By* and *Affects* columns to move up and down the strategic chain of events. The following image shows an example of the Causes & Effects view.



Perspective	Objective	Tgt	Caused By	Tgt	Affects	Tgt
Financial	Blended Profit Goal		Profit up 20 Pct			
			Margin up 10 Pct			
	Margin up 10 Pct		Decrease COGS by 10 Pct		Profit up 20 Pct	
			Shipping costs down 5 Pct		Blended Profit Goal	
			High customer renewal rate			

The Causes & Effects view displays hyperlinked metrics in the Perspective, Objective, Caused By, and Affects columns.

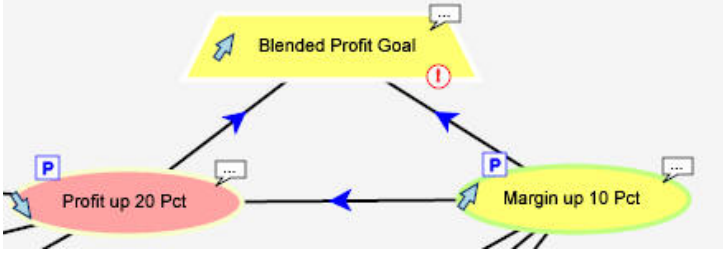
To display related data for the perspective, click the Perspective hyperlink and select the desired option. For more information, see *Perspective Drill-Down Options* on page 33.

To probe deeper into the metrics listed in the Objective, Caused By, and Affects columns, click a hyperlink and select the desired option. For more information, see *Objective Drill-Down Options* on page 33.

Understanding Compound Objectives and Consequences

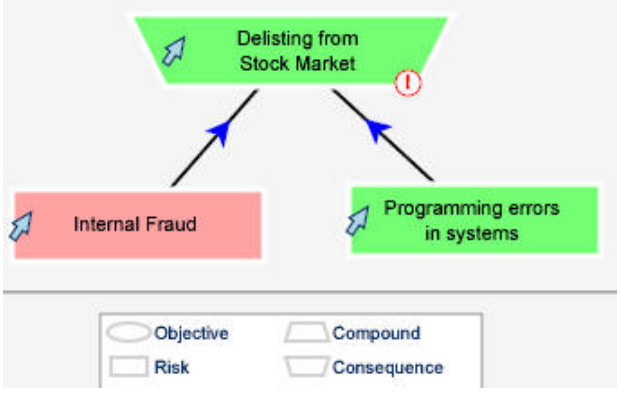
A compound objective links multiple causative objectives into a grouping on a Strategy Map. When included on a dashboard, a view, or a Strategy Map, a compound objective displays the aggregate values of the contributing objectives.

The following image shows a sample compound objective on a Strategy Map. The compound objective is named Blended Profit Goal. In this example, the contributing objectives are Profit up 20 Pct and Margin up 10 Pct. Those objectives were assigned a weight (priority) by the author at your site.



A risk represents a specific problem or threat to your enterprise. A consequence links multiple causative risks into a grouping on a Strategy Map. A consequence displays the aggregate values of the contributing risks.

The following image shows a sample consequence on a Strategy Map. The consequence is named Delisting from Stock Market. In this example, the contributing risks are Internal Fraud and Programming errors in systems. Those risks were assigned a weight (priority) by the author at your site.

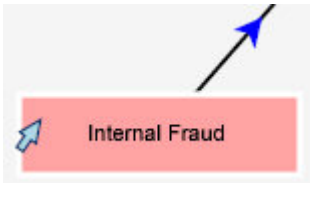


On a Strategy Map, you can click an object type on the legend to highlight that specific type. For example, you can click *Risk* on the legend to highlight only the risk objects on the Strategy Map. This capability supports a live discussion about the risk performance of your business strategy.

Understanding Risks

A risk describes an area that you are measuring that represents a specific problem, or threat, to your enterprise. Risks can be placed on the Strategy Map and different metrics can be linked to each risk.

The following image shows a sample risk, named Internal Fraud, on a Strategy Map.



On a Strategy Map, you can click an object type on the legend to highlight that specific type. For example, you can click *Risk* on the legend to highlight only the risk objects on the Strategy Map. This capability supports a live discussion about the risk performance of your business strategy.

Predictive Analysis Views

PMF allows you to apply predictive analysis to your measures. You can design a view that shows historical metrics and predicts future results, using a wide range of patterns and sampling frequencies. PMF analyzes data using all available forecasting models, finds the one that best predicted past performance, and applies it to predict future performance.

Results are displayed in a side-by-side view that shows the patterns of change for the metrics. You can use these results as the basis for planning, or to demonstrate how an existing business strategy is most likely to succeed or fail.

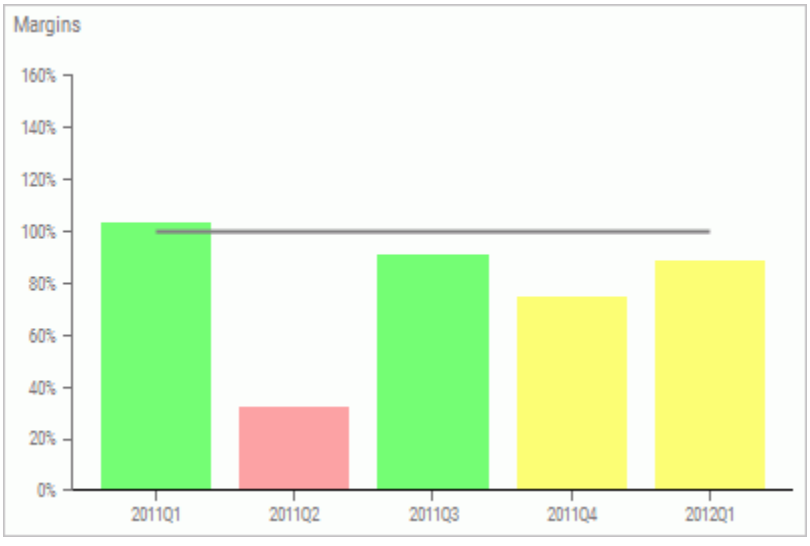
To fully utilize the predictive analysis functionality of PMF, you should configure predictive processing for specific measures to make forecasting results available in related views and reports. When configuring predictive methods, a map of all available prediction methods and sampling frequencies is presented for you to determine which ones provide the best results. You can easily select and change the method and sampling frequency used for predictive analysis without having any forecasting or advanced mathematics knowledge. Configuring predictive processing is performed by authors and administrators from the Edit Measure Metadata panel.

The following topics describe and show details of the views that use predictive analysis and forecasting to extend trends into the future. These views are available as drill-down options.

Note: To enable users to distinguish between standard and predictive actual and target data displayed in some views and reports, cells containing predictive data have a different background color.

Performance Trend (Predictive)

When you click a Measure drill-down hyperlink (for example, *Margins*), and select *Graph: Performance Trend*, the drill down takes you to the Performance Trend view, as shown in the following image.



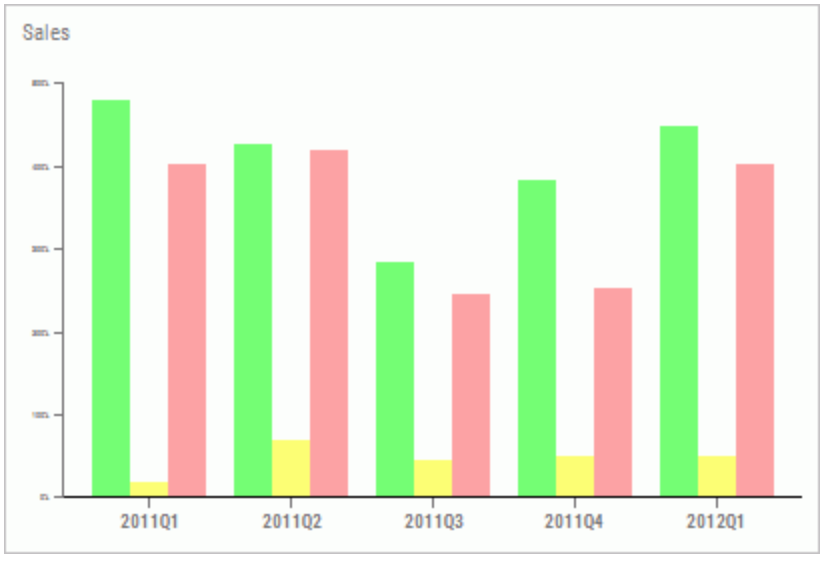
The Performance Trend predictive view shows the performance achievement for both past and future time periods, displaying graphic performance indicators side-by-side to visually show patterns of change in the metrics.

There are no additional drill downs available from this view.

Histogram (Predictive)

When you click a Measure drill-down hyperlink (for example, *Sales*), and select *Graph: Pct Reached Histogram*, the drill down takes you to the Performance Trend predictive histogram view. The method (algorithm) used to create the predictive data in the view varies. PMF analyzes all available methods, identifies the one that best predicted past achievement, and uses it to predict future achievement.

The following image shows an example of a Performance Trend predictive histogram view, in which the method used is moving average.



The preceding Performance Trend predictive histogram view shows the high, mid, and low moving averages for each time period, displayed in three separate colors, as indicated in the legend.

There are no additional drill downs available from this view.

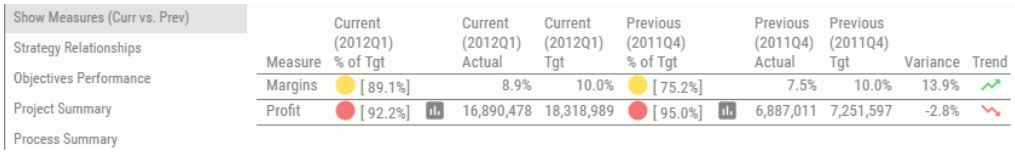
Measure Views

The following topics describe and show details of the measure-related views that are available as drill-down options.

Note: In reports that show aggregated measures, measure data might be distinctly counted. This means that items, such as staff, tools, or machinery that moves from location to location are not counted twice when totaling at higher levels.

Show Measures

When you click an Objective drill-down hyperlink and select *Show Measures (Curr vs. Prev)*, the drill down takes you to the Show Measures view, which displays the heading Measures - Compare to Previous. In this view, current measures (Percent Reached, Target, and Actual) are compared to previous measures for the selected objective, as shown in the following image.



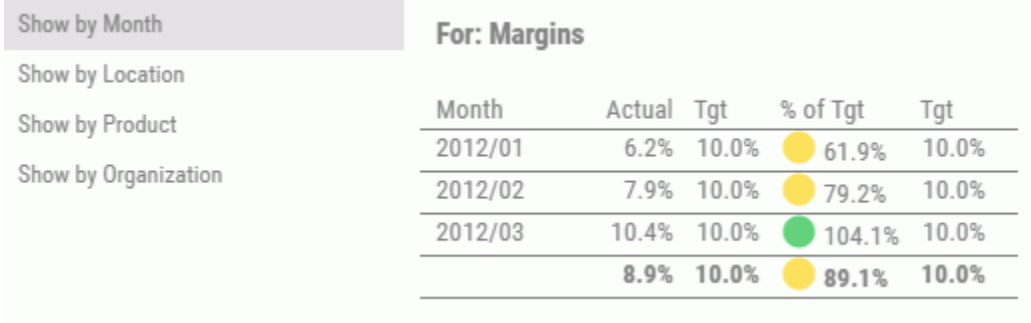
This view compares data for current and previous time periods which can be year over year, quarter over quarter, or month to previous month depending on the time window that is configured. PMF also provides measures for the previous year total, same quarter in previous year, and same month in previous year.

From the Show Measures view, you can select the *Measure Details* drill-down option in any of the columns displaying Current and Previous data. This option takes you to another view that provides statistical data at the lowest atomic measure level for the related metric. For more information, see *Measure Details* on page 71.

The Show Measures view also enables you to drill into the properties for any item in the Measure column to display additional views that show how the measure was loaded, what calculations were used to create it, and so on. To display additional data related to a measure, click a hyperlinked item in the Measure column and select the desired option. For more information, see *Default Measure Drill-Down Options* on page 34.

Measure Details

When you click a measure drill-down hyperlink (for example, in the Show Measures view) and select *Measure Details*, the drill down takes you to Measure Detail Data. Clicking a measure in this views view provides statistical data at the lowest atomic measure level for the related metric, as shown in the following image.



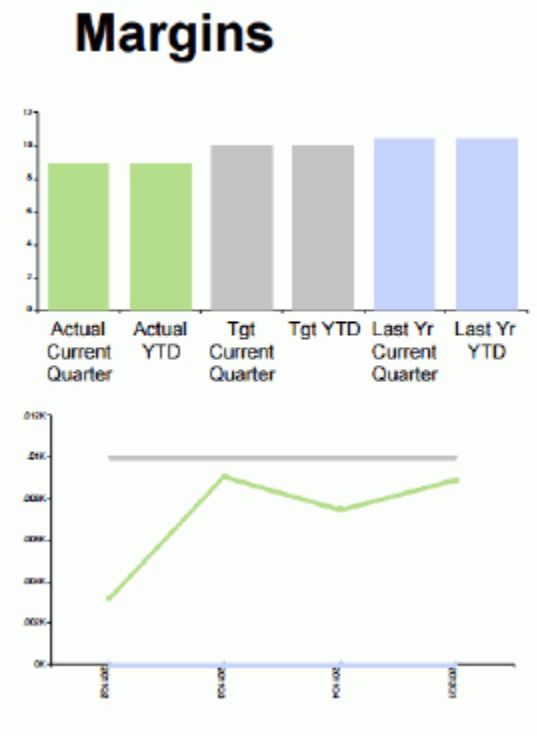
From Measure Detail Data, you have access to different dimensional cross-drill data views by clicking a hyperlink in the first column and selecting from the drill-down options. The options vary, depending on how your own dimensions are set up.

In the preceding example, the options include the following:

- **Show by Month.** Reformats the view to show data by month.
- **Show by Location.** Reformats the view to show data by location.
- **Show by Product.** Reformats the view to show data by product.
- **Show by Organization.** Reformats to show data by organization.

Measure Breakout

When you click a measure drill-down hyperlink and select *Measure Breakout Booklet - PDF*, the drill down takes you to the Measure Breakout view. This view provides actual, target, and percent reached measure data with graphs displaying current period and year-to-date trends for actual, target, and prior year performance. You can also view additional measure properties in a pop-over panel, by clicking the zoom button in the upper-right corner of the view. An example of the Measure Breakout view for the Sales measure is shown in the following image.



To run this view, click the dashboard icon on the Today page. Click *Content*, select *Analysis* or *Measures Detail*, and then click *Measure Breakout Booklet - PDF*.

Operational Report

When you click a drill-down hyperlink and select *Operational Report*, the drill down takes you to the view that was set up by your administrator, as shown in the following image.

TurnOver Report

Plant	Employed Count	Resigned Count	Terminated Count	TotalPersonel	TurnOver Ratio
Boston	18	7	3	28	.36
Dallas	25	1	4	30	.17
Los Angeles	58	14	7	79	.27
Orlando	30	1	1	32	.06
Saint Louis	6	1	0	7	.14
Seattle	14	1	0	15	.07

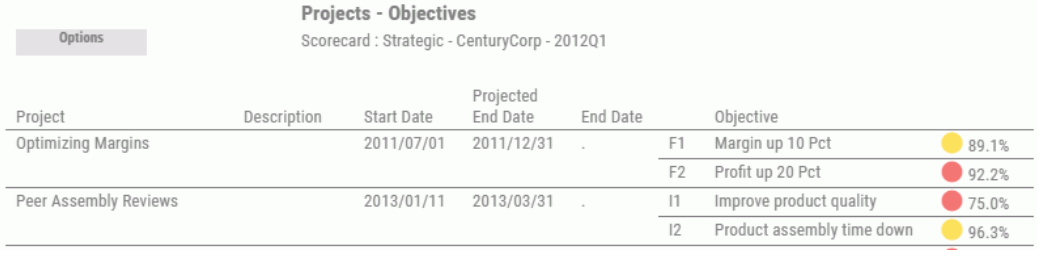
For any project, process, objective, or measure, your administrator can set up a WebFOCUS report as your operational report. This enables you to link PMF to external reports.

Project Views

The following topics describe and show details of the available project-related views. A project supports an objective, and has a start and end date. Project views measure the impact of projects on aligned objectives and identify the status of budgets and schedules.

Projects - Objectives

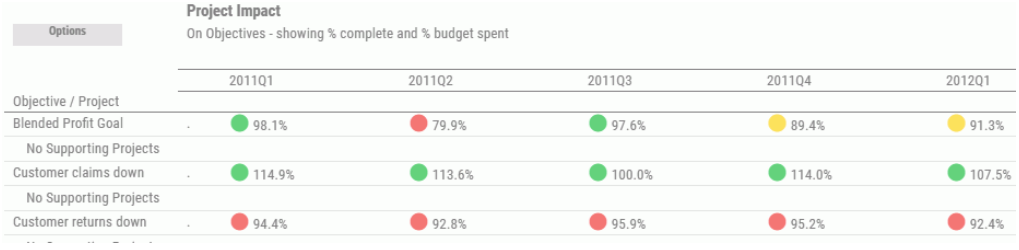
To access this view, click the dashboard icon on the Today page. Click *Content*, select *Projects & Processes*, and then click *Projects - Objectives*. This view provides a summary of all projects related to your scorecard and displays objective performance for each project, as shown in the following image.



The Projects - Objectives view provides hyperlinked metrics in the Project and Objective columns. To probe deeper into the metrics listed in the Project column, click a hyperlink and select the desired option. To display related data for an objective, click an Objective hyperlink and select the desired option.

Project Impact

To run a Project Impact view, click the dashboard icon on the Today page. Click *Content*, select *Projects & Processes*, and then click *Project Impact*. Another way to run this view is to click a project drill-down hyperlink, for example, in the Project Summary or Scorecard Projects view, and select *Project Impact*. The Impact of Projects on Objectives view opens, as shown in the following image. This view provides a way to measure the impact of projects on aligned objectives.



For all projects listed in the view, visual indicators show the percentages for project completed and budget spent to see if the project is actually supporting the related objective or not. Percentages are also shown for each objective for each time period in the view to indicate if the objective is accomplishing its goal or not.

The Project Impact view displays aligned and unaligned projects as entered in PMF against their aligned goals in a time line view. The time line displays the immediate or gradual impact of the project on its aligned goals. You can use this view to demonstrate:

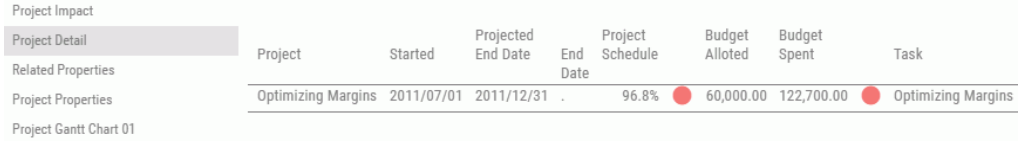
- The effectiveness of the project and whether it is having its intended results.
- The Project Health metric, which is a blended metric that combines the project performance regarding schedule and budget. You can determine how well the project is running at a glance.

Project managers can also use this view to determine the disposition of a project.

The Project Impact view displays hyperlinked metrics in the Objective/Project column. To probe deeper into the metrics listed in the Objective/Project column, click a hyperlink and select the desired option. For more information, see *Objective Drill-Down Options* on page 33.

Project Detail

When you click a project drill-down hyperlink (for example, Optimizing Margins in the Project Summary or Scorecard Projects view) and you select *Project Detail*, the drill down takes you to Project Detail, as shown in the following image.



Project Detail shows the overall health of a project, listing budget targets versus actual spending, and schedule targets versus actual schedules. It combines the target budget versus actual budget, and target schedule versus actual schedule, to determine an overall Project Health metric. It draws an indicator for each time break to show the project schedule and budget health at various points in time.

It also shows any tasks that are assigned to that project, including task feedback, status, and due date.

The Project Detail report provides hyperlinked metrics in the Project and Task columns. To probe deeper into the metrics listed in these columns, click a hyperlink and select the desired option. Drilling down on a Task link will allow you to view task details, as well as edit the selected task.

Aligned Projects

When you click a drill-down hyperlink, for example, in the Strategy Relationships view, and select *Aligned Projects*, the drill down takes you to the Scorecard Aligned Projects by Objective view, as shown in the following image. This view shows the aligned projects for the selected objective.

To access this view for all of the objectives in a scorecard, click the dashboard icon on the Today page. Click *Content*, select *Projects & Processes*, and then select *Projects Summary* from the list.

The Aligned Projects view displays the status of a project and demonstrates its impact on the aligned objectives.

It provides hyperlinked metrics in the Objective and Project columns.

To display related data for an objective, click an Objective hyperlink and select the desired option. For more information, see *Objective Drill-Down Options* on page 33.

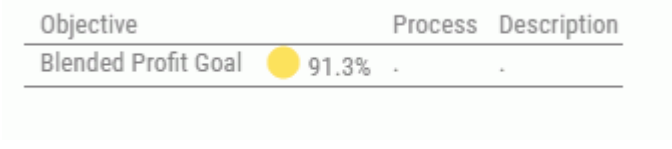
To probe deeper into the metrics listed in the Project column, click a hyperlink and select the desired option. For more information, see *Project Drill-Down Options* on page 34.

Process Views

The following topics describe and show details of the available process-related views. A process supports an objective and is recurring (does not have start and end dates).

Scorecard Aligned Processes by Objective

When you click an objective drill-down hyperlink and select *Aligned Processes*, the drill down takes you to the Scorecard Aligned Processes by Objective view. This view shows the aligned process and a description of the process, for the selected objective, as shown in the following image.



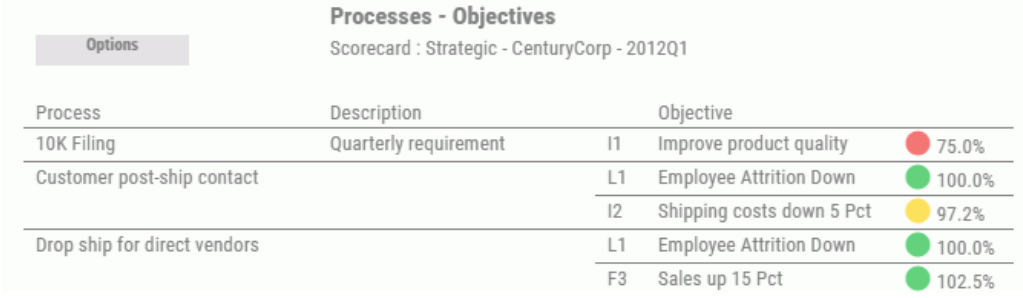
To access this view for all of the objectives in a scorecard, click the dashboard icon on the Today page. Click *Content*, select *Projects & Processes*, and then select *Process Summary* from the list.

The Scorecard Aligned Processes by Objective view displays process status and demonstrates its alignment with business objectives. It provides hyperlinked metrics in the Objective and Process columns.

To display related data for an objective, click an Objective hyperlink and select the desired option. For more information, see *Objective Drill-Down Options* on page 33. To probe deeper into the metrics listed in the Process column, click a hyperlink and select the desired option. For more information, see *Process Drill-Down Options* on page 35.

Processes - Objectives

You can access a view that provides a summary of all business processes related to your scorecard and displays objective performance for each process. as shown in the following image.



To access this view for all of the objectives in a scorecard, click the dashboard icon on the Today page. Click *Content*, select *Projects & Processes*, and then select *Processes - Objectives* from the list.

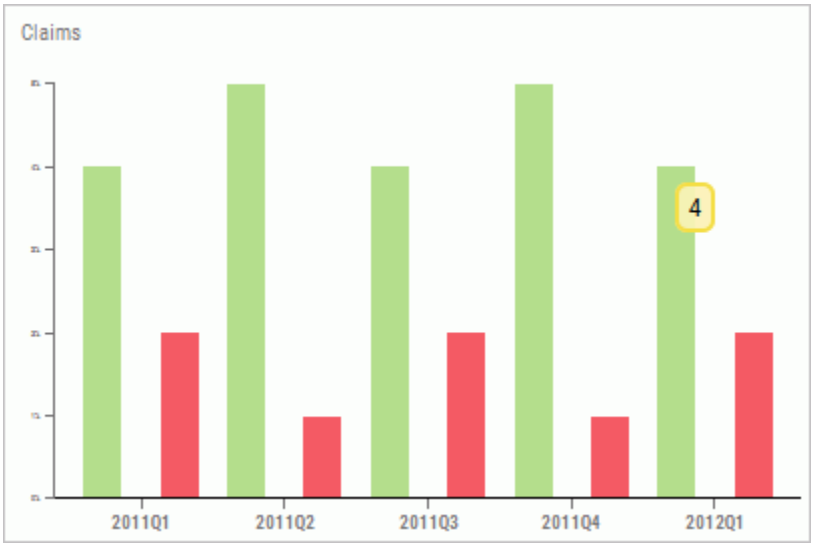
The Processes - Objectives view provides hyperlinked metrics in the Objective and Process columns. To display related data for an objective, click an Objective hyperlink and select the desired option. To probe deeper into the metrics listed in the Process column, click a hyperlink and select the desired option.

Performance Views

The following topics describe and show details of the performance trending views available as drill-down options.

Percent Reached Histogram

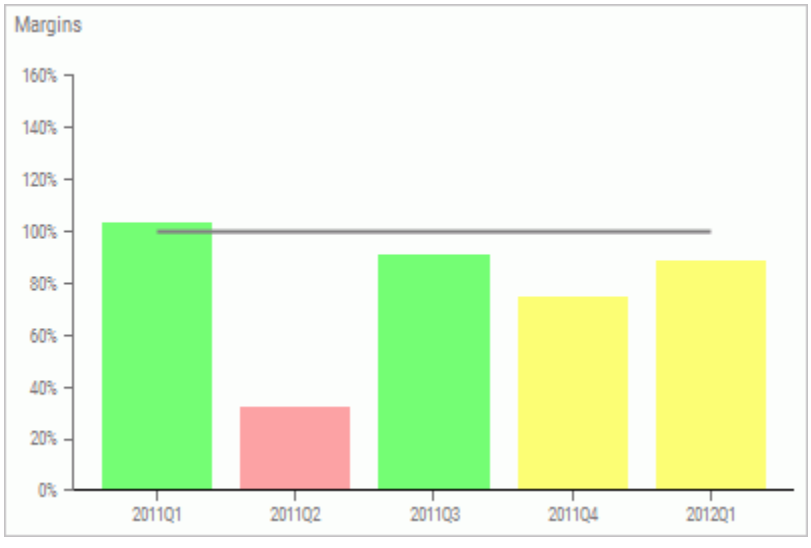
When you click a drill-down hyperlink (for example, in the Show Measures view) and select *Graph: Pct Reached Histogram*, the drill down takes you to the Percent Reached Histogram, which contains graphical data for the associated objective and perspective, as shown in the following image. This view shows percentage reached performance trend data for the selected metric and associated time periods.



There are no additional drill downs available from this view.

Performance Trend

When you click a drill-down hyperlink for an objective, perspective, or measure, and select *Graph: Performance Trend*, the drill down takes you to the Performance Trend view, as shown in the following image. Depending on the metric, Performance Trend data is presented in one or more bar or line graphs.

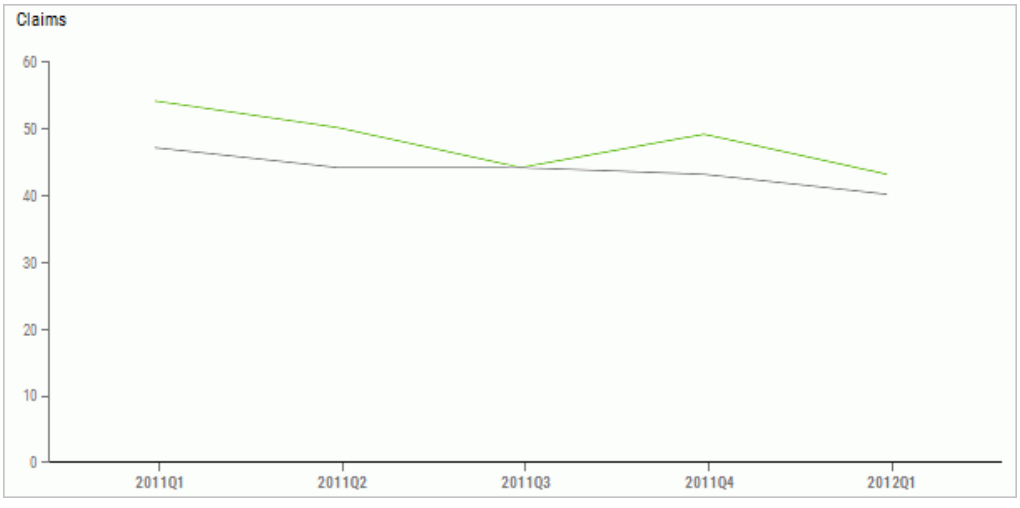


There are no additional drill downs available from this view.

For information on selecting trend dates for Performance Trend views using the Analysis Designer, see *Automatic Trend Dates* on page 89.

Actual vs. Target Relationship

When you click a Measure drill-down hyperlink (for example, in the Show Measures view) and select *Graph: Actual vs. Target Relationship*, the drill down takes you to the Actual vs. Target Relationship view, as shown in the following image.



This view tracks actual performance compared to target performance. The lines in the graph assume that the percent achievement of the target is shown. The actual targets can vary from period to period, depending on how they have been set up by planners or managers.

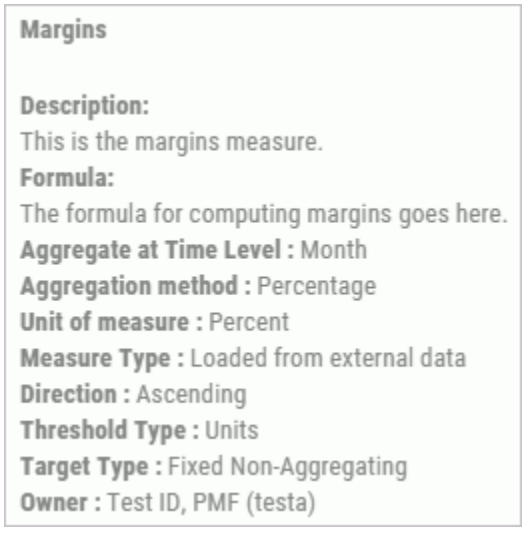
There are no additional drill downs available from this view.

Properties Views

The following topics describe and show details of the various properties views for objectives, perspectives, projects, processes, and measures that are available as drill-down options.

Measure Properties

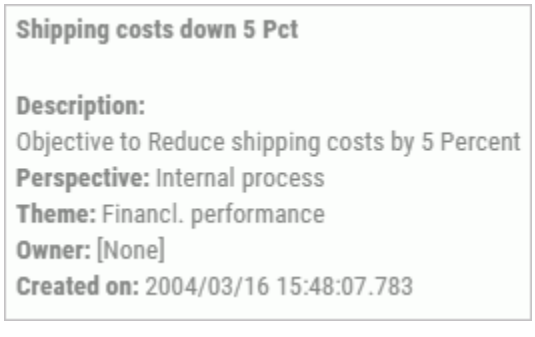
When you click a drill-down hyperlink (for example, *Margins* in the Show Measures view) and you select *Measure Properties*, the drill down takes you to the Measure Properties view, as shown in the following image. It provides details about a selected metric including the formula for computing that metric, aggregation method, threshold direction, and more.



There are no additional drill downs available from this view.

Objective Properties

When you click a drill-down hyperlink (for example, *Shipping costs down 5 Pct* in the Objectives Summary view) and you select *Objective Properties*, the drill down takes you to the Objective Properties view, as shown in the following image. It provides basic information about the selected metric including perspective, associated theme, and creation date.



There are no additional drill downs available from this view.

Perspective Properties

When you click a perspective drill-down hyperlink (for example, *Financial* in the Causes & Effects view) and you select *Perspective Properties*, the drill down takes you to the Perspective Properties view, as shown in the following image. It provides basic information about the selected perspective including the creation date and a description.

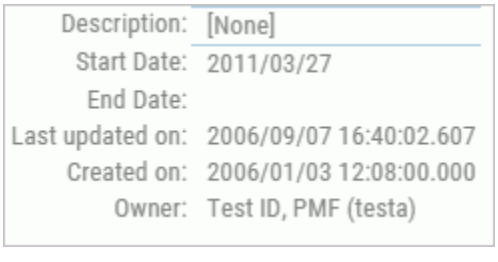
There are no additional drill downs available from this view.

Project Properties

When you click a project drill-down hyperlink (for example, *Optimizing Margins* in the Scorecard Projects view) and you select *Project Properties*, the drill down takes you to the Project Properties view. It provides basic information about the selected project including a description and the start, end, update, and creation dates.

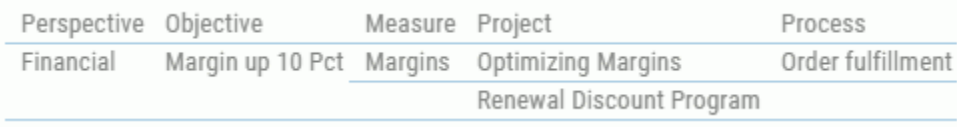
Process Properties

When you click a process drill-down hyperlink (for example, *Drop ship for direct vendors* in the Scorecard Processes view) and you select *Process Properties*, the drill down takes you to the Process Properties view, as shown in the following image. It provides basic information about the selected process including a description and the update and creation dates.



Related Properties

When you click a drill-down hyperlink and select *Related Properties*, the drill down takes you to the Related Properties view where additional drill-down hyperlink options are available in the Project and Process columns. The following image shows the drill-down options for the Project column.



Perspective	Objective	Measure	Project	Process
Financial	Margin up 10 Pct	Margins	Optimizing Margins	Order fulfillment
			Renewal Discount Program	

All five PMF scorecard metrics are displayed in this view: Perspective, Objective, Measure, Project, and Process.

To display related data for the perspective, click the Perspective hyperlink and select the desired option. For more information, see *Perspective Drill-Down Options* on page 33.

To probe deeper into the metric listed in the Objective column, click the Objective hyperlink and select the desired option. For more information, see *Objective Drill-Down Options* on page 33.

To display additional data related to the measure, click the Measure hyperlink and select the desired option. For more information, see *Default Measure Drill-Down Options* on page 34.

To display related data for a project, click a Project hyperlink and select the desired option. For more information, see *Project Drill-Down Options* on page 34.

To display related data for a process, click a Process hyperlink and select the desired option. For more information, see *Process Drill-Down Options* on page 35.

Using the Analysis Designer

The Analysis Designer enables you to specify parameter options and run a view based on those options. The available parameter options are grouped into five sections: Layout, Groupings, Data, Filters, and Report.

In the Filters section of the Analysis Designer, you can filter the view by selecting any combination of specific values including time, product, scorecard, objective, perspective, theme, metrics, location, organization, and measure. If you want to select multiple measures, click the browse (...) button to the right of the Measure drop-down menu. The Multi-Measure Selector dialog box opens.

Note that you can force the report to always use the selected scorecard by selecting the check box next to Scorecard in the Filters section of the Analysis Designer. Leaving the check box clear allows an end user to pass the scorecard they wish to view at run time.

In the Layout, Groupings, and Data sections of the Analysis Designer, you can select a report template, sort criteria, and the type of data you want to show. There are nine different report templates that you can select: Metrics Vertical Sort, Metrics Across Dimension, Metrics Crosstab, Objectives Vertical Sort, Objectives Across Dimension, Objectives Crosstab, Themes Vertical Sort, Themes Across Dimension, and Themes Crosstab. You can select from primary and secondary vertical sort fields, and a horizontal sort field when you select the Metrics Across Dimension or Objectives Across Dimension report templates. Views can be sorted by perspective, objective, year, quarter, month, location, product, organization, supplier, or theme. You can control the output by selecting to show actual output data, multiple alternate targets plus indicators, or the percentage of goals achieved plus indicator information. For an example of displaying multiple alternate targets in a view, see *Running the Metrics Vertical Sort View* on page 86. Additionally, the Analysis Designer enables you to show any combination of value, percent reached, and indicator to compare up to four columns of data. This gives you the ability to create thousands of different views.

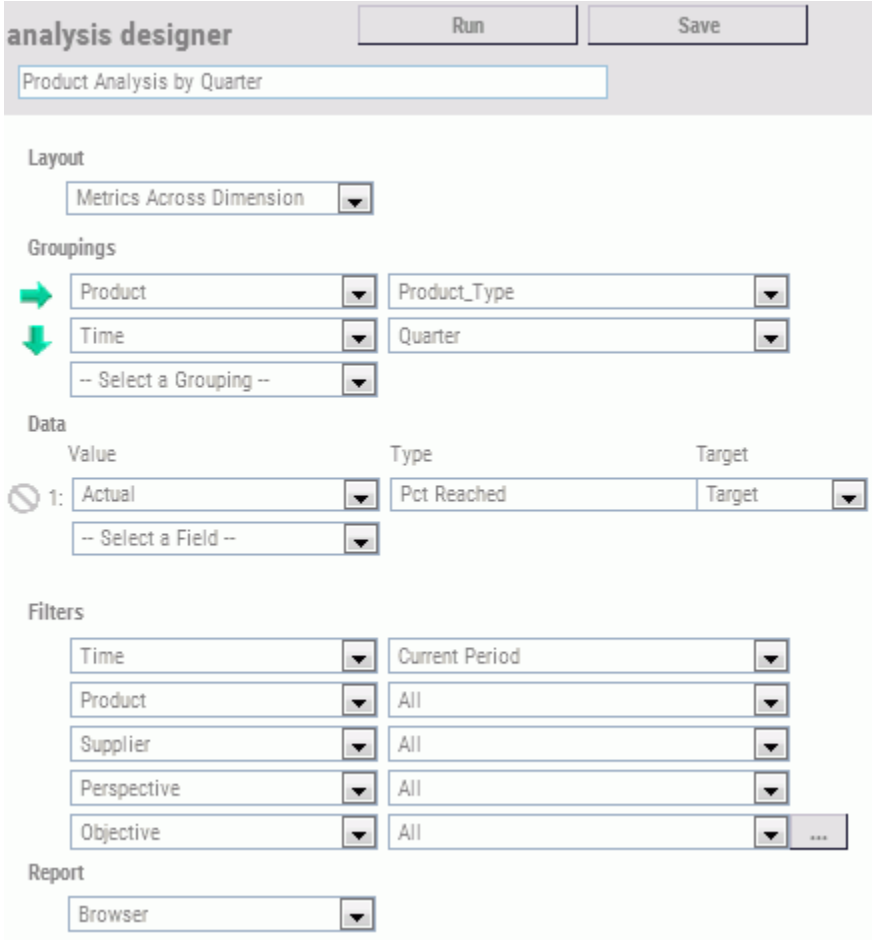
In the Report section of the Analysis Designer, you determine the output format by selecting to display the view in a browser, a PDF file, a WebFOCUS HTML active report, an Excel spreadsheet, which can be sent to end users for offline analysis. Enter a report name at the top of the Analysis Designer so it can be saved for future use. You can also use the Quick Reporting Mart option to take data from PMF and build custom content. For more information, see *Designing a PMF Quick Reporting Mart* on page 412.

Running the Metrics Across Dimension View

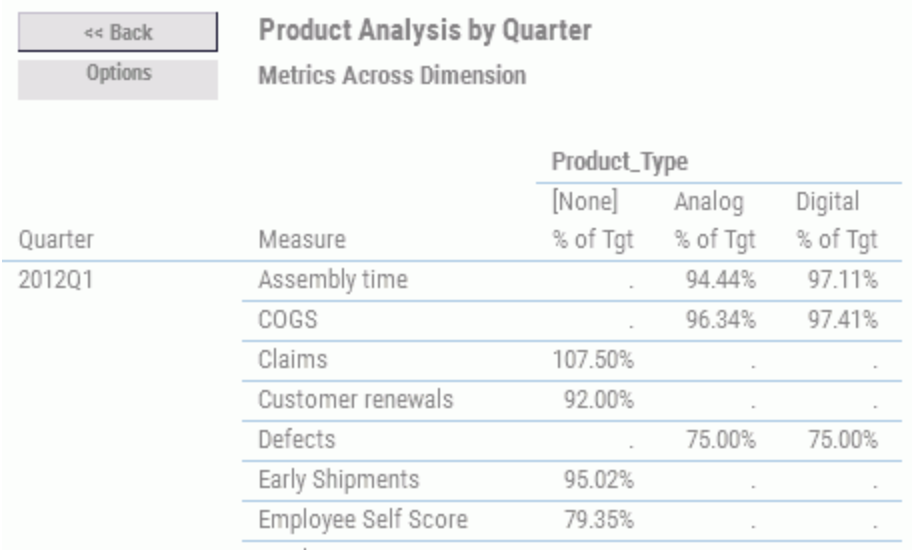
PMF provides the Metrics Across Dimension template, which you can use to create a view that displays metrics horizontally across your organization using the selected parameters. This view requires you to select an Across sort field.

To run the Metrics Across Dimension view, click the dashboard icon on the Today page. Click *Content*, select *Analysis*, and then click *Analysis Designer*. The Analysis Designer opens where you select the desired report template and specify your parameter options.

Type a report name in the field provided (for example, *Product Analysis by Quarter*). From the Layout drop-down menu, select *Metrics Across Dimension* and then select the desired parameters in the Groupings and Filters sections, as shown in the following image.



Click *Run* to execute and open the grid. The following image shows the Metrics Across Dimension view for the selected parameter values.



		Product_Type		
		[None]	Analog	Digital
Quarter	Measure	% of Tgt	% of Tgt	% of Tgt
2012Q1	Assembly time	.	94.44%	97.11%
	COGS	.	96.34%	97.41%
	Claims	107.50%	.	.
	Customer renewals	92.00%	.	.
	Defects	.	75.00%	75.00%
	Early Shipments	95.02%	.	.
	Employee Self Score	79.35%	.	.

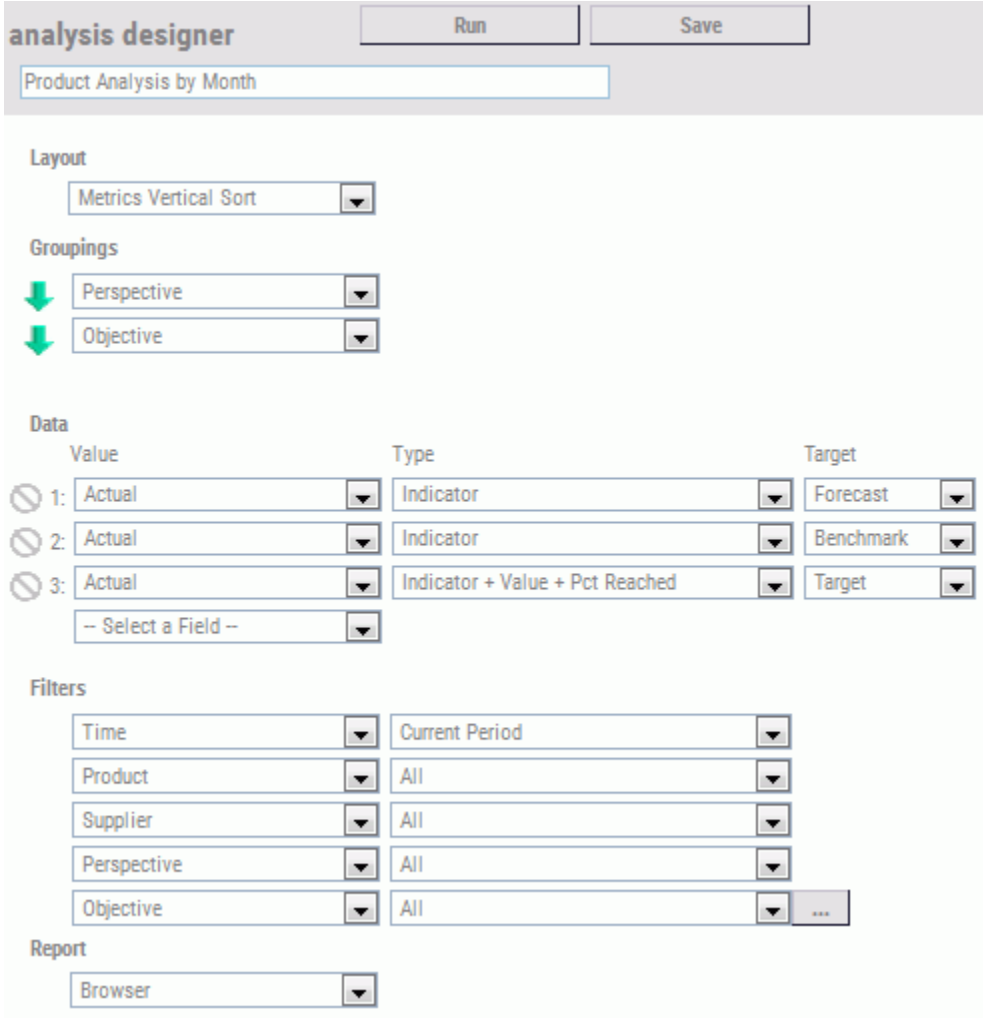
The *Options* button at the top-left of the view enables you to Print the view, Output (export) to an Excel file, Output to a PDF, add to Mobile favorites, or Schedule the run time and distribution of the view using the Report Wizard. You can also display alternate target data in the view by selecting Show Benchmark, Show Forecast, or Show Stretch Target.

Running the Metrics Vertical Sort View

PMF provides the Metrics Vertical Sort template, which you can use to create a view that displays metrics vertically using the selected parameters and vertical sort field.

To run the Metrics Analysis, click the dashboard icon on the Today page. Click *Content*, select *Analysis*, and then click *Analysis Designer*. The Analysis Designer opens where you select the desired report template and specify your parameter options.

Type a name in the field provided (for example, *Product Analysis by Month*). From the Layout drop-down menu, select *Metrics Vertical Sort*, and then select the desired parameters in the Groupings and Filters sections, as shown in the following image.



Click *Run* to execute and open this view in a new window. The following image shows the Metrics Vertical Sort view for the selected parameter values.

Perspective	Objective	Measure	Fcast	Bnchmk	Actual % of Tgt
Financial	Blended Profit Goal	Margins			8.9% [89.1%]
		Profit			16,890,478 [92.2%]
	Margin up 10 Pct	Margins			8.9% [89.1%]
	Profit up 20 Pct	Profit			16,890,478 [92.2%]
	Sales up 15 Pct	Sales			132,235,881 [102.5%]
Customer	Customer claims down	Claims			43 [107.5%]
		Employee Self Score			.79 [79.3%]
	Customer returns down	Product returns			4,928 [92.4%]

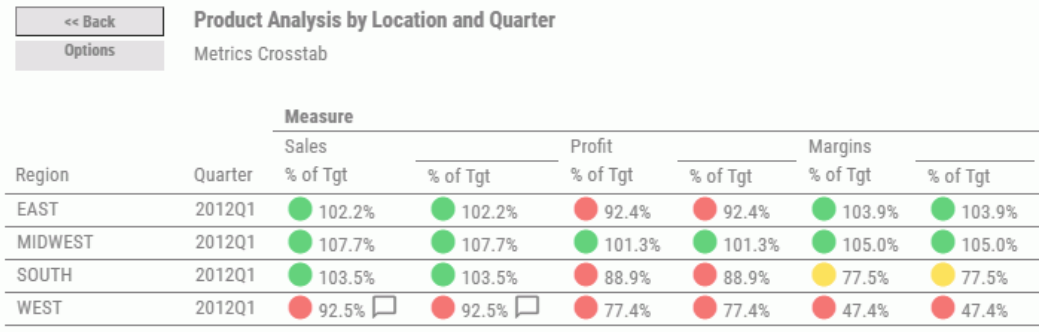
The *Options* button at the top-left of the view enables you to Print the view, Output (export) to an Excel file, Output to a PDF, add to Mobile favorites, or Schedule the run time and distribution of the view using the Report Wizard. You can also display alternate target data in the view by selecting Show Benchmark, Show Forecast, or Show Stretch Target.

Running the Metrics Crosstab View

PMF provides the Metrics Crosstab template, which you can use to create a view that displays metrics horizontally using the selected parameters. This view enables you to see dimensional breakouts across many measures. When you run the Metrics Crosstab report, you can visually analyze your measures on a point-to-point basis across the selected sorting levels.

To run the Metrics Analysis, click the dashboard icon on the Today page. Click *Content*, select *Analysis*, and then click *Analysis Designer*. The Analysis Designer opens where you select the desired report template and specify your parameter options. If you click the browse (...) button to the right of the Measure drop-down menu, you can select multiple measures to personalize the columns you want displayed in the output.

Type a report name in the field provided. From the Layout drop-down menu, select *Metrics Crosstab*, select the desired parameters, and then click *Run* to execute and open this view in a new window. The following image shows an example of the Metrics Crosstab view.



		Measure					
		Sales		Profit		Margins	
Region	Quarter	% of Tgt	% of Tgt	% of Tgt	% of Tgt	% of Tgt	% of Tgt
EAST	2012Q1	102.2%	102.2%	92.4%	92.4%	103.9%	103.9%
MIDWEST	2012Q1	107.7%	107.7%	101.3%	101.3%	105.0%	105.0%
SOUTH	2012Q1	103.5%	103.5%	88.9%	88.9%	77.5%	77.5%
WEST	2012Q1	92.5%	92.5%	77.4%	77.4%	47.4%	47.4%

Creating Active Technologies Reports

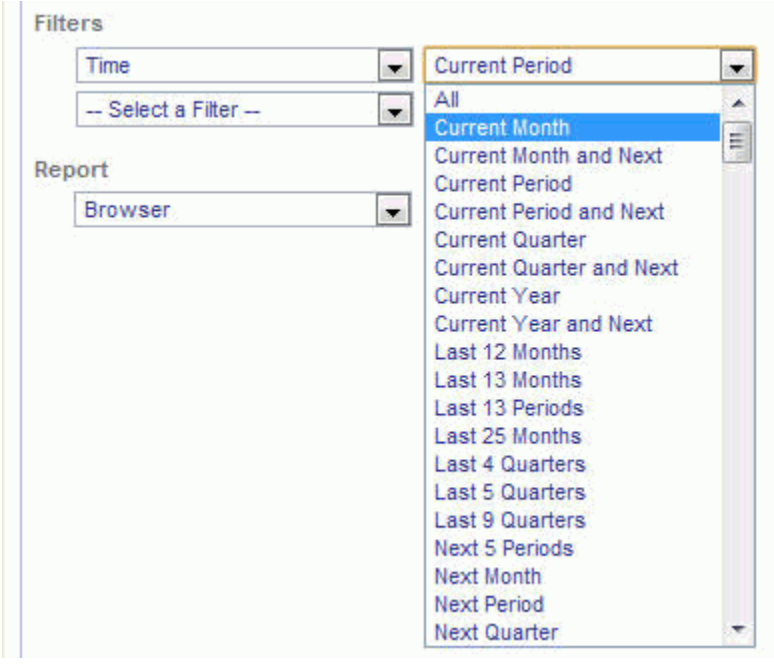
You can use the Analysis Designer to create HTML active reports. The Analysis Designer enables you to design personalized PMF output that can be sent to end users along with embedded data and built-in browser-neutral analysis tools. To request your content to be delivered as an active report, select the *Active* option in the Format area of the Analysis Designer and click *Run*.

Note: The use of WebFOCUS HTML active reports requires a specific software license from Information Builders.

Automatic Trend Dates

To better facilitate generating performance trend views with the Analysis Designer, standard trending dates are available in the Time dimension drop-down menu in the Filters section of the Analysis Designer. You can quickly create a trend view that looks back from the current period to the start of the trend period selected.

For CenturyCorp Card, the default options available for the trend periods include Last 13 Months, Last 25 Months, Last 5 Quarters, and so on, as shown in the following image. The Current Period is the default Time selection.

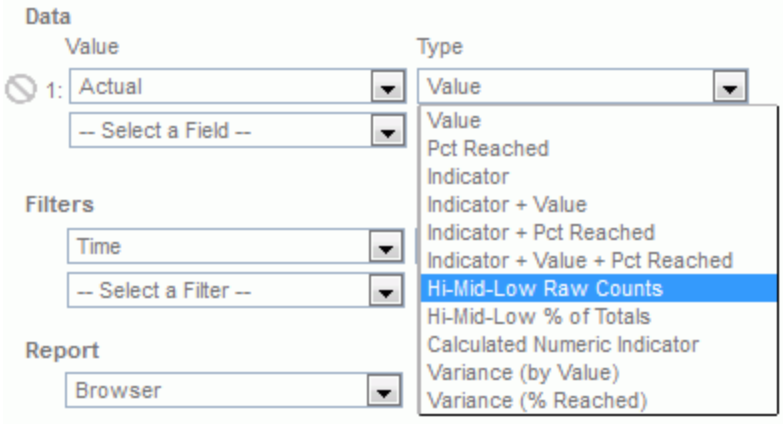


If you create personalized trend periods using the Time Ranges capability of the Manage page, those values will be available in the Filters section of the Analysis Designer, as shown in the following image. For more information, see *General Tab - Time Ranges* on page 373.

Hi-Mid-Low Raw Counts and Percents of Total

You can use the Analysis Designer to report both the total Hi-Mid-Low (Hi-Mid-Low or red/yellow/green) counts for a metric range, as well as the Hi-Mid-Low Percent of Total, which shows the share of each indicator of the total count of metric values in that metric range.

These options can be found in the Data drop-down menu of the Analysis Designer, as shown in the following image.



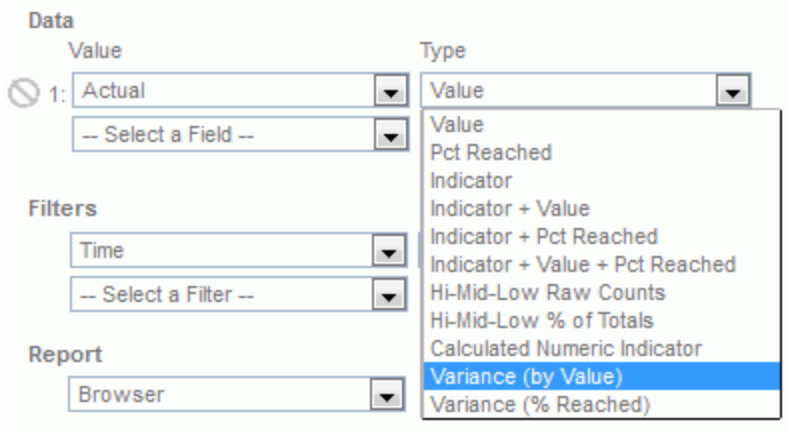
The display options are:

- **Hi-Mid-Low Raw Counts.** Displays a count of High, Mid, and Low (Green, Yellow, and Red) values. This is the count of rows for that metric and Dimensional intersection that are each High, Mid, and Low (Green, Yellow, and Red).
- **Hi-Mid-Low % of Totals.** Displays the share of total High, Mid, and Low (Green, Yellow, and Red) values. This is the percent share of total rows that are each Greens (Highs), Yellows (Mid), and Reds (Low).

Variance by Value and Percent Reached

You can use the Analysis Designer to report both the variance value from Target, as well as the percent variance from Target.

These options can be found in the Data drop-down menu of the Analysis Designer, as shown in the following image.



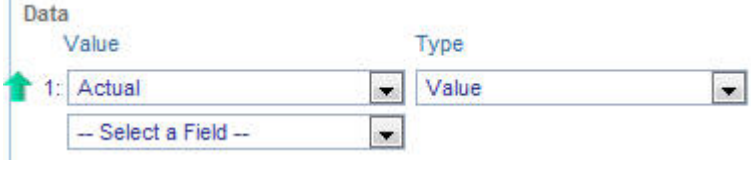
The display options are:

- **Variance (by Value).** Displays the difference between the actual value and the target value.
- **Variance (% Reached).** Displays the difference of percent reached. For example, if the percent reached is 75%, the actual variance from target is -25%. If the percent reached is 125%, the actual variance from target is 25%.

Ranking Metrics and Objectives

Metrics and objectives for views and in gadgets can be displayed based on the ranking of their performance or value. The available options are *Rank Ascending* or *Rank Descending*. The default sorting setting is alphabetic.

To set up Ranking, click the dashboard icon on the Today page. Click *Content*, select *Analysis*, and then click *Analysis Designer*. The Analysis Designer opens where you select the desired report template and specify your parameter options. If you click to the left of the data field, of the Value that you want to rank, a ranking button appears, as shown in the following image.



If you click to the left of another field and the previous field has been ranked, it will transfer to the newly selected field.

Note: Only Vertical Sort styles of the Measure, Objective, and Theme templates can support ranking.

PMF ranking sorts the report information by the value or the percent reached. For example, if you chose a value for actual or target, PMF ranks based on the value of the field for the indicators. If you choose a percent reached field, or a combo indicator, PMF ranks based on the percent reached for the indicators.

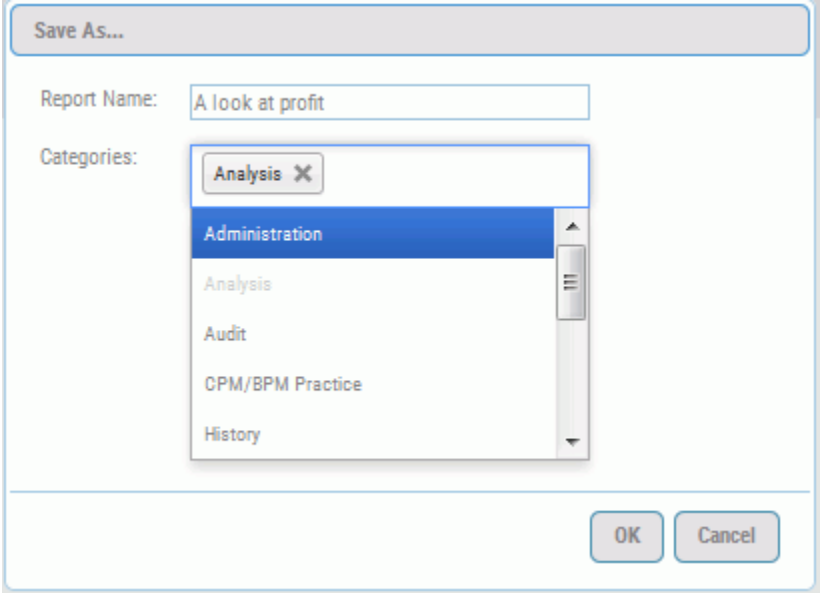
If you choose a sort value from the Sorting options, PMF displays the rank within the outermost sort type indicated. For example, if sorting by one or more Dimensions, PMF performs the rank within the innermost dimension. If sorting by Perspective, PMF ranks the items within each perspective. The only exception to this is when sorting on the Time Dimension.

Categorizing a Saved Report

PMF has several predefined categories that allows a user to categorize and share saved reports with other users, including Administration, Analysis, Audit, CPM/BPM Practice, History, Measures Detail, Objective, Perspective, Projects & Processes, Today, and Private. There are also ten additional user-defined categories available, which are set up in the Content panel by your Administrator.

Categorizing and Publishing a New Analysis Designer Report

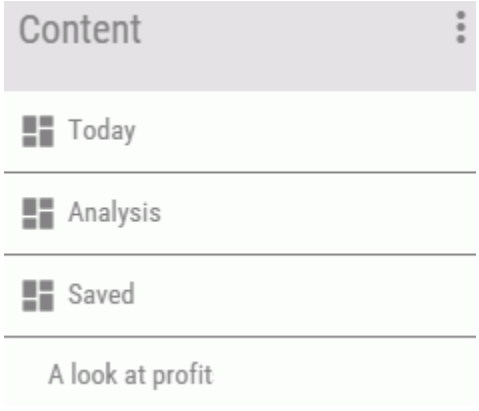
If you create a new report in Analysis Designer, you can quickly add the report to any category while saving it. Click the Categories field and select the desired categories from the drop-down menu, as shown in the following image.



You can also type the category name in the field provided to quickly search through the list.

Click *OK* to save the report.

Analysis Designer reports that have been user-categorized will appear in the drawer, under the Saved section, as well as in the categories to which they have been assigned, as shown in the following image.



Other users can now see and run the report.

Adding or Removing Categories from Saved Reports

You can change the categories of any saved report. To add a category to, or remove a category from a saved report, click the dashboard icon on the Today page. Click *Content*, select *Analysis*, and then click *Analysis Designer*. Click *Open* and select the report from the Report Name drop-down menu. Click *OK*.

Click the Categories field and select the desired categories from the drop-down menu. To remove a category, click the *X* next to the category name. Click *Save* once you are done making changes. The report will now be listed in the drawer, under the Saved section, as well as under the new categories selected.

Saving a View

After you run a view, you can save its parameters and run the view again later. To save a view created in the Analysis Designer, type a report name in the Report field provided at the top of the Analysis Designer and click *Save*.

Running a Saved View

To run a saved view, click the dashboard icon on the Today page. Click *Content*, select *Saved*, and then click the name of the saved view.

Editing a Saved View

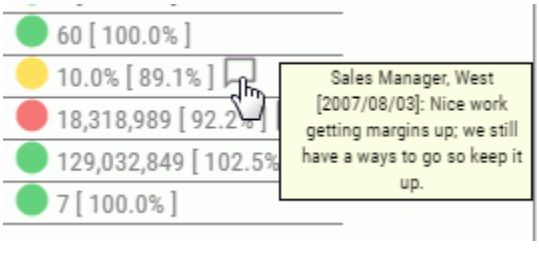
You can change the parameters of any saved view. To edit a saved view, click the dashboard icon on the Today page. Click *Content*, select *Saved*, and then click the desired saved view. The Report panel opens where you can change your parameter options. After you are done making changes, run the view to test the results of your changes. If you are satisfied with the results, click *Save*.

Feedback Blogging

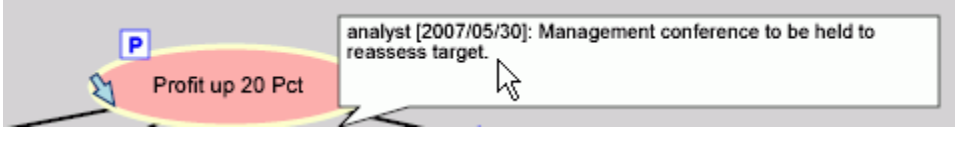
Feedback blogging enables you to instantly enter feedback comments about a measure, and the associated objective, for which you have responsibility. Each instance of feedback is stored and tracked by user and provides valuable data including Owner ID, the date and time the feedback was entered, percent achieved, and indicator color at the time of input.

If feedback has been entered, a feedback icon appears on the reports and views associated with the measure, and on the Strategy Map above the associated objective. Hover the mouse over the feedback icon to display the most recent feedback. If you click the icon, you can add new feedback, view related feedback entered by others, and edit any existing feedback that you recently added.

The following is an example of viewing feedback by hovering over a feedback icon on a report.

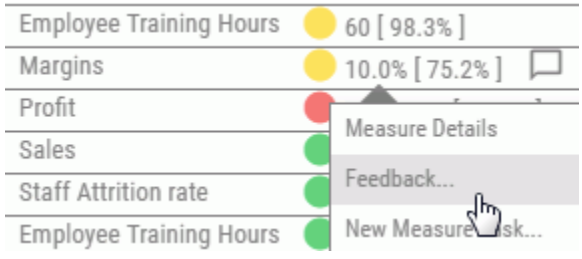


The following is an example of viewing feedback by hovering over a feedback icon on the Strategy Map.



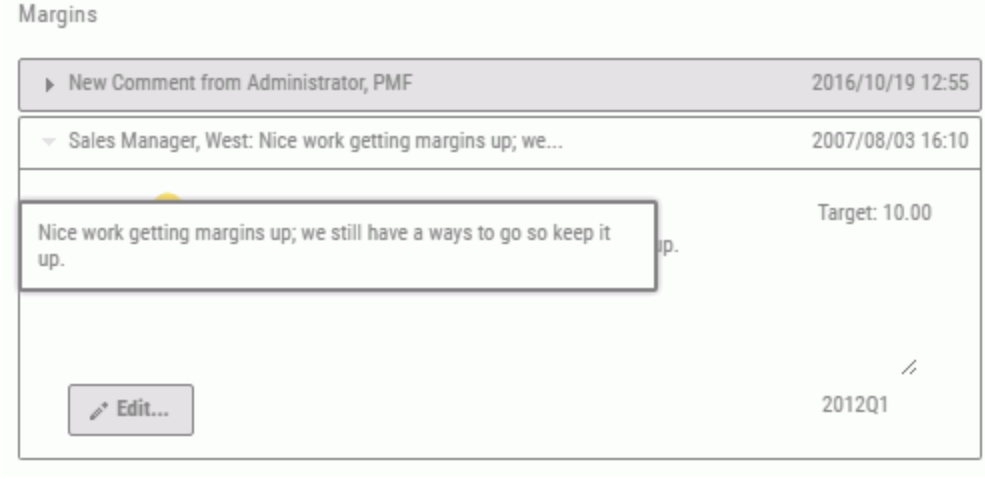
Procedure: How to Add Feedback

1. To add feedback for a measure on a report or view, click the measure and select *Feedback...* from the menu, as shown in the following image.

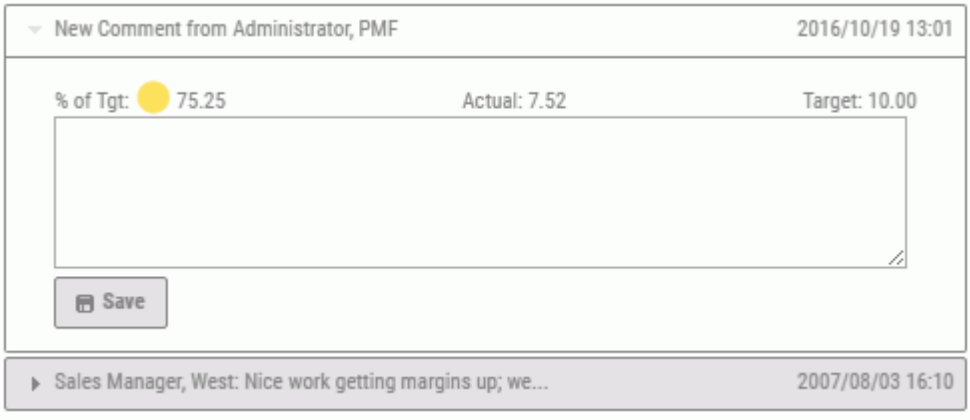


To add feedback for an objective on the Strategy Map, right-click the objective and select *Feedback...* from the menu.

The Feedback panel opens, displaying a New Comment panel (and any feedback that exists), as shown in the following image.



2. To enter new feedback, click the *New Comment from* panel button and type feedback comments in the input text area, as shown in the following image.



3. When you are finished entering feedback, click *Save*.

   You can type up to 1024 characters to document the selected measure.

4. If you want to edit existing feedback that you recently added, click its panel button and make any edits in the input text area that opens and click *Save*.

Procedure: How to Edit or Delete Feedback

1. To edit or delete feedback that you entered for a measure on a report or view, click the measure that displays the feedback icon, then select *Feedback* from the menu.

   To edit feedback that you entered for an objective on the Strategy Map, double-click the feedback icon or right-click the objective, then select *Feedback* from the menu.

   The Feedback panel opens, displaying existing feedback.

2. Click the panel button for the desired comment and make your changes in the input text area.

3. To save the edited feedback, click *Save*.

   To delete the feedback, click *Delete*, a confirmation dialog box appears, then click *OK*.

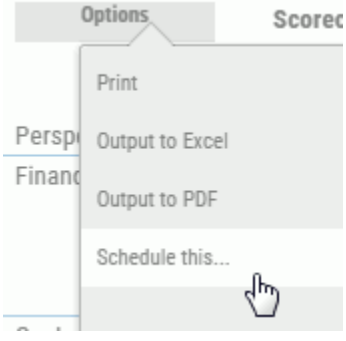
Note: Feedback editing can only be performed for a period of time that is preset by your PMF Administrator, who can also disable the option to edit feedback.

Scheduling Reports and Views

You can instantly schedule any view to be sent to you exactly how it currently appears. The scheduling facility automatically captures the parameters of the report you are viewing. Views are scheduled and distributed using WebFOCUS ReportCaster. You can cancel or revise any existing scheduled view quickly and easily.

Procedure: How to Schedule Reports and Views

1. From any view, click the *Options* button and select *Schedule this* from the menu.



The Schedule this panel opens.

2. Select values for the following fields to schedule the report or view.

Note: Your choice of the scheduling interval determines which additional fields appear in the Schedule this panel. The following table lists all of the possible fields.

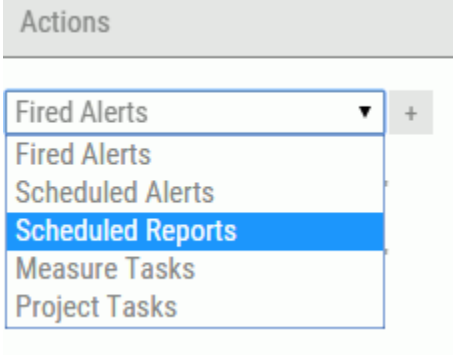
Field	Description
Schedule to run	Desired report scheduling interval. Options are Once, Daily, Weekly, and Monthly.
Weekdays	Select the days of the week to schedule the report or view. Click to select a day. Click twice to deselect. This field only appears when you select Weekly as the schedule interval.

Field	Description
Days of month	Select the days of the month to schedule the report or view. Options include all numbered days of the month (1-31) and Last Day. Click to select a day. Click twice to deselect. This field only appears when you select Monthly as the schedule interval.
Start Date	Date you want to start the schedule (in YYYYMMDD format).
End Date	Date you want to end the schedule (in YYYYMMDD format). This field does not appear when scheduled to run once.
Start Time	Time you want to start the schedule (in HHMM, 24-hour format).
End Time	Time you want to end the schedule (in HHMM, 24-hour format). This field does not appear when scheduled to run once.

3. Click *Save* and close the Schedule this panel.

Procedure: How to View, Update, or Cancel a Scheduled Report or View

1. Select *Scheduled Reports* from the drop-down menu in the action block on the Today page.



PMF displays a list of reports and views you have scheduled.

2. Click the schedule you want to change.

PMF displays a menu with the following options:

- Change When Report Runs

- ❑ Remove Report

3. To update when the report or view is scheduled to run, click *Change When Report Runs*.

   The Schedule this panel opens.

   Make the desired changes and click *Save*.

4. To cancel a scheduled report or view, click *Remove Report*.

   PMF deletes the schedule for that report or view.

Managing Project Tasks

You can manage tasks assigned to you from the action block located on the dashboard. Since the action block is a portable component, it can be placed anywhere on the PMF dashboard by an administrator.

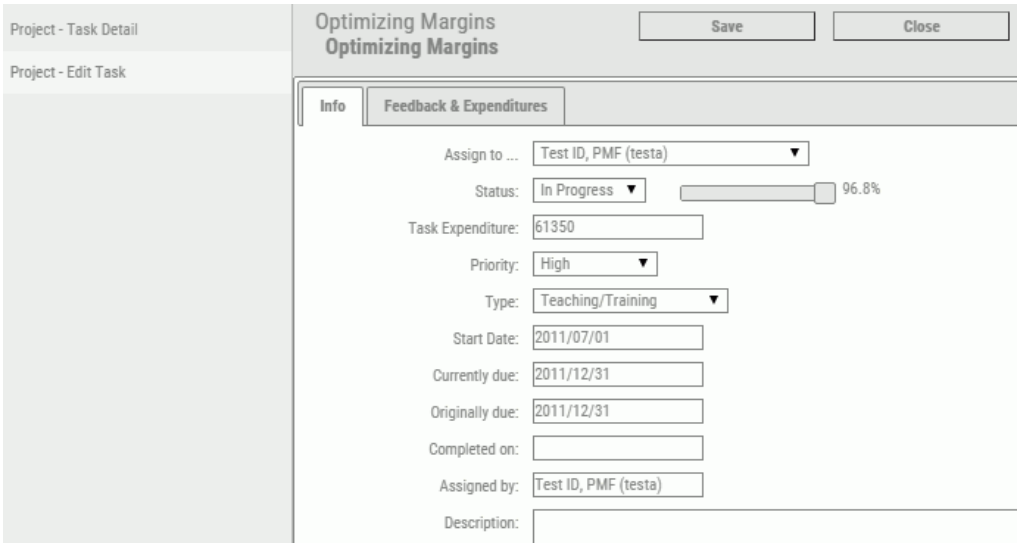
From the action block, you can work with tasks in the following ways:

- ❑ See the project tasks assigned to or assigned by the owner who is currently signed in.
- ❑ See the tasks for projects linked to the current scorecard.
- ❑ Edit any of the listed tasks.
- ❑ Create new tasks if you are the owner of the project.
- ❑ Add feedback comments to the selected task.
- ❑ Add budget entries (Expenditures) to the selected task.
- ❑ View all details for the selected task.

Procedure: How to Edit a Task

1. From the action block, select *Project Tasks*.
2. Click the task you want to edit.

3. Click *Project - Edit Task* to open the Edit Task panel, as shown in the following image.



4. Make any necessary changes, such as updating the task status, priority, or due date. For more information on the fields in this panel, see *Projects* on page 208.
5. Click *Save*.
6. Click the *Refresh* icon in the action block to see the changes.

Procedure: How to Add Feedback or Spending to a Task

1. From the action block, select *Project Tasks*.
2. Click the task for which you want to add feedback or spending.

   A menu opens.
3. Click *Project - Edit Task*.

   The Edit Task panel opens.
4. Click the *Feedback & Expenditures* tab.
5. For the Effective Date, click the box and select the date from the calendar that opens.

6. Type any expenditure and task feedback items in the boxes provided, as shown in the following image.

Note: An Owner can only edit or delete their own Effective Date, Feedback, or Expenditure entries.

7. Click *Save*.

   The Info Tab in the Edit Task panel will display the aggregated Spend data in the Task Expenditure field.

Procedure: How to View Task Details

1. From the action block, select *Project Tasks*.
2. Click the task for which you want to view details.

   The Task Detail report opens, as shown in the following image.

Managing Alerts

PMF implements WebFOCUS ReportCaster alerts through an easy-to-use action block. You can display fired alerts and scheduled alerts, modify or delete existing alerts, or add new alerts.

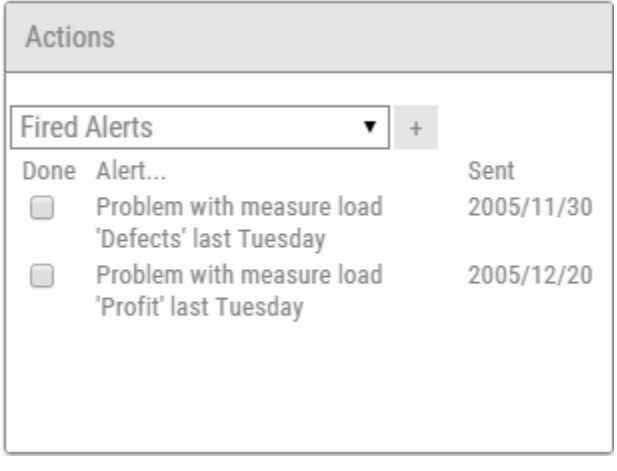
When you log on to PMF, you can access all alert functionality from the action block located on the dashboard. Since the action block is a portable component, it can be placed anywhere on the PMF dashboard by an administrator.

From the action block, you can work with alerts in the following ways:

- ❏ See a list of the current fired alerts and alerts scheduled to be fired.
- ❏ Display alert views from the ReportCaster Library.
- ❏ Reassign actions for an alert to another user.
- ❏ Document the actions taken to correct the condition that caused the alert to fire.
- ❏ Access the Alert Wizard, where you can change how the alert fires or create a new alert.

The action block allows you to choose to display Fired Alerts (alerts that have been sent because the alert condition was met), Scheduled Alerts (alerts that are being monitored and will be sent if the alert condition is met), Scheduled Reports, Measure Tasks (for collaborating), or Measures to Input (for user-entered measures).

When you choose *Fired Alerts*, for example, a list similar to the following displays.



The Fired Alerts list includes the date each alert was sent and a Done check box next to each alert to close the alert. Selecting the *New Alert* icon + opens the Alert Wizard for creation of a new alert.

Viewing and Modifying Alerts

Each alert listed in the Fired Alerts is also a hyperlink to alert options. Click an alert hyperlink to access the following drill-down options:

- **View All Alerts.** Displays all alerts including alerts that have been closed, which appear at the bottom of the Alerts display panel.
- **Change When Alert Fires.** Opens the Alert Wizard where you can modify the alert settings that determine when the alert fires.
- **Add Comments or Reassign.** Opens the Edit Alert Status panel, which displays information about the alert including the condition that caused the alert to fire, the owner of the alert, the action being taken, the date the alert fired, and the date the alert was read. Check boxes are available to indicate when the alert was read and when action was taken. A text box is available to add comments or additional information about the alert and the course of action being taken.

Scheduled Alerts have the following hyperlink options:

- **View Fired Alerts.** Allows you to switch to the display of fired alerts.
- **Change When Alert Fires.** Opens the Alert Wizard where you can modify the alert settings that determine when the alert fires.
- **Remove Alert.** Deletes the scheduled alert.

When Do Alerts Fire?

Alerts only fire on a *change* based on the rule you select in the Alert Wizard. When working with alerts, keep the following in mind:

- Alerts are based on indicator states, not values.
- PMF avoids firing an alert if a metric indicator stays the same.
- Alerts always base their comparisons on whatever the current point in time is set to in the PMF Today Date setting. For more information, see *System Settings* on page 392.
- You can make compare to previous (the period just before the current point) or prior (the period a year ago from the current point).
- The time level from the context is also considered.

Procedure: How to Change When an Alert Fires

1. Click the alert you want to modify and select *Change When Alert Fires*.

   The Alert Wizard (1 of 4) panel opens. This panel provides the settings that define the conditions under which the alert fires.

2. Change the necessary settings that define when the alert fires, and click *Next* until you are in the Alert Wizard (3 of 4) panel. See *Creating a New Alert* on page 107 for details on these settings.

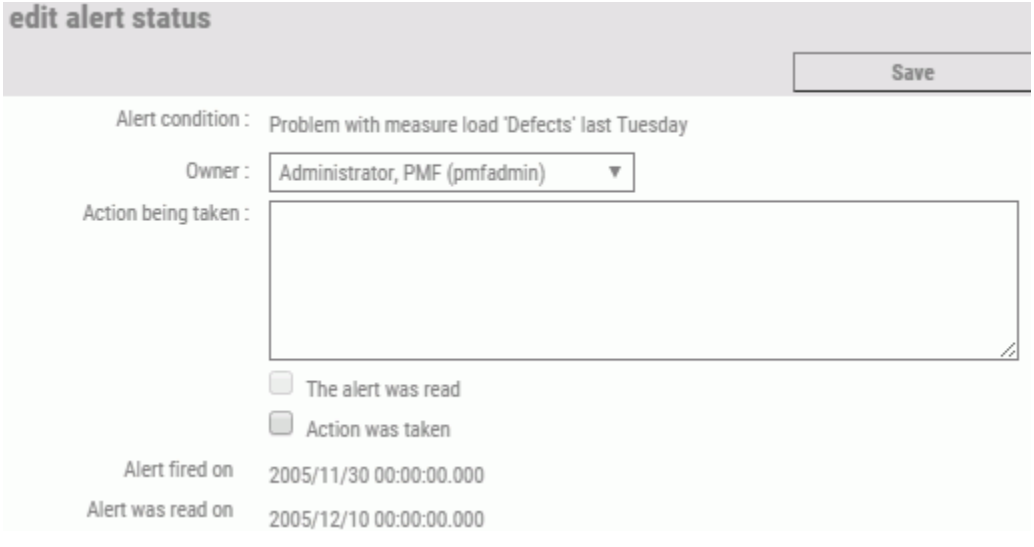
3. Click *Finish*.

4. In the Alert Wizard (4 of 4) panel, click *Done*.

Procedure: How to Add a Comment or Reassign an Alert

1. Click the alert you want to work with and select *Add Comments or Reassign*.

   The following image shows the delete alert status panel that opens, with sample values in the fields.



2. To reassign the alert to another user, select that user from the Owner drop-down menu.

3. To add a comment or information about the necessary course of action for the alert, add appropriate text in the Action being taken text box.

4. When the alert has been read, select *The alert was read* check box.

5. When the appropriate action is taken for the alert, select the *Action was taken* check box.

6. Click *Save*.

   A message at the top of the panel informs you that the information was updated.

7. Close the panel.

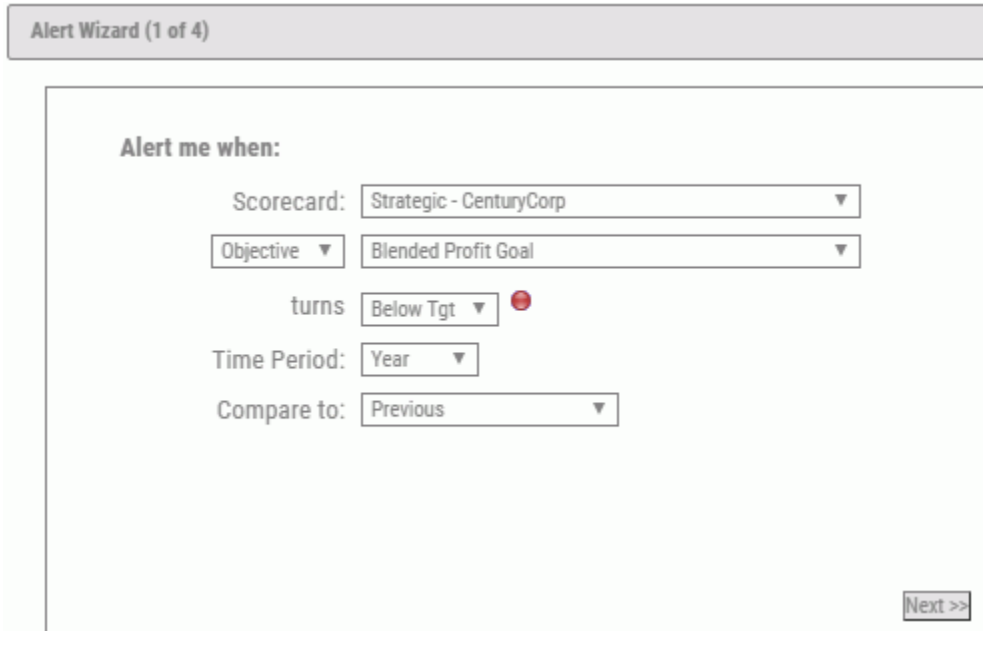
Creating a New Alert

The Alert Wizard is an easy-to-use tool that guides you through the step-by-step process of creating an alert for a potential condition that requires a course of action to be taken.

Procedure: How to Create a New Alert

1. Click the *New Alert* icon + to the right of the action block drop-down menu.

   The Alert Wizard (1 of 4) panel opens, as shown in the following image. In this panel, you define the condition that triggers the alert.



2. Select values in the following fields to define the alert:

Scorecard
Select the appropriate scorecard associated with the alert.

Objective or Measure
The first drop-down menu determines if the alert is based on an objective or a measure. The second drop-down menu provides the specifics of the objective or measure.

turns (status indicator)
Status indicator of the objective or measure. The following options are available:

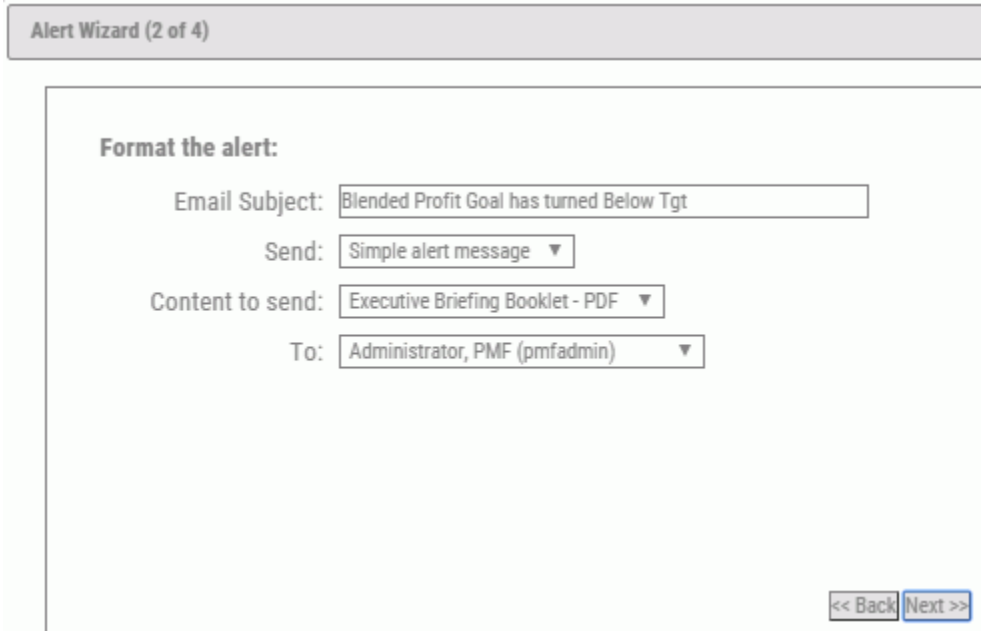
Option	Fires if metric changes:	Does not fire if the past period was also:
Below Tgt	To red.	Danger ("Red")
Marginal	To yellow.	Warning ("Yellow")
On/+ Tgt	To green.	Acceptable ("Green")
Better	From red to yellow. From red to green. From yellow to green.	The same indicator color. For example, yellow to yellow, or green to green.
Worse	From green to yellow. From green to red. From yellow to red.	The same indicator color. For example, yellow to yellow, or red to red.

Time Period
Time period of the objective or measure. Selections are Year, Quarter, Month.

Compare to (time period)
Time period for which you want to compare the objective or measure. Selections are previous or prior period (1 year ago).

3. Click *Next*.

The Alert Wizard (2 of 4) panel opens, as shown in the following image. Here you determine the email subject, the type of the alert to send, the selected view to send with the alert, and the User ID of the person to notify when the alert fires.



4. Select values for the following fields to format the alert:

Email Subject
Type a brief message that appears in the alert email.

Send (type of email)
Form of alert notification.

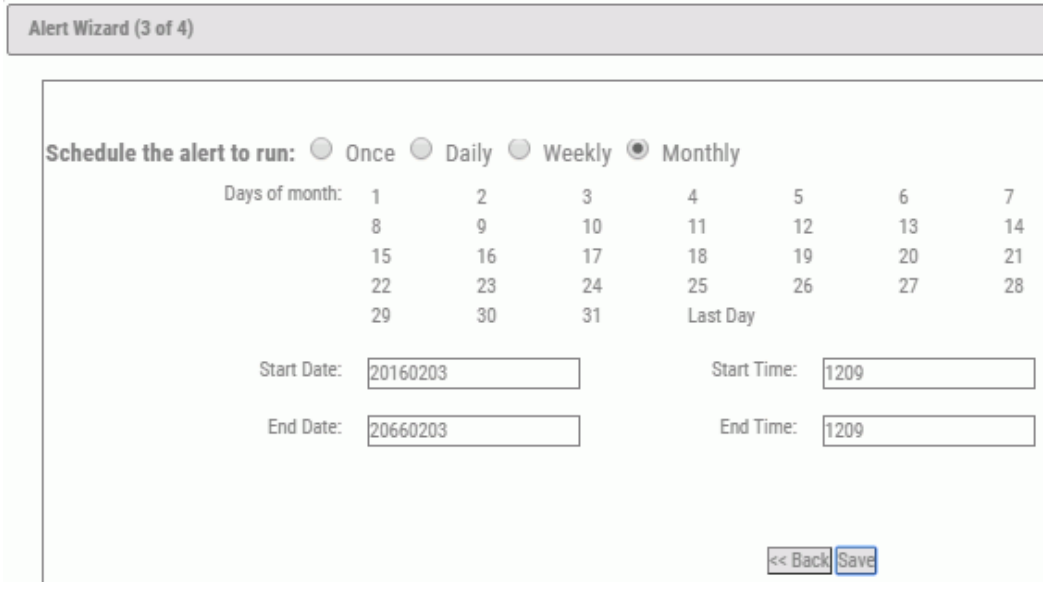
- **Simple alert message.** Send an email with the Alert email subject and view selected in the second list.
- **Content page.** Send an email with the Alert email subject, a content page, and the view selected in the second list.

Content to send
Select the appropriate PMF view to send with the alert message.

To (user ID to notify)
The User ID of the person you want to notify when the alert fires. Selections are the administrators and users of PMF.

5. Click *Next*.

The Alert Wizard (3 of 4) panel opens, as shown in the following image. This panel provides the parameters to schedule the alert.



6. Select values for the following fields to schedule the alert:

   Schedule the alert to run
   Desired schedule interval for testing the alert condition. Selections are Once, Daily, Weekly, and Monthly.

   Weekdays
   Select the days of the week to run the alert. Click to select the day. Click twice to deselect. This field only appears when you select Weekly as the schedule interval.

   Days of the month
   Days of the month you want to run the alert (1-31 or Last Day). Click to select the day. Click twice to deselect. This field only appears when you select Monthly as the schedule interval.

   Start Date
   Date you want to start the alert (in YYYYMMDD format).

   End Date
   Date you want to end the alert (in YYYYMMDD format).

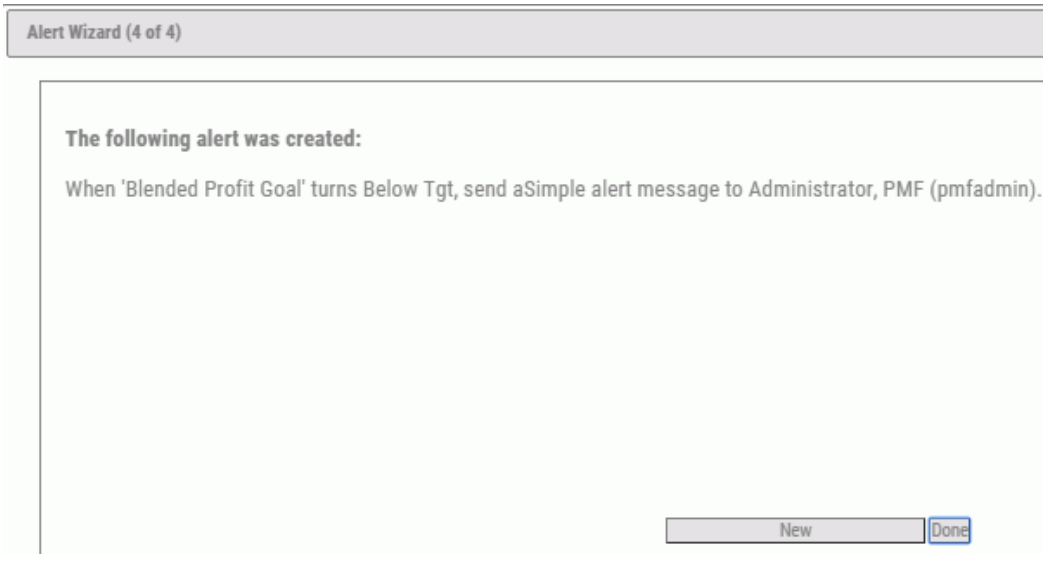
   Start Time
   Time you want to start the alert (in HHMM, 24-hour format).

   End Time
   Time you want to end the alert (in HHMM, 24-hour format).

   Note: Your choice of the scheduling interval determines which additional parameters appear in the panel.

7. Click *Save*.

The Alert Wizard (4 of 4) panel, as shown in the following image, shows that the alert was created followed by a summary description of the alert.



8. Click *Done* to exit the wizard.

   If you want to create another alert, click *New* to restart the Alert Wizard.

Procedure: How to Create an Alert from a Measure, Objective, or Risk

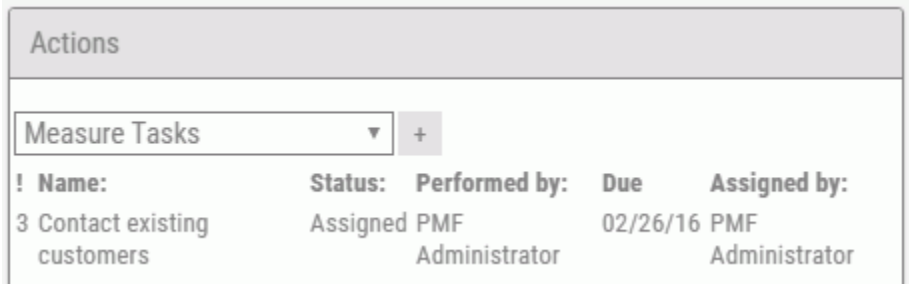
1. Click a Measure, Objective, or Risk from any report. A menu opens.
2. Select *Alert when*.

   The Alert Wizard opens.
3. Select values in the fields to define the alert. For more information on the Alert Wizard fields, see *How to Create a New Alert* on page 107.

Working With Measure Tasks

To enhance your ability to collaborate in PMF, you can create a list of action items (tasks) for Measures. Measure tasks help facilitate common work-flow options and enable you to assign, update, change status of, and view tasks, whether you are the assigner of the task or the person currently responsible for performing the task.

To find your tasks, select *Measure Tasks* in the action block. A list similar to the following image opens.



The Measure Tasks list includes the name of the task, the assigned owner, the due date, and the owner who assigned the task. Selecting the task name opens the Edit Task panel where you can edit the task to change the status, reassign it, change the due date, and more.

Selecting the New Task icon + opens the panel for creating a New Task.

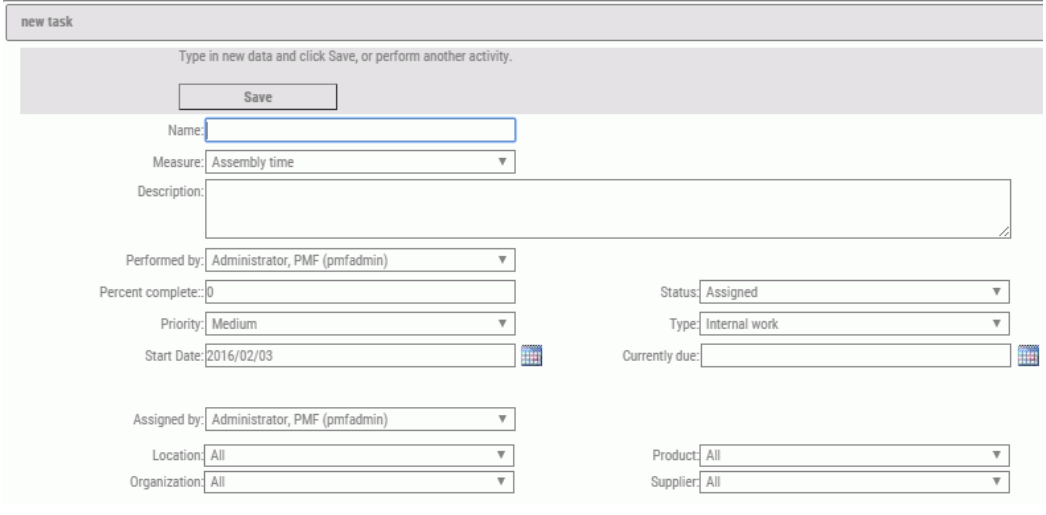
Procedure: How to Create a New Task

1. Select *Measure Task* in the action block.

   The Measure Tasks list displays in the action block.

2. Click the *New Task* icon + to the right of Measure Tasks.

   The New Task panel displays, as shown in the following image.



3. Complete the New Task panel and select values for the fields that are listed and described in the following table.

Field	Description
Name	Type a name for the task.
Measure	Select the Measure to which the task is aligned.
Description	Type a description for the task, including instructions and any other necessary information.
Performed by	Select the owner who will perform the task.
Percent complete	Type in the percent complete for the task.
Status	Choose one of the following status values from the drop-down menu: ❑ **Assigned.** Task is assigned to an owner for action. ❑ **Complete.** Task was completed. ❑ **Deferred.** Task is on hold. ❑ **In Progress.** Task is currently being performed.
Priority	Select a priority from Low to High.
Type	Choose one of the following task types from the drop-down menu: ❑ *PMF action required*. ❑ *Metric Follow-up*. ❑ *Technical work*. ❑ *Internal work*. ❑ *Work with customer*. ❑ *Other*.

Field	Description
Start Date	Type a date or click the calendar control to select a start date for the task. By default, the task start date is today.
Currently due	Type a date or click the calendar control to select a due date for the task.
Assigned by	Select the owner who is assigning the task. By default, you are the owner assigning the task.
Dimensions	Select a value from the drop-down menu next to each of the dimensions displayed at the bottom of the new task panel. The selected value is used for linking the task. The available dimensions are Location, Organization, Product, and Supplier.

4. Click *Save* when the New Task panel is completely filled out.
5. Click *Close* to exit the New Task panel.

Procedure: How to Edit a Task

1. To edit or delete an existing task, select *Measure Task* in the action block.

   The Measure Tasks list displays in the action block.

2. Click the task name in the action block.

   The Edit Task panel displays.

3. To delete the Measure task, click *Delete*, then click *OK* when the delete confirmation dialog box appears.
4. To edit the Measure task, change any of the previously entered information and selected values in the Edit Task panel as needed.

   Note: The Edit Task panel contains the same fields as the New Task panel. In addition, it displays the original due date (in the event the date is changed). For details about the fields in the New Task panel, see *How to Create a New Task* on page 113.

   Tip:

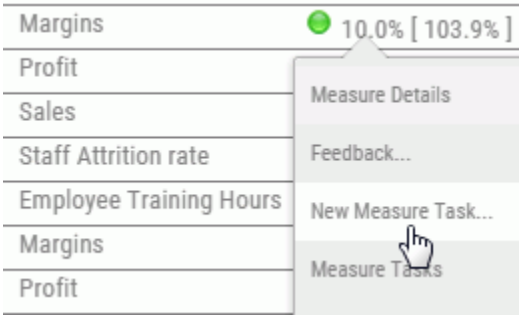
   - The Percent complete and Status fields provide a good indicator of how much progress is being made on the measure task.
   - To reassign a Measure task to another owner, you must be the owner in the Assigned by or Performed by fields, or an administrator.

5. Click *Save* when the New Task panel is completely filled out.

Procedure: How to Create a New Measure Task From a Measure

From a report, or gadget, that displays Measure data:

1. Click a data field. A menu opens, as shown in the following image.



2. Select *New Measure Task*.

   The New Task panel opens.

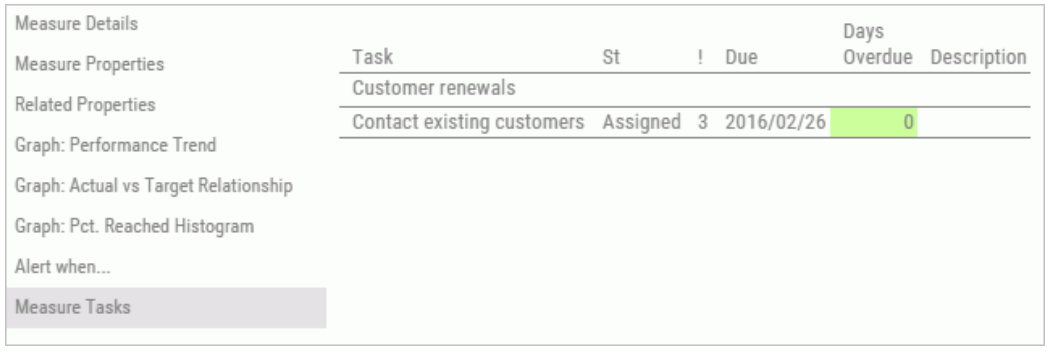
3. Complete the New Task panel and select values for the fields that are listed. For more information on setting up Measured Tasks, see *How to Create a New Task* on page 113.

Procedure: How to View a Measure Task from a Measure, Objective, or Risk

A Measure Task icon indicates if there are Measure Tasks linked to the measure, objective, or risk you are viewing.

1. Click the measure that is linked to a Measure Task.
2. Select *Measure Tasks* from the universal drill.

A report opens, as shown in the following image.

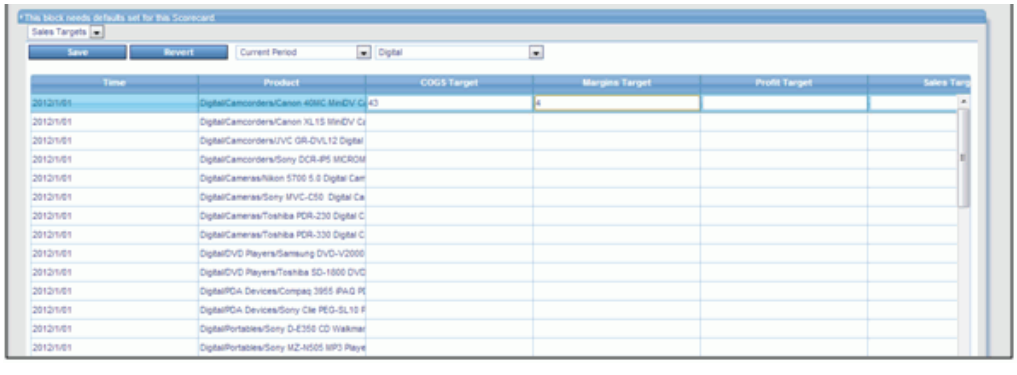


This report lists the linked measure tasks, their descriptions, and their current status.

Inputting User-Entered Sources

PMF includes a gadget, called Utility – UE Sources, which incorporates the User Entry user interface. You can include this gadget on a dashboard to allow end-user access for data entry.

This gadget allows users to select from the user-entered sources to which they have access, based on the measures linked to the current scorecard, as shown in the following image.



Click *Save* in the gadget to save the data you have entered into the datapoints. You can also:

- Sort the contents of the Enter data tab by clicking the column headings. The arrow next to the column heading tells you the direction of the sort.
- Highlight any row or column for closer examination with a click.
- Resize the columns of the Enter data tab by dragging the column borders in the headings.

Working with Dashboards

Dashboards appear to PMF owners (users) the same as other Today pages. Dashboards can be designated by the PMF Administrator for use by particular users. This can be changed at any time by selecting a personalized dashboard as a Today page on the Today page.

When an owner first selects a dashboard, it automatically populates itself with data appropriate to their access role or owner access (depending on how this is configured in PMF). Metrics are displayed using the default choices set up by the dashboard designer.

PMF users can personalize each gadget to display the metric information that is important to them. As a user, you can group, filter, and select the data points that are displayed in the gadgets on your dashboards. The available choices for each gadget depend on how the gadget was designed.

PMF includes a set of gadgets that use HTML5 technology with local intelligent caching. As you navigate through data, the intelligent caching agent determines if data is already in your browser. If it is, the data is instantly delivered to the HTML5 gadgets. If not, the agent requests the needed data.

Dashboard Designer

The Dashboard Designer is available to the user if the user was given Administrator rights to the dashboard.

To access the Dashboard Designer, from the Today page, click the dashboard icon , select *Content*, and then click the *Edit Dashboard* icon .

The Dashboard Designer opens, as shown in the following image.

Dashboard Designer includes:

- A canvas, which is the surface on which you position and configure gadgets.
- The Gadgets catalog, which provides a list of the available gadgets currently registered with PMF. Each gadget is represented by a thumbnail preview image that lets you see how the gadget looks and works. A scroll bar directly to the right of the gadgets enables you to view the entire list of available gadgets. From the list, you can drag and drop individual gadgets onto the canvas.
- The WebFOCUS catalog, which provides a list of WebFOCUS content and folders which you can easily drag onto any dashboard.
- A toolbar, from which you can click the following icons:
  - *Save Dashboard* icon , to save the current dashboard, including the gadgets that you added to the dashboard and their position on the page. For a new dashboard, you are prompted for a name when you click *Save* for the first time. If this option can be changed, you can also indicate whether the dashboard is public or private. A public dashboard is accessible to all PMF users at the site. A private dashboard is accessible only to you.
  - *Save as Dashboard* icon , to save the dashboard under a new name.

- *Reset dashboard* icon , to reset Dashboard user preferences back to the default preferences in the original dashboard design.

- *Exit Edit* icon , to exit the Dashboard Designer.

Dashboard Design Tips

When designing a dashboard, use the following guidelines:

- **Provide enough space for gadgets.** Configure and position your gadgets to provide enough space to display properly in the dashboard.

- **Avoid scroll bars.** The best designed dashboards show all of the important Information without requiring the use of scroll bars. If scrolling is required, place the most important information and indicators in the most significant locations of the dashboard, either close to the top left corner or near the center of the dashboard.

- **Design for different screen resolutions.** The PMF Dashboard Designer enables you to design for any target screen resolution, but cannot automatically reconfigure and deploy your dashboard design to a lower resolution screen. Make sure you know the target resolutions your consumers will be using, and design alternate versions of the dashboards as needed.

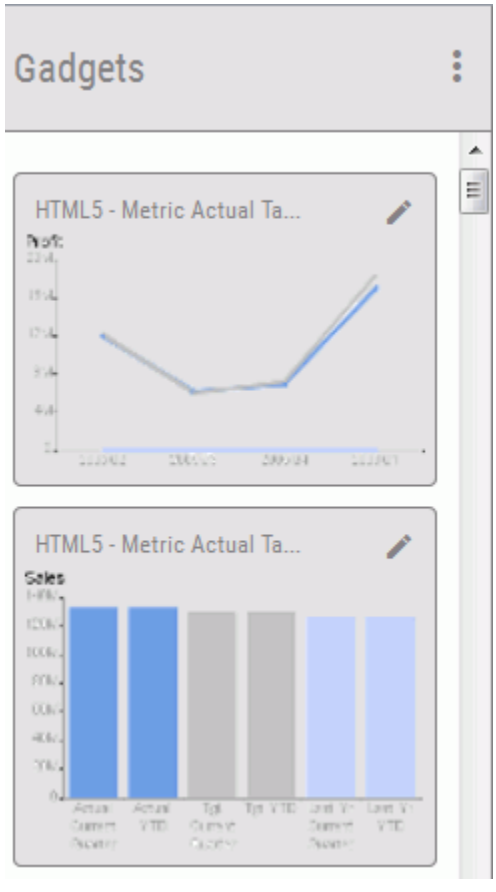
- **Mix contexts so users can see everything.** Where possible, avoid requiring users to switch flags or options to see all of the data that is important to them. PMF enables you to configure each dashboard by owner, scorecard, or gadget, so you can point different gadgets to different contexts and avoid making users perform unnecessary clicks.

- **Appropriate metrics.** PMF can automatically detect and display valid metrics for each dashboard and scorecard. However, because PMF cannot select the most appropriate metric to display for a scorecard, you should set up appropriate default metrics for each scorecard.

Procedure: How to Design a New Dashboard

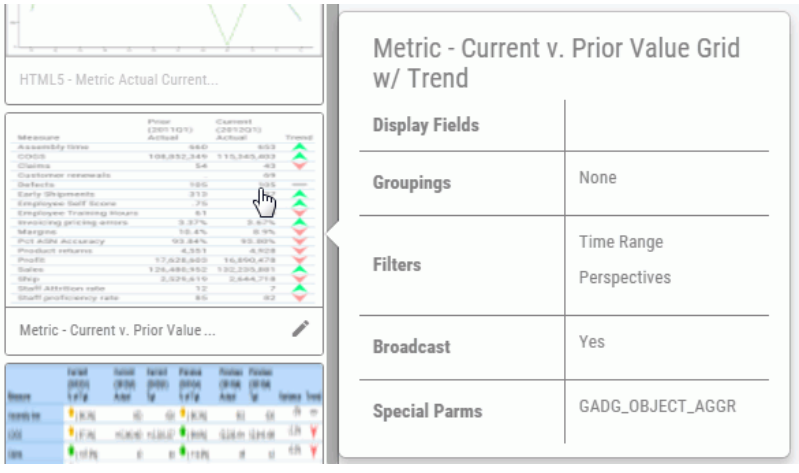
1. From the Today page, click the dashboard icon and then click the *Add Dashboard* icon .

The Gadgets catalog opens, as shown in the following image.



2. Use the scroll bar to display the entire list of available gadgets. You can also search for a specific gadget by clicking the *Gadget Preferences* icon ⋮ and typing its name in the search field.

To see more detailed information about the available gadgets, hover over the gadget. A tooltip opens, which shows information about the gadget, such as its accepted filters and whether it can receive a broadcast. The following image shows an example of the tooltip.



3. Drag the desired gadget or gadgets onto the design canvas.

   PMF retrieves the default size for each gadget that you add to the canvas.

4. Perform the following actions to achieve the desired result.

   - To reposition a gadget on the canvas, click anywhere inside the gadget and drag the gadget to the desired location.

     Dashboard Designer automatically aligns the top edges of gadgets that are in proximity.

   - To resize a gadget on the canvas, click the lower-right corner of the gadget and drag the borders of the gadget to the desired height and width.

   - To delete a gadget from the dashboard, click the *Delete Gadget* icon on the title bar of the gadget.

   - To change the values used to display the data for a gadget, click the *Gadget Preferences* icon on the title bar of the gadget. Make your selections from available list items. For details, see *Changing Dashboard Gadgets and Preferences* on page 36.

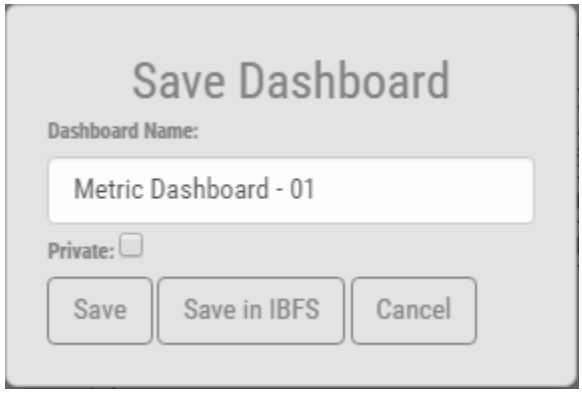
   - To add WebFOCUS content, click the *WebFOCUS* panel button and select the folder that contains the content you want to use. Drag the content to the desired location on the dashboard.

5. Optionally, click the *Listens to filters* icon to specify whether or not run-time changes will affect the selected gadget.

   For details on Broadcast, see *Setting Up Broadcast on a Dashboard* on page 136.

6. On the side toolbar, click the *Save Dashboard* icon when you are satisfied with your design.

   The following image shows the Save Dashboard window.



7. Type a name for the new dashboard and select whether the dashboard is public or private in the check box.

   If you select the Private checkbox, the dashboard will be visible only to the owner who created it. You can create a private dashboard with Edit or higher dashboard access. If you leave the dashboard as public, it will be visible to all owners in PMF. Administrator access is required to create a public dashboard.

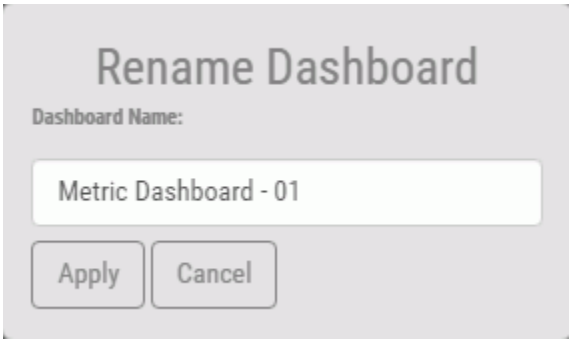
   Note: If you exit the designer without saving your changes, you will be prompted to either save or cancel your changes.

Procedure: How to Edit an Existing Dashboard

1. From the Today page, click the dashboard icon and then click the *Edit Dashboard* icon .

   The dashboard opens in the Dashboard Designer.

2. Make any desired changes to the dashboard, such as adding or deleting gadgets, moving the position of the gadget, or adding WebFOCUS content. To rename the dashboard, click the title bar with the Scorecard - Dashboard name. A Rename Dashboard window opens, as shown in the following image.



Note: You can also rename a dashboard using the Looks and Properties panel. For more information, see *Styling the Dashboard* on page 137.

3. On the side toolbar, click the *Save Dashboard* or *Save As Dashboard* icon when you are satisfied with your design.

Note: If you exit the designer without saving your changes, you will be prompted to either save or cancel your changes.

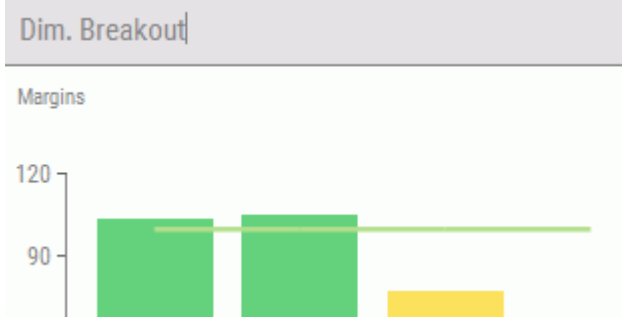
Controlling the Look of a Gadget

You can make changes to a gadget when its title bar appears. To display the title bar, hover anywhere over the gadget.

The gadget controls include the following:

- **Moving.** You can position the anchor point of any gadget. To move a gadget, click inside the gadget and drag the gadget to the desired position.
- **Resizing.** You can interactively adjust the height and width of a gadget. Click the lower-right corner of the gadget and drag the borders of the gadget to resize it as desired.
- **Deleting.** The Delete Gadget icon removes the selected gadget from the canvas.

- **Gadget Preferences.** A separate Gadget Preferences icon exists for each gadget on a dashboard. The icon opens a panel on which you can change the values used to display the data for that gadget. For more information on specifying preferences for a gadget, see *Changing Dashboard Gadgets and Preferences* on page 36.
- **Renaming the gadget.** You can change the default title of a gadget and rename it by going to the Dashboard Designer and clicking the title bar of the gadget. Enter the new title, as shown in the following image.



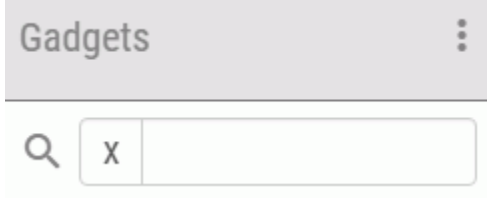
Procedure: How to Search the Gadget Catalog

There is a built-in search capability in the Gadget Catalog, which makes it easier to find specific gadgets for your dashboard.

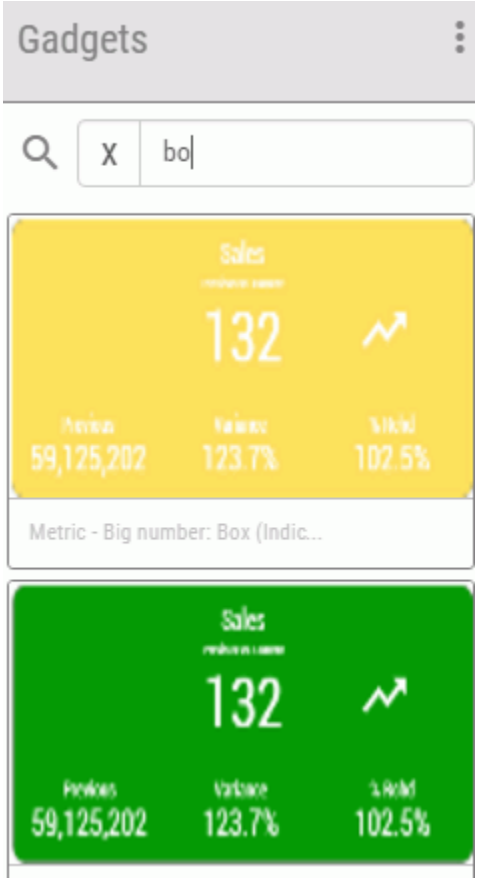
To search for a gadget:

1. In the Dashboard Designer, click *Gadgets*.
2. Click the more icon .

   The Gadgets panel button expands, as shown in the following image.



3. In the search field, enter the first few letters of the gadget type, as shown in the following image.



4. Select the desired gadget from the list that appears.

To clear the search and show all available gadgets, delete the search term in the field.

Editing a Gadget

Gadgets can be edited directly from the catalog in the Dashboard Designer. Gadgets that are edited and configured from the catalog are immediately available to use in dashboard designs.

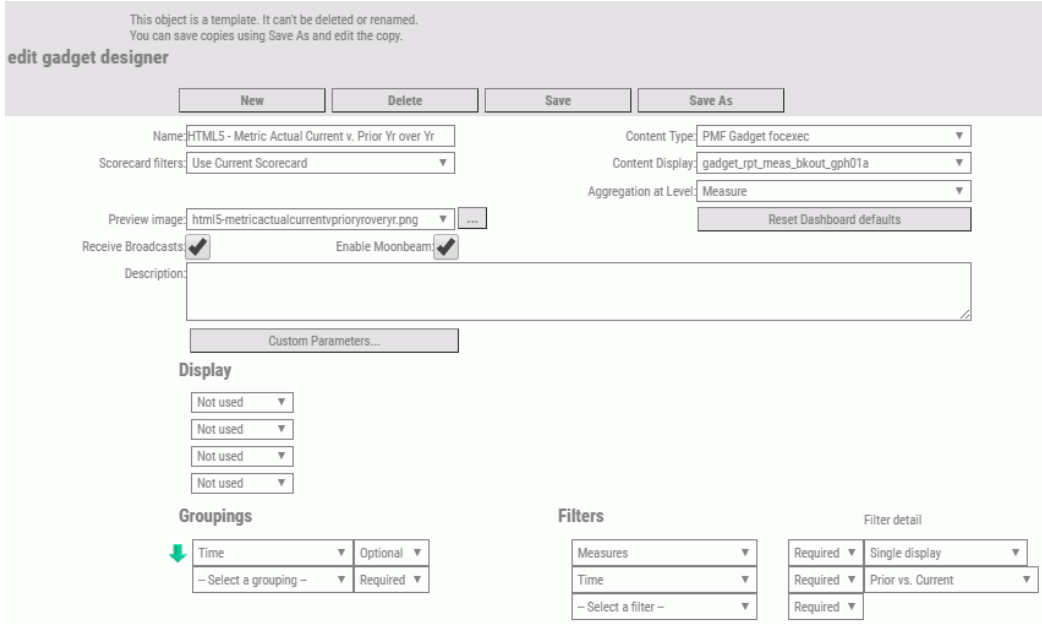
Procedure: How to Editing a Gadget From Inside the Catalog

From the Dashboard Designer:

1. Click *Gadgets*.

2. Click the *Edit Gadget* icon next to a gadget in the catalog.

   The Edit Gadget Designer panel opens, as shown in the following image.



3. Complete the fields in the Edit Gadget Designer panel, as described in the following table.

Field	Description
Name	Type the name of the gadget.
Scorecard filters	Specify whether the current scorecard filters should be used.
Preview image	Shows the preview image of the gadget.
Receive Broadcasts	Select to enable the broadcast feature for the gadget.
Enable Moonbeam	Select to enable the moonbeam feature.
Content Type	Select which type of content will be added as the gadget.

Field	Description
Content Display	Select which type of content will be displayed.
Aggregation at Level	Select the appropriate level of the dimension at which data will be aggregated.
Reset Dashboard defaults	Select to reset Dashboard default values.
Description	Type a description of the gadget.
Custom Parameters	Allows you to pass WebFOCUS parameters to your gadget.
Display	Select from the following Display elements, to include in the gadget being created. ❑ Actual ❑ Benchmark ❑ Forecast ❑ Stretch Target ❑ Target

Field	Description
Groupings	Select up to three Groupings elements to include in the gadget being created. Use the drop-down menu next to each element to select Required or Optional. The following options are available: ❑ Perspective ❑ Theme ❑ Objective ❑ Measure ❑ Project ❑ User Specified Dimension ❑ Time
Filters	Select up to three Filters elements to include in the gadget being created. Use the drop-down menu next to each element to select Required or Optional. The following options are available: ❑ Perspective ❑ Theme ❑ Objective ❑ Measures ❑ Projects ❑ User Specified Dimension ❑ Time ❑ Scorecard ❑ Red and Yellow indicators only ❑ Red indicators only

4. After you have entered your data in the fields of the Edit Gadget Designer panel, click *Save*.

Resetting Dashboard User Preferences

Dashboard user preferences can be reset to the default preferences in the original dashboard design.

The dashboard preferences control settings a user sees, such as metrics and dimensional filters. Preferences are stored for each of the following:

- User
- Dashboard
- Scorecard

Default preferences are stored for each dashboard in the system. These preferences are set during the dashboard design process in the Dashboard Designer.

Users can override preferences set for a dashboard by saving their changes in the Preference panel in the dashboard.

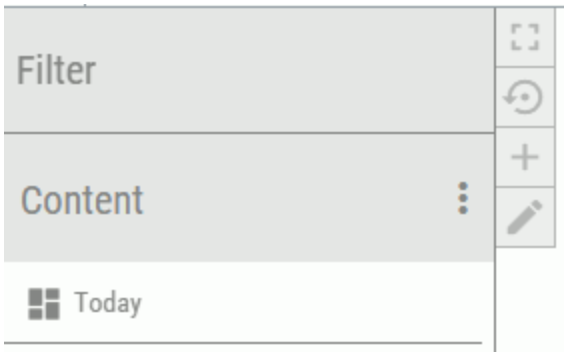
User preferences can be reset from many areas within PMF. Where the reset is performed determines the scope of where those preferences are overridden.

Procedure: How to Reset Dashboard Preferences From the Dashboard Designer

While working with Dashboards, any preferences that are changed from within the Dashboard Designer changes the default preferences for that dashboard, as well as each scorecard that can be selected and configured.

If a user has administrator rights in a dashboard, they have the ability to clear user preferences for any of their dashboard designs and restore the dashboard back to the default values that were designated by the Designer. Dashboard preferences can easily be reset by clicking the *Reset dashboard* icon .

The Reset Dashboard icon is located on the toolbar of the drawer on the Today page, as seen in the following image.



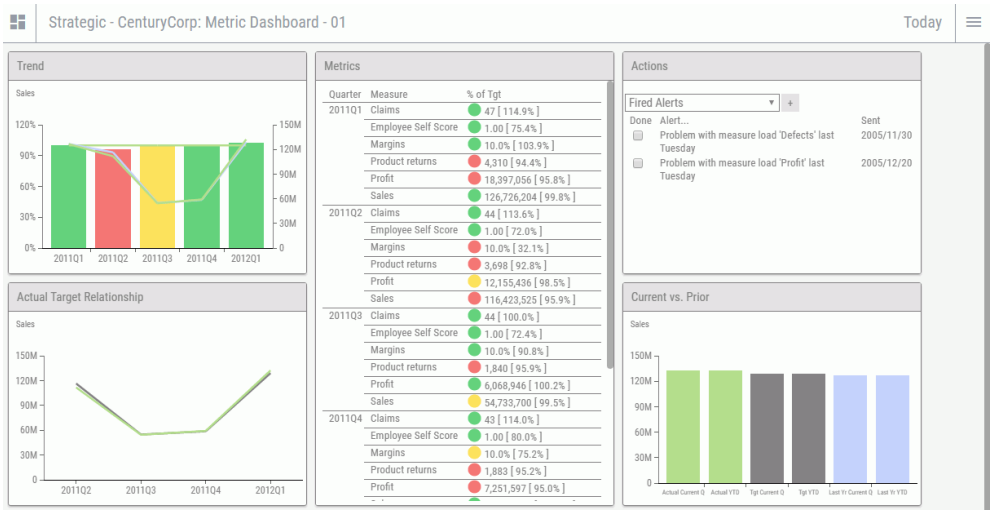
You can also access the toolbar with this icon by clicking the *Edit Dashboard* icon to enter the Dashboard Designer.

Resizing and Displaying Gadgets

PMF Gadgets can contain drill downs to many contexts including operational reports, detailed views, websites, mini-dashboards, and graphs.

Gadgets resize responsively to changes in browser canvas size. The content in the gadgets is generally also responsive. If you are running custom content, which you or a developer designed, make sure to have them use responsive content options in WebFOCUS tools.

The following image shows how multiple gadgets may appear on your dashboard.



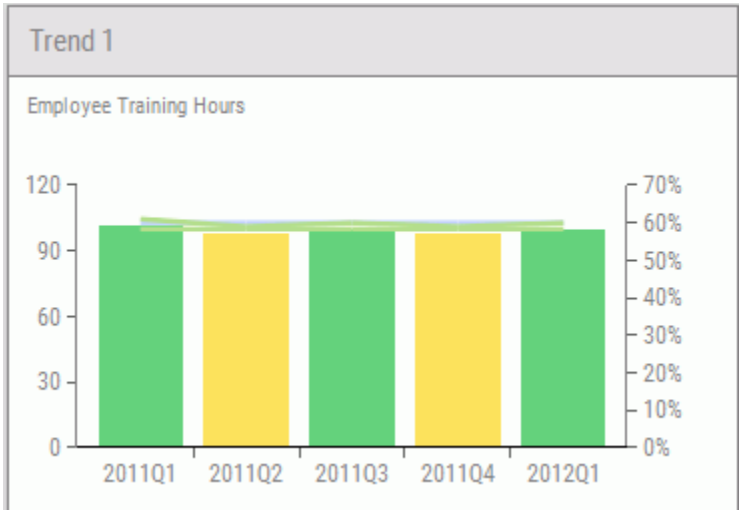
If you make the browser canvas narrower, the gadgets respond by expanding to fit into the smaller frame, as seen in the following image.

Working with Gadget Tracking Menus

PMF tracking captions with instant menus allow you to:

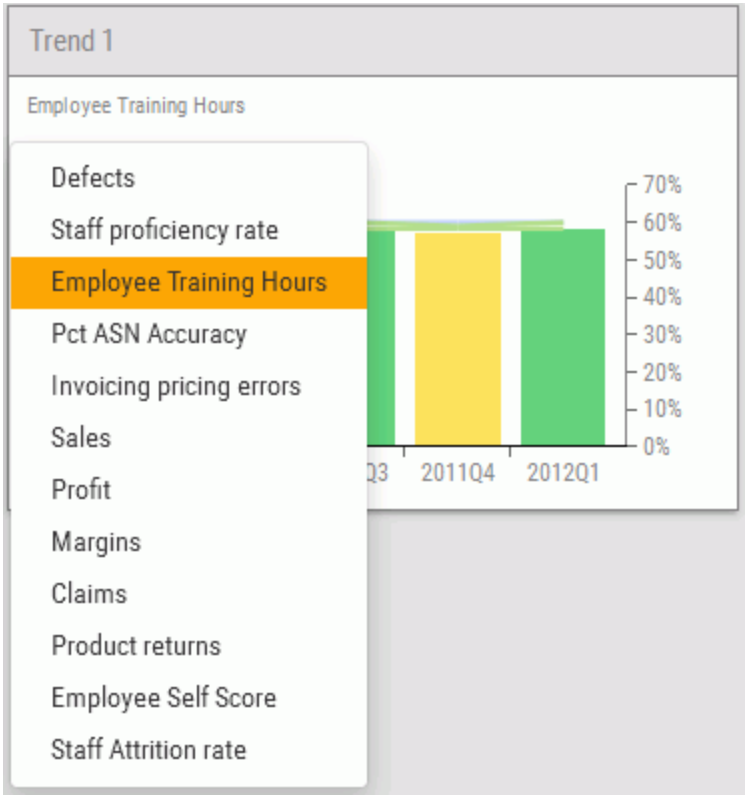
- ❏ Hover to see menus that allow you to quickly and effectively drill to other cached contexts.
- ❏ Exempt any gadget from the inter-gadget Broadcast.
- ❏ Use the one-click page flip capability.

As you interact and drill with chart gadgets on the PMF dashboard, the captions display the initial filter and grouping conditions for each gadget, as shown in the following image.



As you change the gadgets, the captions continue to track so you never lose context of the information you are viewing.

You can change the current applied filter by hovering over the top of the tracking menu. A drop-down menu appears with the filters, as shown in the following image.



To auto-activate the page flip on any client, click the *Flip* button on the tracking menu. The gadget view will change, as shown in the following image.

To exclude the gadget from receiving any Broadcasts, click the *Listens to filters* icon . This will lock the gadget in place so that it does not respond to broadcasted filters, which allows more control over comparative analysis.

What is Broadcast?

Broadcast enables changes you make to the parameters passed to a gadget to be shared among other gadgets on the dashboard, and enables you to cascade simultaneous changes which you specify across multiple gadgets on the dashboard. As a result, you can quickly compare similarities and differences between multiple Dimension areas, or compare different Measures for the same Dimension areas. With Broadcast, changing the Dimension Preferences on any gadget can change the displayed Dimension data for all gadgets. You can add a gadget or remove a gadget from a Broadcast group with a few clicks.

For all gadgets, (both HTML5 and other), the Gadget Preferences icon also controls the currently displayed filters. This actually controls all gadgets grouped for Broadcast on the dashboard, regardless of whether they are HTML5 or not.

Setting Up Broadcast on a Dashboard

Since the Broadcast capability is always on, run-time values specified by a user in Gadget Preferences for a single gadget are applied to all the gadgets in a group. As a result, users can quickly compare similarities and differences among multiple dimensional areas, or compare different measures for the same dimensional areas.

Procedure: How to Disable a Gadget from Receiving Broadcast

To disable a specific gadget from receiving Broadcast:

1. Hover over the gadget for which you wish you disable Broadcast, and click the *Listens to filters* icon in the title bar.

   Note: This icon is only available if the gadget is capable of receiving Broadcast.

   The gadget is now "locked" and will ignore any changes to run-time values.

2. To re-enable Broadcast for that gadget, click the *Ignores filters* icon in the title bar.

Procedure: How to Change Multiple Gadgets in a Broadcast Group

For the desired dashboard:

1. Click the dashboard icon and then click *Filter*.

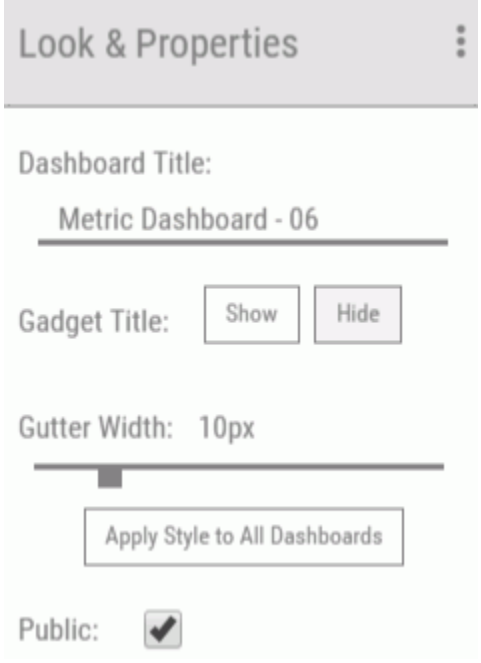
   The Filter list opens.

2. In the Filters list, select or clear the filters that you wish to broadcast to the gadgets in the group. The changes automatically propagate to all the gadgets in the Broadcast group so they are all showing data.

   Tip: To see which gadgets will be affected by the filter, hover over the filter. Any gadgets capable of listening to the broadcast that would be sent are highlighted on the dashboard

Styling the Dashboard

You can change the overall look of your Dashboard from the Look & Properties panel in the drawer, as shown in the following image.



The following options are available:

- **Dashboard Title.** Lets you rename the current dashboard.
- **Gadget Title.** Select *Show* to always display gadget title bars. If the title bars are hidden, gadget icons will be displayed when you click or hover over a gadget.
- **Gutter Width.** Controls the width of the vertical and horizontal gutter on a gadget.
- **Apply Style to All Dashboards.** Lets you globally apply the look of the current selected Dashboard across all Dashboards, so that you get a consistent look. The following properties are copied across all Dashboards:
  - The display of the title bar on gadgets.
  - Gutter width.

- **Private.** Selecting this option will make the Dashboard you are editing visible to only you, the owner who created it. Any user with Edit or higher Functional access for the Dashboard object can create private Dashboards.

Chapter 3

Performance Management Framework Author

This chapter describes the authoring role and provides instructions for establishing the business strategies in a Performance Management Framework (PMF) application.

In this chapter:

- Implementing PMF
- PMF Prerequisites
- Getting Started as a PMF Author
- Authoring in PMF
- Navigating PMF: Adding, Changing, and Deleting Items
- Scorecarding
- Navigating the Author Page
- Creating a New Scorecard
- Creating Strategy and Risk Objects
- Drawing a Strategy Map
- Adding Themes to a Strategy Map
- Linking Projects and Processes to Objectives in the Strategy Map
- Understanding Measures
- Indicator Concepts
- Weighting Measures Across Objectives
- Weighting Objectives Across a Strategy
- Automatic Equal Weighting
- Setting a Basis for Descending Measures
- Overriding Measures at the Measure Level
- Working with Projects
- Documenting Your Work
- Scorecard-Specific Data Access Security
- Author Scorecard Options

Implementing PMF

Designing a working scorecard or metrics dashboard with PMF requires not only the information and data to be presented, but also strategic information about your enterprise. The implementation process is usually straightforward. The workflow in the Performance Management practice starts with the installation by technical staff and ends with a production-ready PMF application being used by all identified users.

The basic steps for implementing PMF at a site are:

- Installing PMF components.
- Creating scorecards to group metrics based on business objectives for groups of users.
- Making scorecards available to users at all levels.
- Designing and loading dimensions and metrics (done by an administrator).
- Maintaining the scorecards and using them to chart corporate progress.
- Setting up access and functional security (done by an administrator).

PMF Prerequisites

Before you start entering objectives and metrics into the PMF metrics dashboard, you should have a basic understanding of strategy information for your enterprise. Even if your intention is not to begin with a full strategic view of your enterprise, you should be familiar with these aspects of organization performance.

Before you can author a PMF application, your enterprise must have:

- Successfully installed and configured the product, based on the requirements in the *Performance Management Framework Installation and Configuration Guide*, and verified the sample Century Corp scorecard to meet the installation requirements.
- Designated staff responsible for strategy design, if needed.
- Established a methodology to build the scorecard, if needed.
- Assigned the duties of authors and administrators.

Getting Started as a PMF Author

The role of author is one of the most important in the PMF design process. The main responsibility of the author is the overall metrics and strategic content of PMF scorecards. The Author and Strategy subtabs contain most of the tools the author needs to perform these tasks.

What You Should Know

Authoring a PMF application can involve:

- Understanding the concepts of scorecards.

- Meeting with personnel who have knowledge of:
  - Organization strategies.
  - Organization measures and Key Performance Indicators (KPIs).
  - Current applications at the customer site that provide measures and KPI data.
- Acting as a liaison between the Business Strategy Committee and the administrators of the PMF application, if needed.

Authoring in PMF

The role of the author is to capture and record strategies that serve as the basis for the Performance Management solution. An author serves both a business role and a technology role in the enterprise. The author outlines strategies as they evolve, and then captures these in PMF as the basis of all scorecard views. The author also interacts with the PMF administrator to ensure that measures needed for the overall strategy are loaded, and checks the good sense and accuracy of these measures.

Note: When making any changes within the Author page, it is recommended that you click the *Refresh Contents* icon to ensure that your changes take effect immediately.

Scorecard Building Methodology

To build a scorecard with a Business Strategy Committee, you must:

- Interact with the Business Strategy Committee (if you have one) to build strategic linkages.
- Determine indicators of success.
- Identify processes and projects.
- Build the scorecard process.

Determine the following:

- Key Performance Indicators (KPIs)
- Mission statement

Determine and specify the following:

- Dimensions
- Measures

- ❑ Objectives
- ❑ Risks
- ❑ Perspectives
- ❑ Projects
- ❑ Processes
- ❑ Themes

Determine the options for Today page content, which include:

- ❑ Explaining different versions and options.
- ❑ Identifying the roles of various users in the organization.
- ❑ Confirming content with the Business Strategy Committee after you successfully load your scorecards.

Interact with administrators who will:

- ❑ Acquire measures.
- ❑ Acquire dimensions, sources, datapoints, and measures.
- ❑ Set up feeds.
- ❑ Set up Dimensional security, if desired.
- ❑ Test loads.

Schemas

The main schemas of PMF, and questions you should ask are:

- ❑ **Measures.** What do you want to measure? Where do measures originate? What units of measure are needed to support these? How should these be aggregated?
- ❑ **Sources.** What sources will provide data for your measures? Do you have all data on hand, or will you need to capture some from end users or other personnel?

- **Dimensions.** What business dimensions are required? Examples of dimensions to consider are Customer, Location, Product, Service, Organization, and additional Time dimensions.
- **Scorecard.** What overall business strategies are to be implemented? One strategy is supported per scorecard.
- **Objectives.** What specific, measurable goals are included in a strategy?
- **Risks.** What risks are present and need to be tracked? How can these be measured?
- **Projects.** What specific projects are linked to your objectives?
- **Processes.** What specific processes are linked to your objectives?

Navigating PMF: Adding, Changing, and Deleting Items

PMF gives you a tree-based means of navigating its hierarchy of contents. You can access any PMF scorecard, metric, or system object through hierarchy tree menus. After you have located the object you want to edit, click the object name in the tree. PMF displays an edit [object] panel to the right of the tree, where you can make changes.

To create a new object or delete an existing object, you can access information in an edit [object] panel, and then click the *New* or *Delete* button. PMF will display a new [object] panel.

To perform scorecard maintenance, click the scorecard tree to work with scorecard objects through the panels.

Scorecarding

There are two methodologies for working with PMF. You can work from the top down, by drawing a high-level strategy and creating measures. You can also work from the bottom up, by creating a KPI Dashboard using loaded measures and adding the strategy elements at some point in the future.

Top Down Process	Bottom Up Process
If you use the top down process, perform the following steps before you create any metrics. **1.** Create a new scorecard. Populate it with objectives, perspectives, themes, projects, and processes. For more information, see *Creating a New Scorecard* on page 152.	If you use the bottom up process, perform the following steps before you create a scorecard. **1.** Set up metrics and load them into the PMF data mart. For more information, see *Planning Considerations For Loading Sources* on page 304.

Top Down Process	Bottom Up Process
2. Set up a few user-entered measures. For more information, see *Adding and Editing Measures* on page 179.	**2.** Immediately use the relaxed reports that provide KPI dashboard-like views of your metrics.
3. Draw your Strategy Map and observe its flow through the views built into PMF. You can tweak your design until it best fits your organization strategy. For more information, see *Drawing a Strategy Map* on page 170.	**3.** Use the PMF Scorecard Wizard to create a scorecard and draw a strategy. The Wizard allows you to link your live metrics to a strategy in minutes. For more information, see *Creating a New Scorecard* on page 152.
4. When the time comes to hook up the scorecard to loaded metrics, you can easily switch over from manually entered metrics to multi-dimensional loaded metrics. For more information, see *Planning Considerations For Loading Sources* on page 304.	

Navigating the Author Page

The Author and Strategy subtabs provide authors with all the capabilities you need to author PMF applications.

The Author subtab allows staff members that have authoring responsibilities to add, edit, and delete information for scorecards, measures (loaded, user-entered), objectives, risks, projects, and processes. It also provides a wizard that streamlines the creation of scorecards.

The panel buttons in the Author page represent components that involve scorecards, measures, objectives, projects, and processes. Click a panel button to view its contents. The following table contains a summary of the subordinate levels for each component.

Component	First Level	Second Level
Scorecards	Perspective and Themes	Objectives
Measures	Measures Source	Measure detail...
Perspectives	Measures Source	

Component	First Level	Second Level
Objectives	Measures Source	
Risks	Measures Source	
Themes	Themes	
Projects	Objectives	Measures Source
Processes	Objectives	Measures Source

If you are in demo mode, meaning you are accessing pmf_manufacturing or a similar file, the first panel button in the Author page, Scorecards, includes a sample scorecard that you can use to learn how to navigate within PMF. For more information, see *Navigating the Scorecard Tree* on page 149. When the *Scorecards* panel button is selected, two buttons are displayed. The New button opens the New Scorecard panel, where you can create a new scorecard. The Wizard button opens the New Scorecard Wizard, which guides you through the process of creating a new scorecard. For more information about the Scorecard Wizard, see *Creating a New Scorecard* on page 152.

When the next panel button, *Measures*, is selected, the New button displays. Clicking this button opens the New Measure panel, where you can create a new measure. For details about creating and editing measures, see *Adding and Editing Measures* on page 179.

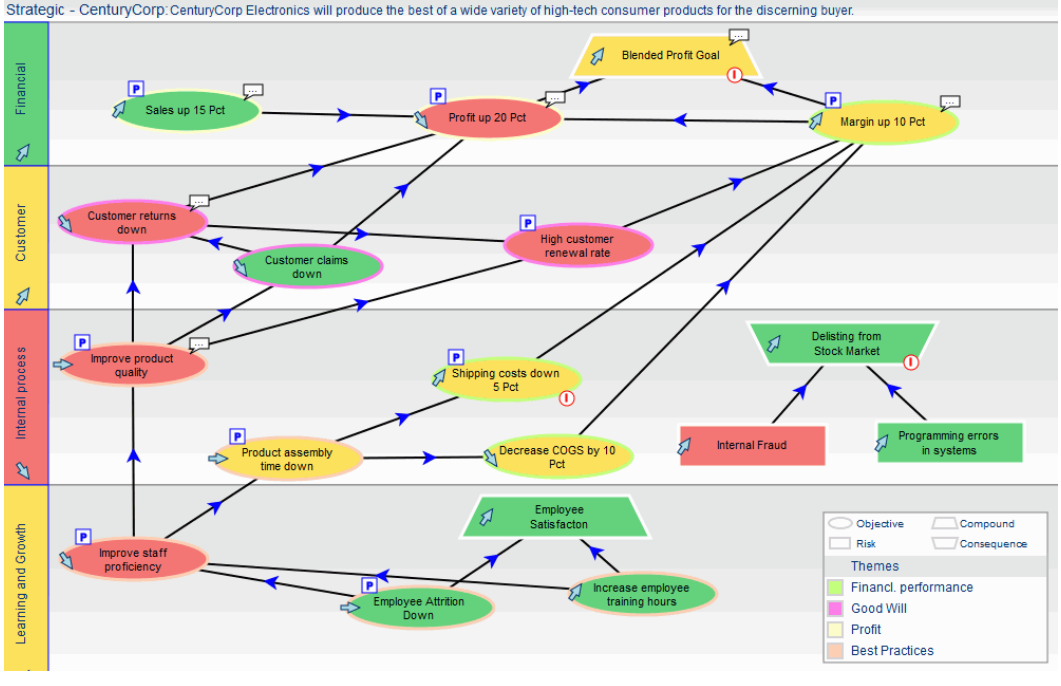
The Perspectives, Objectives, Risks, Themes, Projects, and Processes panel buttons provide you with options for viewing, creating, editing, and deleting objectives, risks, projects, and processes. To learn more about working with these Author page options, see the following topics:

- *Perspectives* on page 199
- *Objectives* on page 201
- *Risks* on page 204
- *Themes* on page 206
- *Projects* on page 208
- *Processes* on page 213

You can also select the *Show My Objects* button at the bottom of the Author page navigation panel to filter out any objects for which you are not the owner. If the Show all Objects button is displayed, then you are already viewing just the objects for which you are the owner. If you select *Show all Objects*, all objects for all owners are displayed. Note that the ability to edit objects is controlled by the Functional Role access of the owner. To set Show My Objects as the default, set the Object Display Type setting to *U* in the UI panel on the Settings menu. For more information, see *Viewing and Editing Default Settings* on page 378.

Strategy Subtab

The Strategy subtab allows you to build Strategy Maps, and drag and drop objects on the map. The following image shows an example of a Strategy Map.



For consumers and analysts, the Strategy Map is read-only. For authors, the Strategy Map can be readable and writeable, if it has been set up that way by your administrator.

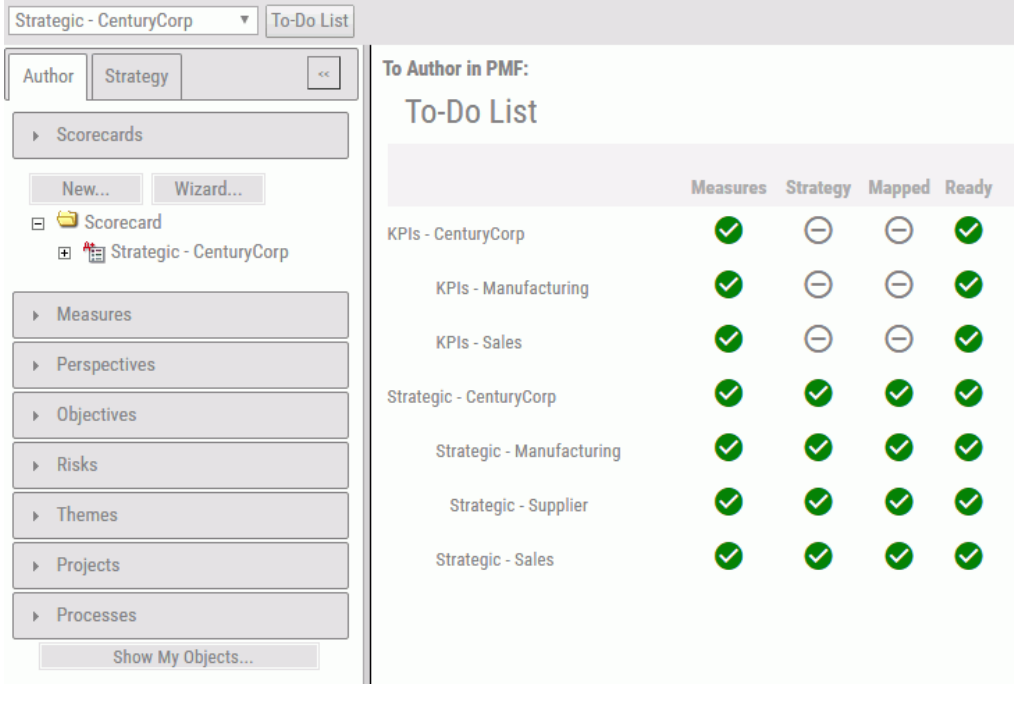
The read-only Strategy Map displays indicators that show the performance of metrics linked to the objectives displayed. The Strategy Map layout shows the relationship between objectives for your operational area of the enterprise. The indicators show an aggregate overall performance of the metrics you own for each of your objectives. The links between objectives for your enterprise represent your enterprise strategy. Larger arrows correspond to more important strategies. The size of the arrow does not affect how it is reported, but is meant as a visual cue only.

For a step-by-step tutorial on using the Strategy Map, see *How to Draw the Strategy Map* on page 170.

Strategy To-Do List

The Strategy To-Do List enables you to quickly view progress as you assemble and maintain Strategic scorecards. The list analyzes the steps that you have already taken to assemble these scorecards, and shows you what you need to do next to complete your strategies.

The Strategy To-Do List is the default view of the Author page, as shown in the following image.



The list displays current Scorecards and their current state, as indicated by icons. Each Scorecard shows four different states, with each state showing a condition of *complete* or *to-do*. The following table shows each state, and what is needed for it to be marked as complete.

State	Marked Complete When...
Measures	Every Shown Objective has at least one linked Measure.
Strategy	❑ There is at least one Perspective and one Objective on the Strategy Map, and every Objective on the Strategy Map has at least one linked Measure. ❑ There is more than one Perspective or more than one Objective. ❑ There are no parked Objectives that have linked Measures. A parked Objective is an Objective that is not on the Strategy Map. **Note:** A KPI Scorecard will never have the Strategy state marked as *complete*.
Mapped	❑ The Scorecard strategy is complete. ❑ All Perspectives are on the Strategy Map. ❑ All Perspectives have at least one Objective. **Note:** ❑ A Strategy Scorecard can have the Mapped state set to *complete* even if there are parked Objectives, as long as none of these Objectives have linked Measures. ❑ A KPI Scorecard will never have the Strategy state marked as *complete*.
Ready	❑ (For a KPI Scorecard) The Measures state is marked as *complete* and all Measures on the Scorecard are loaded. ❑ (For a Strategy Scorecard) The Measures state is marked as *complete* and all Measures on the Scorecard are loaded.

Clicking the icon for a Scorecard opens a callout that provides more information for that particular state. The following table lists what is shown in each callout.

State	Callout Show...
Measures	All Measures that are shown on the Strategy Map. **Note:** Any Measure that is linked to an Objective not on the Strategy Map is labeled as *hidden*.
Strategy	All Objectives. An Objective will fall into one of the following categories: ❑ Objectives on the Strategy Map, with linked Measures. ❑ Objectives on the Strategy Map, without linked Measures. ❑ Parked Objectives, with linked Measures. ❑ Parked Objectives, without linked Measures.
Mapped	All Perspectives. The following Perspectives will be shown: ❑ Perspectives that are fully mapped. ❑ Perspectives without an Objective. ❑ Perspectives that are not on the Strategy Map.
Ready	All linked Measures. The callout also indicates whether a Measure is loaded or not.

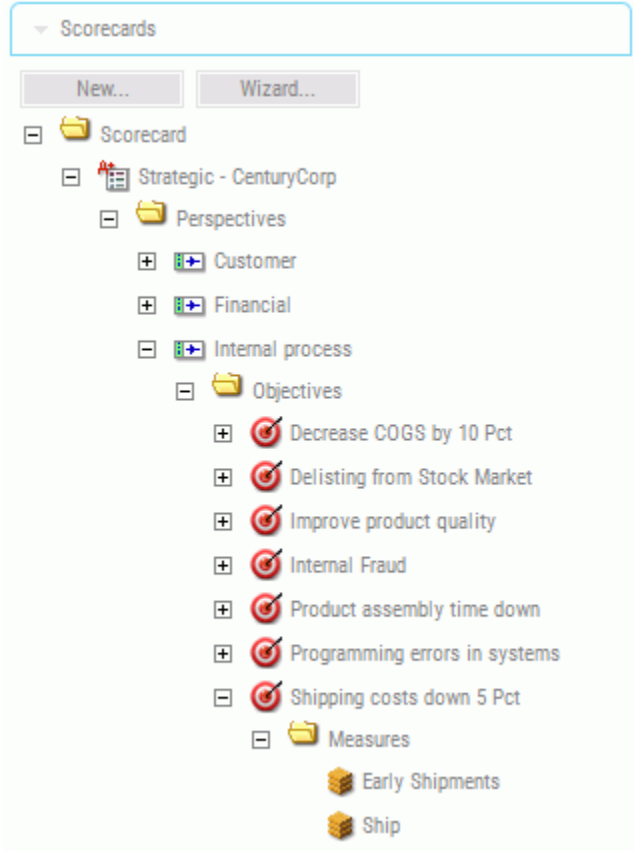
Navigating the Scorecard Tree

To view the contents of the sample scorecard, expand the *Scorecard* and *Strategic - CenturyCorp* card folders to display the main scorecard component, Perspectives.

You can continue expanding folders to reveal additional scorecard elements and see a big picture view of the scorecard structure.

The Perspectives folder can be expanded to reveal subfolders. If you expand one of the Perspective subfolders (for example, *Customer*), the Objectives folder appears. Expanding any of the Objective folders reveals the Measures, Projects, and Processes folders, which are at the core of building a scorecard. For more information about working with perspectives, see *Perspectives* on page 199.

The following image shows the expanded Measures folder for the objective, Shipping costs down 5 Pct, which are all integral parts of the Internal process perspective in the Strategic - CenturyCorp card.



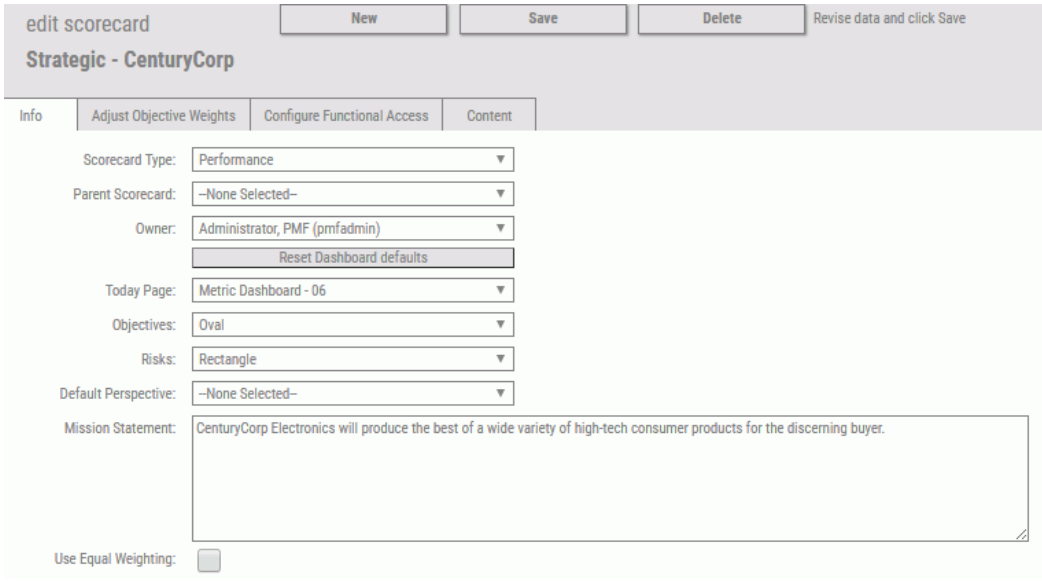
The Themes folder, located in the Themes panel, can also be expanded to reveal objectives and measures elements.

For more information about working with themes, see *Themes* on page 206.

Editing, Deleting, and Creating Scorecards

To perform detailed maintenance of a scorecard, expand the scorecard tree and select a perspective, theme, objective, measure, project, or process to display the associated Edit panel to the right of the scorecard tree, where you can make any necessary changes.

The contents of the existing Strategic - CenturyCorp scorecard are displayed in the Edit Scorecard panel, as shown in the following image.



In the Edit Scorecard panel, you can edit the Scorecard Name, select the Scorecard Type, select a different Parent Scorecard, change the Owner, and add or edit a scorecard Mission Statement. You can also select the Object Shape that is used for displaying objectives in the Strategy Map. For more information about the modifiable fields of a scorecard, see *How to Create and Copy a New Scorecard by Cascading* on page 156.

There are three additional tabs that enable more functionality in the Edit Scorecard panel.

- If you click the *Adjust Objective Weights* tab, the Objective Weights panel opens, where you can control the percentage that each objective represents as part of the overall scorecard strategy. For more information, see *Weighting Objectives Across a Strategy* on page 186.
- If you click the *Configure Functional Access* tab, the Edit Scorecard User Access panel opens, where you can configure Scorecard Functional Access. For more information, see *Working With Scorecard Security* on page 234.
- If you click the *Content* tab, the Edit Scorecard Content panel opens, where you can control the content that is available in the selected scorecard by allowing you to link or unlink multiple content items.

When you select the *Delete* button in the Edit Scorecard panel, a dialog box appears, asking you to confirm that you want to delete the scorecard.

Note: If you delete an existing scorecard, you will permanently remove the scorecard schema, including perspectives, Strategy Map, objectives, themes, and links to projects, processes, and metrics.

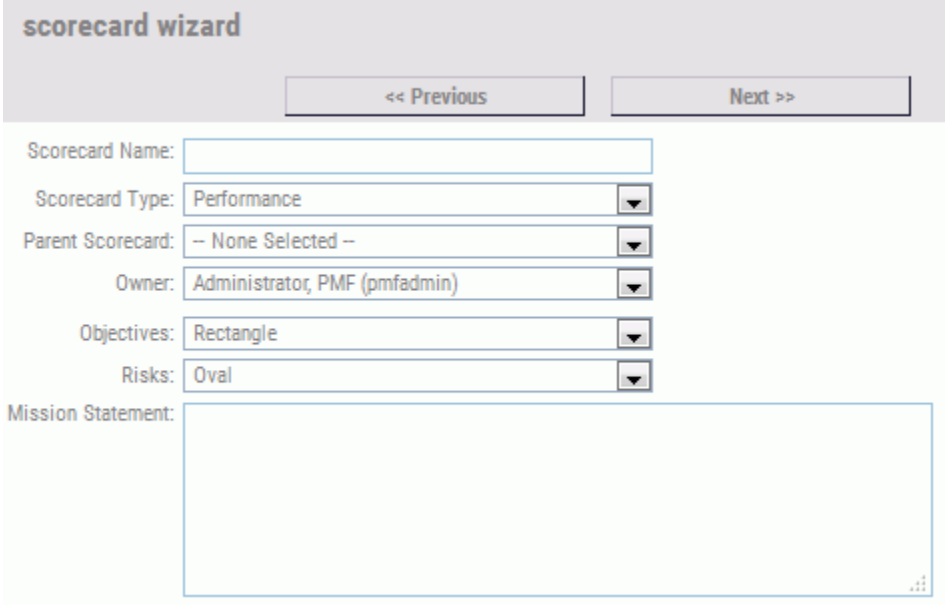
Creating a New Scorecard

You can create a new scorecard using the New Scorecard Wizard or by cascading from a parent scorecard. The New Scorecard Wizard quickly sets up all of the basic records you need to create a scorecard, including the scorecard record, the four standard Kaplan/Norton perspectives, and the desired objectives.

Procedure: How to Create a New Scorecard Using the Scorecard Wizard

1. In the Author page, click the *Scorecards* panel button.
2. Click the *Wizard* button.

   The Scorecard Wizard panel opens, as shown in the following image.



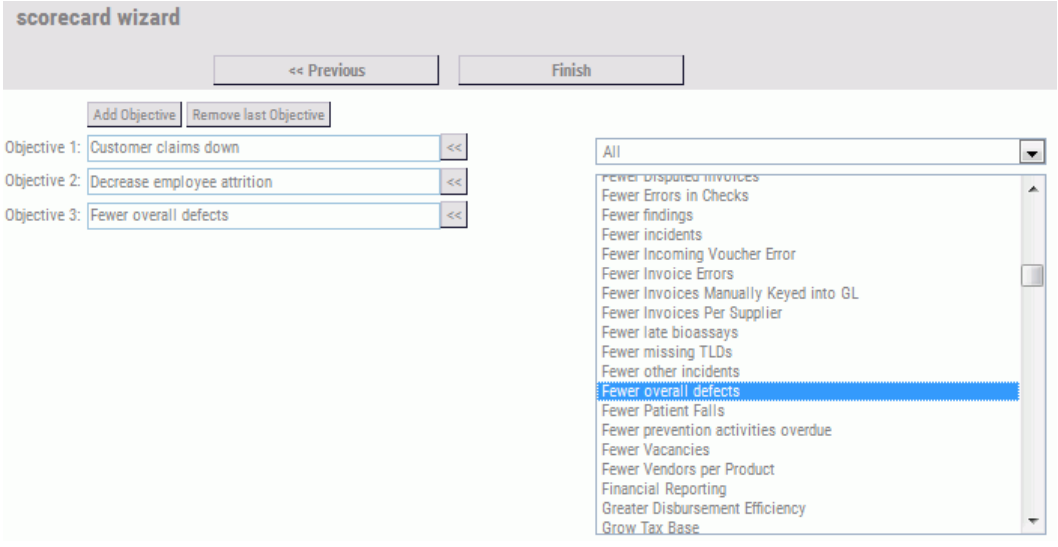
3. Complete the fields in the panel, as described in the following table.

Field	Description
Scorecard Name	Type a name for your new Scorecard. The maximum number of characters is 50.
Scorecard Type	Select Performance or Risk.
Parent Scorecard	If the Scorecard should be cascaded from a parent, select the desired parent scorecard. All scorecards that you have access to are shown in the drop-down menu.
Owner	Select the user ID of the owner of the scorecard. By default, your owner ID is used.
Objectives	Select the shape to use for Objectives in the Strategy Map. Choose Oval, Rectangle, Rounded Rectangle, Wide Oval, Wide Rectangle, or Wide Rounded Rectangle.
Risks	Select the shape to use for Risks in the Strategy Map. Choose Oval, Rectangle, Rounded Rectangle, Wide Oval, Wide Rectangle, or Wide Rounded Rectangle.
Mission Statement	Optionally, type text to describe the fundamental purpose of the new scorecard. This information is displayed in the Strategy Map and in some views.

4. Click *Next*.
5. Select the *Use default Perspectives* check box or type a value in each of the four Perspective fields.

   Note: You can click *Previous* at any time before the Finish step to go back and make changes.
6. Click *Next*.

The next panel, used to add objectives, opens, as shown in the following image.



7. For each new objective that you want to add, select an objective category from the drop-down menu (to the right of Objective 1), and double-click the desired item in the objective selection box, which is located below the objective category drop-down menu.

   You can also do any of the following:

   - Replace an objective that was already selected. Highlight an item in the objective selection box and click the left-pointing arrow to the right of the existing objective.
   - Manually add an objective name. Click the *Add Objective* button and type the name of the desired objective in the blank objective field. Note that when you do this, you will have to also manually type a name for the associated measure.
   - Remove the last objective. Click the *Remove last Objective* button.

8. Click *Next* to review all of the corresponding measures for the objectives you selected on the previous page.
9. If you have no further changes, click *Finish*. Otherwise, click *Previous*.

   When you click *Finish*, a summary page is displayed for the new scorecard you just created. You can click *Go to card* to view the new scorecard or click *Another new* to create another new scorecard.

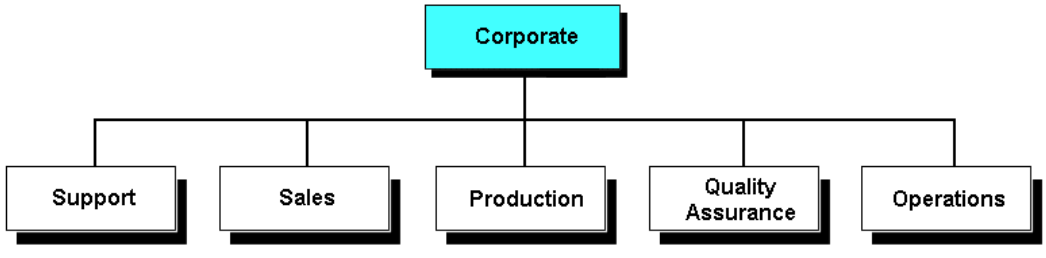
Your new scorecard is now set up and ready to use.

For more information about editing a scorecard created by the Scorecard Wizard, see *Editing, Deleting, and Creating Scorecards* on page 150. For example, you can add a mission statement to the scorecard or select the shape for displaying objectives on the Strategy Map.

Scorecard Cascading and Copying

You can organize scorecards in a hierarchical linkage called a cascade. Cascaded scorecards enable you to drill up and down through the various scorecards set up for your organization, which allows users to view scorecards both higher up and lower down in the hierarchy of the organization. There is almost an infinite number of ways to combine scorecard cascading with data security in PMF. You can customize cascading to permit individual users to view specific metrics from other organizational scorecards, in addition to their own scorecards.

Typically, you cascade scorecards along an organization org chart or company/departmental structure. For example, if your company is in manufacturing, you might create a scorecard cascade, such as the example that appears in the following image. In this example, the parent is the Corporate card, with children representing Support, Sales, Production, and other departments.

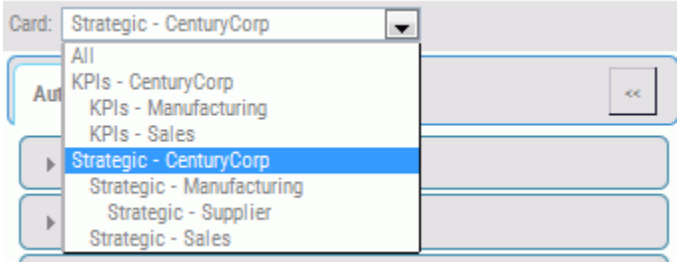


You can add, change, or delete the parent child relationship between any two scorecards by changing the properties from the child scorecard panel. After you set up a parent child relationship between two scorecards, you can begin to drill back and forth between them.

You can create a new child scorecard by making an exact copy of an existing (parent) scorecard and the two will be automatically cascaded. You can then modify the copied (child) scorecard, changing perspectives, objectives, themes, and metrics, without affecting the parent.

In both read-only and read or write Strategy Maps, if a scorecard has a parent and one or more child scorecards, you can use the Strategy Map to navigate to the parent using a link, and the child or children using a menu.

If a scorecard has a parent and one or more child scorecards, you can use the Card drop-down menu to navigate between the parent and children or between the children, as shown in the following image. This capability is available on the Today and Author pages.



Procedure: How to Create and Copy a New Scorecard by Cascading

1. Click the *Scorecards* panel button and then click the *New* button.
2. Complete the fields in the New Scorecard panel, as described in the following table.

Field	Description
Scorecard Name	Type a name for the new scorecard. The maximum number of characters is 50.
Scorecard Type	Choose from Performance or Risk.
Parent Scorecard	Select a parent scorecard from which the new scorecard will be cascaded. All scorecards appear in the drop-down menu. Scorecards to which you have access appear in the list.
Owner	Select an owner from the drop-down menu. The default is the owner name of the sign-in ID.
Today Page	Select the default Today Page for the new scorecard.
Objectives	Select the shape to use for Objectives in the Strategy Map. Choose Oval, Rectangle, Rounded Rectangle, Wide Oval, Wide Rectangle, or Wide Rounded Rectangle.
Risks	Select the shape to use for Risks in the Strategy Map. Choose Oval, Rectangle, Rounded Rectangle, Wide Oval, Wide Rectangle, or Wide Rounded Rectangle.

Field	Description
Cascade Scorecard (check box)	Select this option to copy all aspects of the parent scorecard, such as Perspectives and Objectives.
Mission Statement	Enter text that describes the focus or fundamental purpose of the new scorecard, if desired. This information is displayed in the PMF Strategy Map and on views.

3. After you have entered your data in the fields of the New Scorecard panel, click *Save*.

Creating Strategy and Risk Objects

PMF provides a strategy management system that allows you to arrange and organize metrics into business strategies. You can link and align metrics to various business goals, projects, and themes. You can also assign a weight to an individual metric (that is, set its priority compared to other metrics).

Once you perform the preceding tasks, you can present and interpret the objects through various perspectives and business views, as appropriate for different business roles inside or outside of an organization.

PMF supports several types of objects, including perspectives, objectives, compound objectives, risks, and consequences. On the legend on a Strategy Map, a user can click a type to highlight that specific type. For example, a user can click *Risk* on the legend to highlight only the risk objects on the Strategy Map. This capability supports a live discussion about the risk performance of a business strategy.

Creating or Editing a Perspective

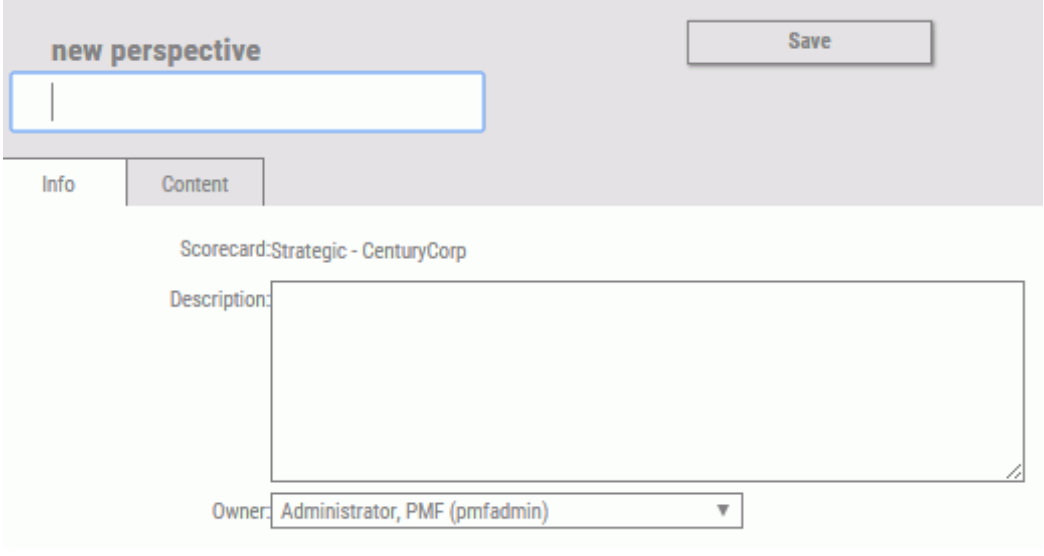
A perspective indicates a high-level classification for types of objectives. It is a container that holds objectives. You can display a perspective for any scorecard, both on a scorecard view and in the Strategy Map.

To create a perspective, you can use the New Perspective panel on the Author page. To edit a perspective, you can use the Edit Perspective panel.

Procedure: How to Create a Perspective

1. In the Author page, click the *Perspectives* panel button.
2. Click the *New* button.

The New Perspective panel opens, as shown in the following image, with sample values in the fields.



3. Complete the fields on the New Perspective panel, as described in the following table.

Field	Description
Info Tab	
Perspective Name	Type a name for the new perspective. The maximum number of characters is 50.
Description	Type a brief description of the perspective. The maximum number of characters is 1024.
Owner	From the drop-down menu, click the ID of the owner of the perspective. The default value is the ID of the owner that is signed in.
Content Tab	
	Allows you to control the content available when selecting an perspective.

4. After you have supplied the values on the panel, click *Save*.

Procedure: How to Edit an Existing Perspective

1. In the Author page in PMF, click the *Perspectives* panel button.
2. Click the name of the perspective that you want to edit.
3. On the Edit Perspective panel that opens, edit the perspective as desired. The fields are the same as those on the New Perspective panel.
4. Click *Save* on the Edit Perspective panel when you have finished making changes.

Creating or Editing an Objective

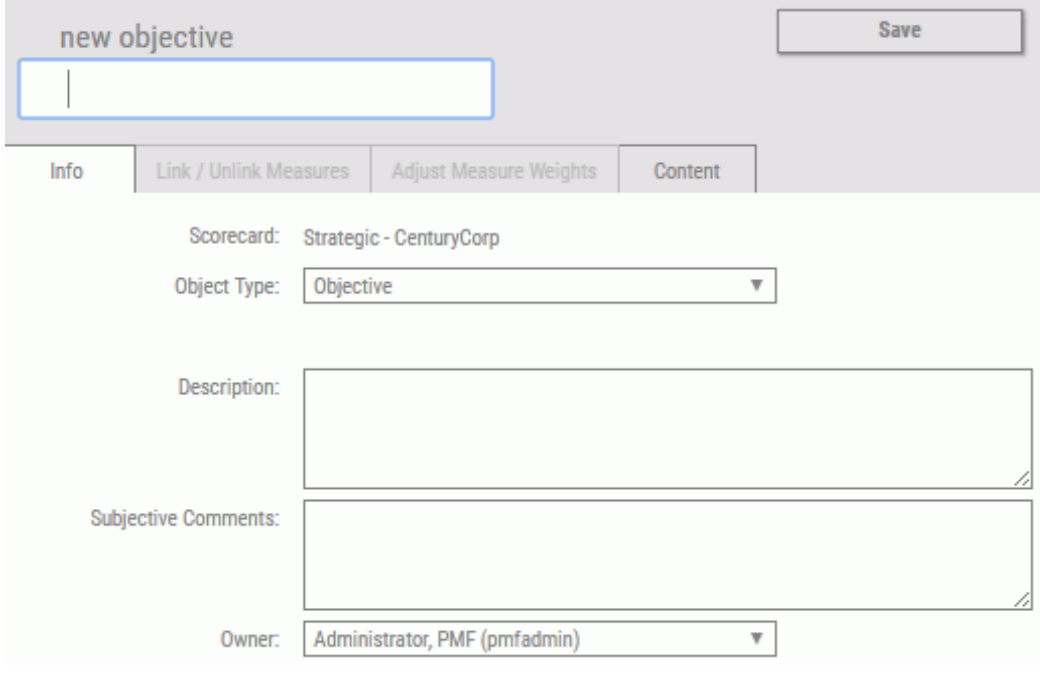
An objective relates to a high-level goal for business action. An objective is designed to be specific, measurable, action-oriented, results-driven, and time-based (SMART).

To create an objective, you can use the New Objective panel on the Author page. To edit an objective, you can use the Edit Objective panel.

Procedure: How to Create an Objective

1. In the Author page in PMF, click the *Objectives* panel button.
2. Click *New*.

   The New Objective panel opens, as shown in the following image.



3. Complete the available fields on the New Objective panel, as described in the following table.

Field	Description
Info Tab	
Name	Type a name for the new objective. The maximum number of characters is 50.
Object Type	Leave the default value, Objective.
Description	Type a brief description of the objective. The maximum number of characters is 1024.
Subjective Comments	Type information about the objective that helps you use it in your authoring tasks. The maximum number of characters is 1024.
Owner	From the drop-down menu, click the ID of the owner of the objective. The default value is the ID of the owner that is logged on.
Content Tab	
	Allows you to control the content available when selecting an objective.

4. After you have supplied the values on the panel, click *Save*.

Procedure: How to Edit an Existing Objective

1. In the Author page in PMF, click the *Objectives* panel button.
2. In the Objectives tree on the left, locate and click the name of the objective that you want to edit.
3. On the Edit Objective panel that opens, edit the objective as desired. The fields are the same as those on the New Objective panel. The name of the associated scorecard, perspective, and theme is shown in the respective field, if applicable.
4. Optionally, click the *Link/Unlink Measures* tab to modify the list of measures that are linked to the objective.
   a. To link a measure to the objective, locate the measure in the Measures Available to be Linked section of the panel. Select the *Link?* check box.

      You can link more than one measure by selecting all the applicable check boxes.

b. To unlink a measure associated with the objective, locate the measure under Measures Currently Linked. Select the *Unlink?* check box for the measure.

c. Click *Save* on the tab to make the changes to the list of measures that are linked to the objective.

5. Optionally, click the *Adjust Measures Weight* tab to set the priority of individual measures that are linked to the objective.

   If you are not using automatic weighting, it is strongly recommended that you adjust the weighting of measures if you change linking relationships, as described in step 4. If you do not adjust weighting, metric totals may be inaccurate.

   a. On the Adjust Measures Weight tab, drag the sliders to re-assign the weights, or type the weighting percentage in the input field.

      Tip: Typed percentages are recognized when you move the mouse off the input field and click it.

      Notice that the weights are automatically balanced across all the measures.

      If you do not want to balance a particular measure as you drag the sliders or type percentages, click the *Lock* icon to the left of the measure to lock the weight of that measure.

      The Total Weighting Percentage is displayed at the bottom of the weights column as a guideline when you make percentage adjustments.

   b. At any time, optionally click *Re-balance weights* to assign an equal percentage to all measures.

   c. Click *Save* on the tab when you have adjusted the weights as desired.

6. Click *Save* on the Edit Objective panel when you have finished making changes.

Creating or Editing a Compound Objective

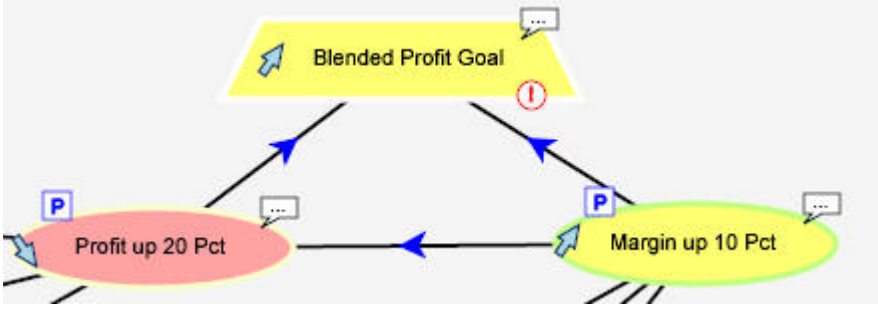
A compound objective enables you to link multiple causative objectives into a grouping that you can place on a Strategy Map. When included on a dashboard, a view, or a Strategy Map, a compound objective displays the aggregate values of the contributing objectives.

To create a compound objective, you can use the New Compound Objective panel on the Author page. To edit a compound objective, you can use the Edit Compound Objective panel.

You can also edit an individual objective that is linked to a compound objective.

To link individual objectives to a compound objective, use the standard linking function on the Strategy Map.

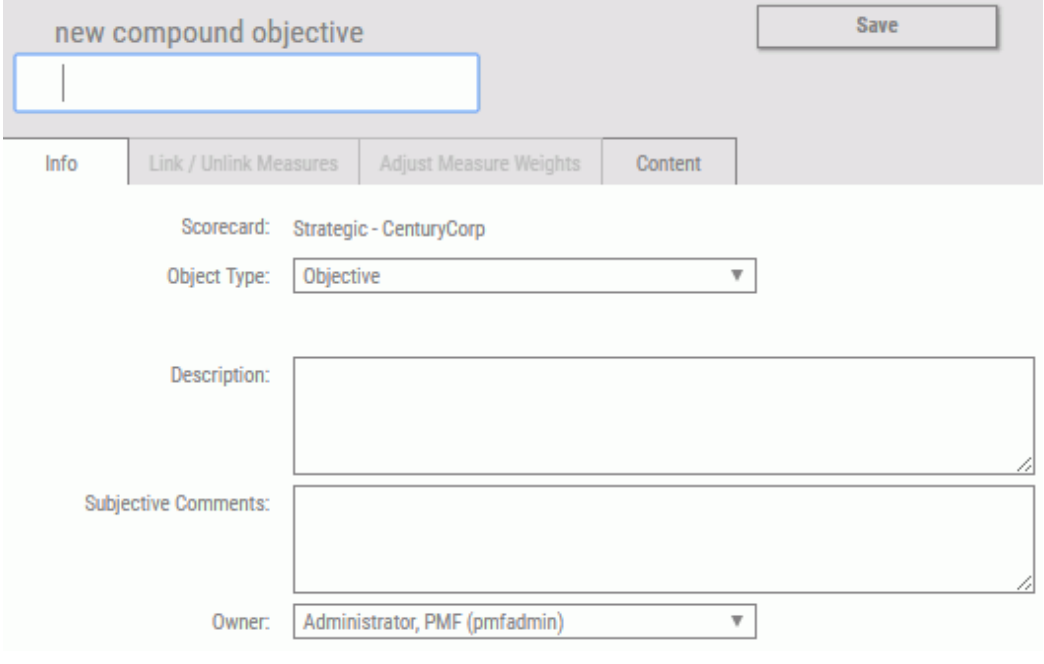
The following image shows a compound objective, named Blended Profit Goal, on a Strategy Map. Two objectives are linked to the compound objective: Profit up 20 Pct and Margin up 10 Pct.



Procedure: How to Create a Compound Objective

1. In the Author page in PMF, click the *Objectives* panel button.
2. Click *Compound*.

   The New Compound Objective panel opens, as shown in the following image, with sample values in the fields.



3. Complete the available fields on the New Compound Objective panel, as described in the following table.

Field	Description
Info Tab	
Name	Type a name for the new compound objective. The maximum number of characters is 50.
Object Type	Leave the default value, Objective.
Description	Type a brief description of the compound objective. The maximum number of characters is 1024.
Subjective Comments	Type information about the compound objective that helps you use it in your authoring tasks. The maximum number of characters is 1024.
Owner	From the drop-down menu, click the ID of the owner of the compound objective. The default value is the ID of the owner that is signed in.
Content Tab	
	Allows you to control the content available when selecting a compound objective.

4. After you have supplied the values on the panel, click *Save*.

Procedure: How to Edit an Existing Compound Objective

1. In the Author page in PMF, click the *Objectives* panel button.
2. In the Compound Objectives tree on the left, locate and click the name of the compound objective that you want to edit.
3. On the Edit Compound Objective panel, edit the compound objective as desired.

   If you are not using automatic weighting, the Adjust Objective Weights button enables you to set the priority of individual objectives that are linked to the compound objective.

   - ❑ Click the *Adjust Objective Weights* tab to set the priority of individual measures that are linked to the compound objective.
   - ❑ Drag the sliders to reassign the weights, or type the weighting percentage in the input field.

Tip: Typed percentages are recognized when you move the mouse off the input field and click it.

Notice that the weights are automatically balanced across all the contributing compound objectives.

If you do not want to balance a particular objective as you drag the sliders or type percentages, click the *Lock* icon to the left of the objective to lock the weight of that compound objective.

The Total Weighting Percentage is displayed at the bottom of the weights column as a guideline when you make percentage adjustments.

- ❑ Optionally, click *Re-balance weights* to assign an equal percentage to all compound objectives.
- ❑ Click *Save* on the panel when you have adjusted the weights as desired.

4. Click *Save* on the Edit Compound Objective panel when you have finished making changes.

Procedure: How to Edit an Individual Objective That Is Linked to a Compound Objective

1. In the Author page in PMF, click the *Objectives* panel button.
2. In the Compound Objectives tree on the left, expand the node for the compound objective to which the individual objectives are linked.
3. In the tree, locate and click the name of the individual objective that you want to edit.
4. On the Edit Objective panel that opens, edit the objective as desired.
5. Click *Save* on the panel when you have made your edits as desired.

Creating or Editing a Risk

A risk describes an area that you are measuring that represents a specific problem, or threat, to your enterprise. Risks can be placed on the Strategy Map and you have the ability to link different metrics to each risk.

To create a risk, you can use the New Risk panel on the Author page. To edit a risk, you can use the Edit Risk panel.

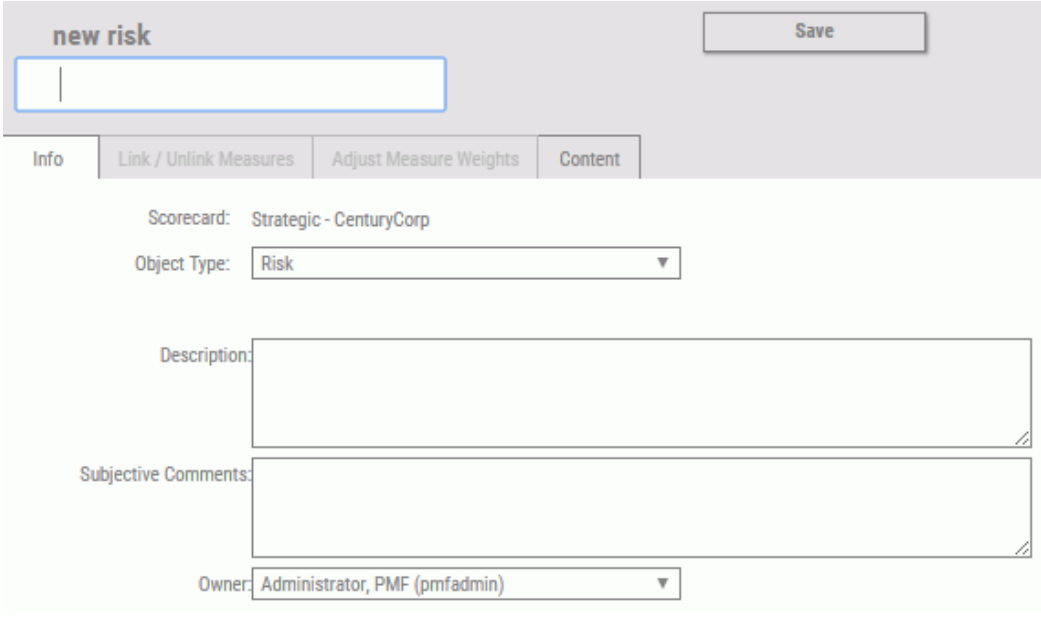
To link individual risks to a consequence, use the standard linking function on the Strategy Map, as described in *Drawing a Strategy Map* on page 170.

Procedure: How to Create a Risk

1. In the Author page in PMF, click the *Risks* panel button.

2. Click *New*.

   The New Risk panel opens, as shown in the following image.



3. Complete the available fields on the New Risk panel, as described in the following table.

Field	Description
Info Tab	
Name	Type a name for the new risk. The maximum number of characters is 50.
Object Type	Leave the default value, Risk.
Description	Type a brief description of the risk. The maximum number of characters is 1024.
Subjective Comments	Type information about the risk that helps you use it in your authoring tasks. The maximum number of characters is 1024.

Field	Description
Owner	From the drop-down menu, click the ID of the owner of the Risk. The default value is the ID of the owner that is signed in.
Content Tab	
	Allows you to control the content available when selecting a risk.

4. After you have supplied the values on the panel, click *Save*.

Procedure: How to Edit an Existing Risk

1. In the Author page in PMF, click the *Risk*s panel button.
2. In the Risks tree on the left, locate and click the name of the risk that you want to edit.
3. On the Edit Risk panel, edit the risk as desired. The fields are the same as those on the New Risk panel. The name of the associated scorecard, perspective, and theme is shown in the respective field, if applicable.
4. Optionally, click the *Link/Unlink Measure*s tab to modify the list of measures that are linked to the risk.
   a. To link a measure to the risk, locate the measure in the Measures Available to be Linked section of the panel. Select the *Link?* check box.

      You can link more than one measure by selecting all the applicable check boxes.

   b. To unlink a measure associated with the risk, locate the measure under Measures Currently Linked. Select the *Unlink?* check box for the measure.
   c. Click *Save* to make the changes to the list of measures that are linked to the risk.
5. Optionally, click the *Adjust Measure Weights* tab to set the priority of individual measures that are linked to the risk.

   If you are not using automatic weighting, it is strongly recommended that you adjust the weighting of measures if you change linking relationships, as described in step 4. If you do not adjust weighting, metric totals may be inaccurate.

   a. On the Adjust Measures Weight tab, drag the sliders to re-assign the weights, or type the weighting percentage in the input field.

      Tip: Typed percentages are recognized when you move the mouse off the input field and click it.

      Notice that the weights are automatically balanced across all the measures.

If you do not want to balance a particular measure as you drag the sliders or type percentages, click the *Lock* icon to the left of the measure to lock the weight of that measure.

The Total Weighting Percentage is displayed at the bottom of the weights column as a guideline when you make percentage adjustments.

b. At any time, optionally click *Re-balance weights* to assign an equal percentage to all measures.

c. Click *Save* on the panel when you have adjusted the weights as desired.

6. Click *Save* on the Edit Risk panel when you have finished making changes.

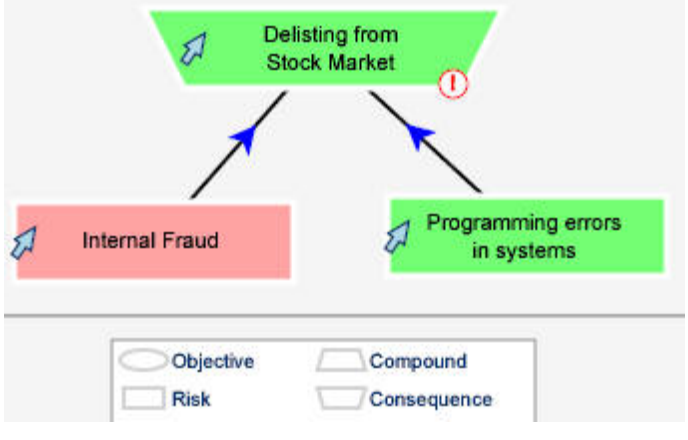
Creating or Editing a Consequence

A consequence enables you to link multiple causative risks into a grouping that you can place on a Strategy Map. When included on a dashboard, a view, or a Strategy Map, a consequence displays the aggregate values of the contributing risks.

To create a consequence, you can use the New Consequence panel on the Author page. To edit a consequence, you can use the Edit Consequence panel.

To link individual risks to a consequence, use the standard linking function on the Strategy Map.

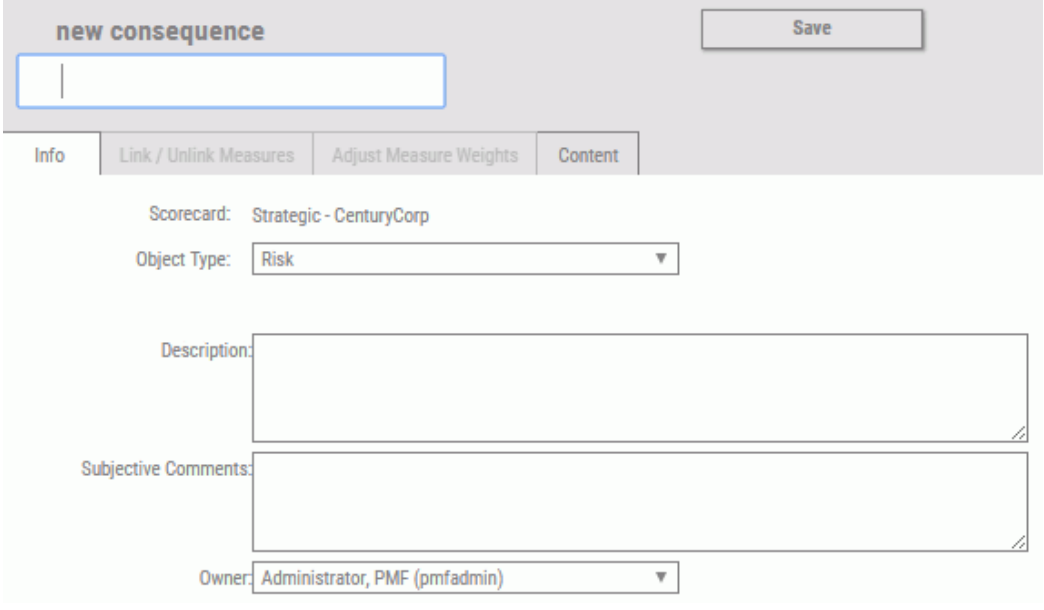
The following image shows a consequence, named Delisting from Stock Market, on a Strategy Map. Two risks are linked to the consequence. They are Internal Fraud and Programming errors in systems.



Procedure: How to Create a Consequence

1. In the Author page in PMF, click the *Risks* panel button.
2. Click *Consequence*.

   The New Consequence panel opens, as shown in the following image.



3. Complete the available fields on the New Consequence panel, as described in the following table.

Field	Description
Info Tab	
Name	Type a name for the new consequence. The maximum number of characters is 50.
Object Type	Leave the default value, Risk.
Description	Type a brief description of the consequence. The maximum number of characters is 1024.

Field	Description
Subjective Comments	Type information about the consequence that helps you use it in your authoring tasks. The maximum number of characters is 1024.
Owner	From the drop-down menu, click the ID of the owner of the consequence. The default value is the ID of the owner that is signed in.
Content Tab	
	Allows you to control the content available when selecting a consequence.

4. After you have supplied the values on the panel, click *Save*.

Procedure: How to Edit an Existing Consequence

1. In the Author page in PMF, click the *Risks* panel button.
2. In the Consequences tree on the left, locate and click the name of the consequence that you want to edit.
3. On the Edit Consequence panel, edit the consequence as desired.

   If you are not using automatic weighting, the Adjust Risk Weights button enables you to set the priority of individual risks that are linked to the consequence.

   - ❏ Click the *Adjust Risk Weights* tab to open the Risk Weights panel for the consequence.
   - ❏ If you are not using automatic weighting, drag the sliders to re-assign the weights, or type the weighting percentage in the input field.

     Tip: Typed percentages are recognized when you move the mouse off the input field and click it.

     Notice that the weights are automatically balanced across all the contributing risks.

     If you do not want to balance a particular risk as you drag the sliders or type percentages, click the *Lock* icon to the left of the risk to lock the weight of that risk.

     The Total Weighting Percentage is displayed at the bottom of the weights column as a guideline when you make percentage adjustments.
   - ❏ Optionally, click *Re-balance weights* to assign an equal percentage to all risks.

- ❑ Click *Save* on the panel when you have adjusted the weights as desired.

4. Click *Save* on the Edit Consequence panel when you have finished making changes.

Deleting a Strategy or Risk Object

The procedure for deleting a strategy or risk object is the same for every type of object. To delete an object, you can use the Edit panel on the Author page.

Procedure: How to Delete a Strategy or Risk Object

1. In the Author page in PMF, click the panel button that opens the navigation tree for the strategy or risk object that you want to delete.
2. Locate and click the name of the object.

   The Edit panel for the object opens.
3. Click the *Delete* button on the Edit panel.

   After you click *Delete*, PMF prompts you to confirm the deletion of the object.
4. Click *OK* to proceed with the deletion.

Drawing a Strategy Map

After you have set up a scorecard and have either user-entered or production measures in the system, you can immediately begin painting your strategy. To do this, use the PMF Strategy Map.

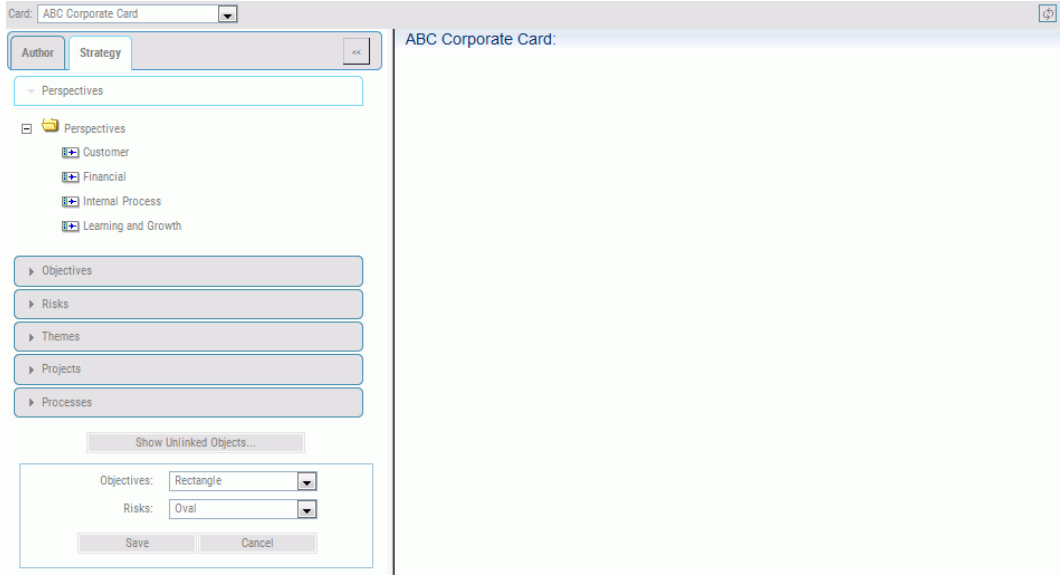
The Strategy Map is based on industry-standard technology, including SVG (Scalable Vector Graphics), which prints at boardroom-quality resolution, and CSS (cascading style sheets), which can be used to easily customize the appearance of the Strategy Map. This enables you to save the Strategy Map in SVG format for embedding in reports, and style the Strategy Map by adding or changing fonts, colors, and images, without modifying the underlying PMF code. You can also add a banner title to display the scorecard name and mission statement.

Procedure: How to Draw the Strategy Map

Note: The first 3 steps apply only to new scorecards.

1. In the Author page in PMF, click the *Strategy* subtab to display the Strategy Map.

The Strategy Map palette area located to the right of the Strategy Map tree. The palette area is blank when you first launch the Strategy Map, as shown in the following image.



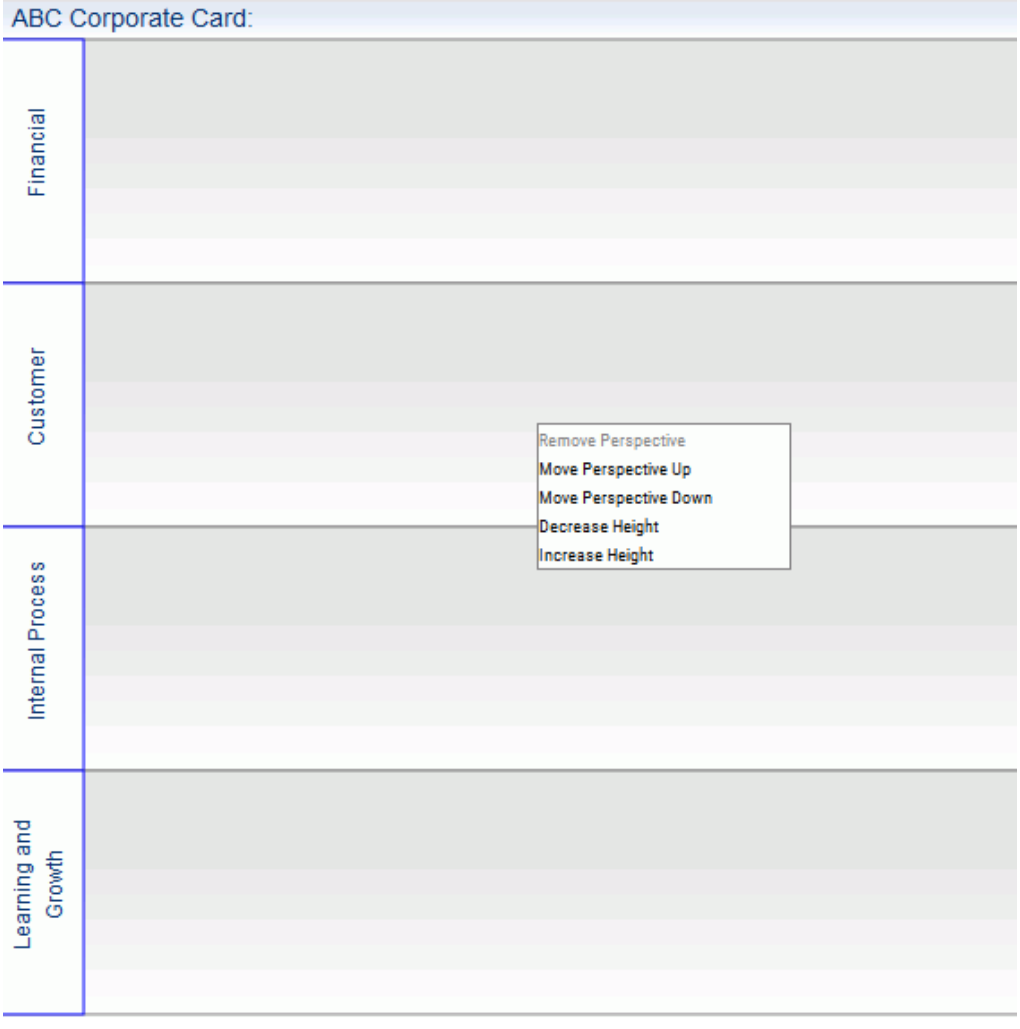
2. To begin populating the Strategy Map, click *Financial* from the Perspectives tree on the left.

   The Financial perspective is added to the palette area.

3. To continue populating the Strategy Map, click *Customer*, *Internal Process*, and then *Learning and Growth*. These perspectives are also added to the palette area.

   If you want to change the order of the perspectives, increase or decrease the vertical size of a perspective, or remove a perspective, right-click a perspective in the palette area, and select the desired option in the pop-up menu that opens.

The following image shows the perspectives added to the Strategy Map and the available options when you right-click a perspective.



The options that are available when you right-click a perspective in the palette area include the following:

- **Remove Perspective.** Removes the perspective.
- **Move Perspective Up.** Moves the perspective up one level.
- **Move Perspective Down.** Moves the perspective down one level.

- **Decrease Height.** Decreases the height of the perspective area by 75 pixels (repeat as many times as needed).
- **Increase Height.** Increases the height of the perspective area by 75 pixels (repeat as many times as needed).

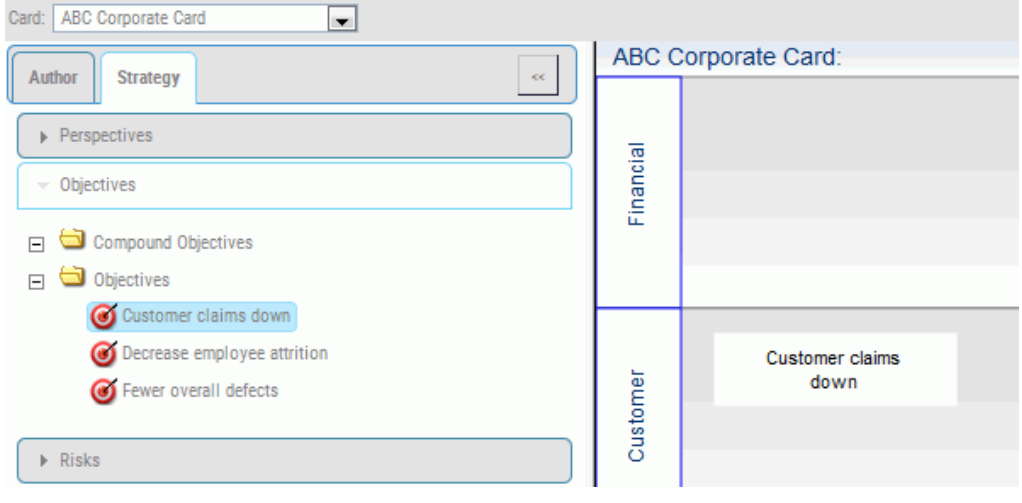
4. To add objectives to the Strategy Map, click the *Objectives* panel button, expand the *Objectives* folder, and then click the desired objective (for example, *Customer claims down*).

   The selected objective is added to the palette area as a rectangle-shaped label.

   Note: The default rectangle-shaped objective label can be changed using the Edit Scorecard panel. For more information, see *Editing, Deleting, and Creating Scorecards* on page 150.

5. Drag the objective to the desired perspective in the Strategy Map and drop it.

   The objective is now anchored to the perspective (for example, Customer claims down is anchored to Customer). The following image shows the new objective and the options that are available when you right-click an objective label.



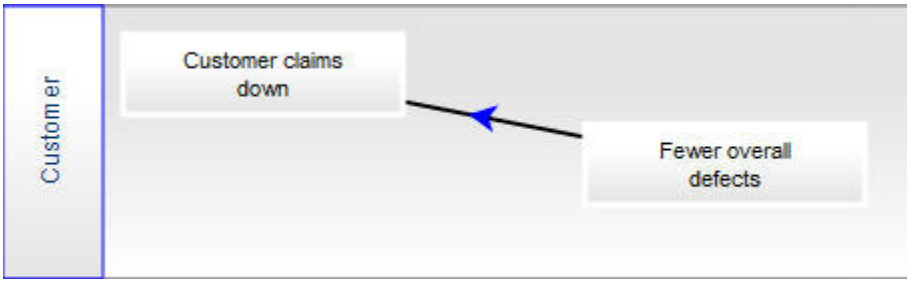
   Note: If you were to save the Strategy Map now, then navigate to the Author page and check under the Customer perspective, you would find that the objective, Customer claims down, is now a child of that perspective.

   If you want to start a link or remove an objective from the Strategy Map, right-click an objective in the palette area, and select the desired option from the pop-up menu that opens.

The options that are available when you right-click an objective label include the following:

- **Start Link.** The first step in linking two objectives.
- **Remove Objective.** Removes the objective from the palette area.

6. Click the *Fewer overall defects* objective, and when it appears in the palette area, drag it to the Customer perspective to anchor it.
7. Right-click *Fewer overall defects* and select *Start Link* from the pop-up menu.
8. Click *Customer claims down* to link the two objectives together, as shown in the following image.



9. Drag more objectives over and link them to finish creating your Strategy Map.

   Each link that you create between two objectives, represents the cause and effect relationship between those objectives. The network of links between all of your objectives is called a *strategy* in PMF.

10. From the left pane of the window, click *Save* to save the Strategy Map.

Adding Themes to a Strategy Map

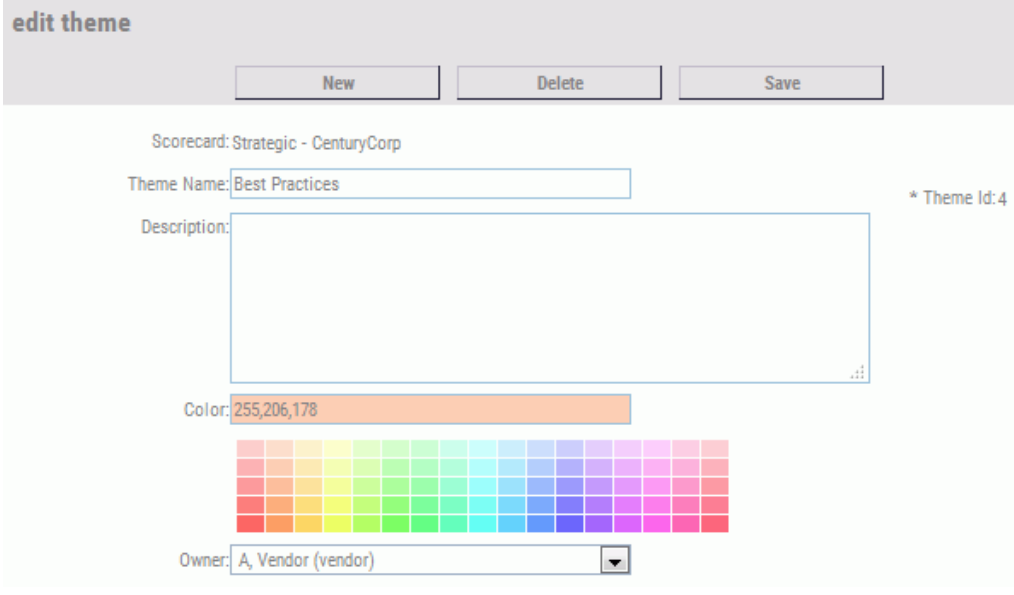
Themes indicate high-level attributes of your strategy. Many organizations initially build their strategies by stating their major themes (for example, consistently high market share or world-class customer service) and then creating objectives representative of their themes.

If you are using themes, they are displayed as color keys on the PMF Strategy Map. While you are editing a strategy in the Strategy Map, you can assign themes to objectives using paint-like actions. Themes are located as the bottom element in the scorecard tree.

Procedure: How to Add Themes to a Strategy Map

1. On the Author page, click the *Themes* panel button to expand the list of themes.

2. Click a theme (for example, *Best Practices*) to see the Edit Theme panel, as shown in the following image.



You can also click *New* to create a new theme.

If you are creating a new theme, select the desired scorecard from the Scorecard drop-down menu. For existing themes, the Scorecard name cannot be edited.

3. In the Theme Name field, type a name for the theme.
4. In the Description field, type a description.
5. Under the Color field, select a color. The Color field displays the numbers representing the RGB (red, green, and blue) for the color you choose.
6. In the Owner field, select an owner from the drop-down menu.
7. Click the *Save* button.
8. Click the *Strategy* subtab to go to the Strategy Map.
9. Click the *Refresh Contents* icon at the upper-right corner of the Strategy Map.

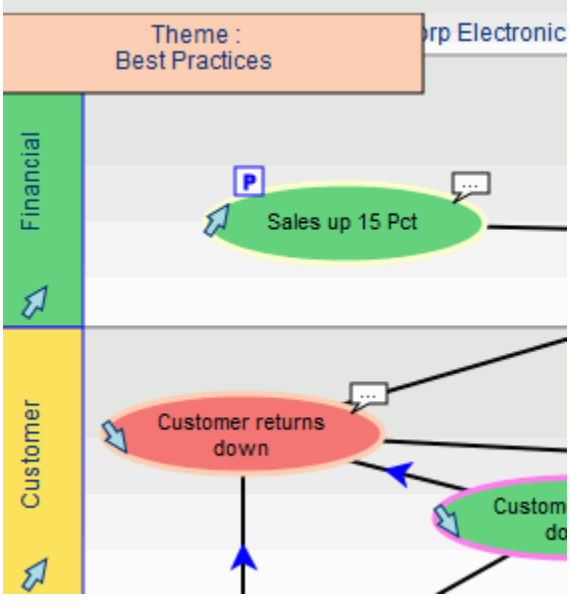
   The Strategy Map refreshes updating colors, trends, and active status indicators. You may notice some or all of the following:

   - The background color for an objective is the same as the indicator color for that objective.

- Up and down arrows represent the trends.
- A Project icon indicates that projects are aligned with the objective below it. If you click the indicator, you can drill down to more project data including schedule and budget status, project impact data, and project-related reports.
- A red metric icon indicates that a measure below the objective is lower than the desired threshold, which is a sign of poor performance. If you click the icon, you can quickly drill to a view of the underachieving measure.
- A feedback icon indicates that feedback has been recorded for an objective or measure below it. If you hover the mouse over the icon, the most recent feedback is displayed. If you click the icon, you can drill down to a view where you can read and edit the feedback.

10. To see the themes and colors you selected, click the *Themes* panel button in the Strategy Map subtab and expand the *Themes* tree.
11. Click a theme (for example, *Best Practices*). It appears in the upper-left corner of the Strategy Map.

    Click an objective representative of the theme, such as *Customer returns down*. A halo of the applicable color appears around the objective, as shown in the following image.



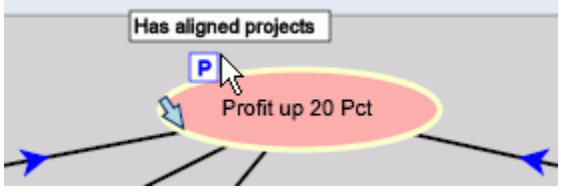
12. Click *Save* to save the Strategy Map.

You can go back into the Strategy Map at any time and change the strategy. When you change your Strategy Map, the views change to reflect your changes. Your Strategy Map controls how everything in PMF is linked together.

Linking Projects and Processes to Objectives in the Strategy Map

You can link projects and processes to objectives using the PMF Strategy Map, which displays all of the objectives for a selected scorecard. Since objectives represent goals, linking projects and processes to your goals is a valuable analytical process.

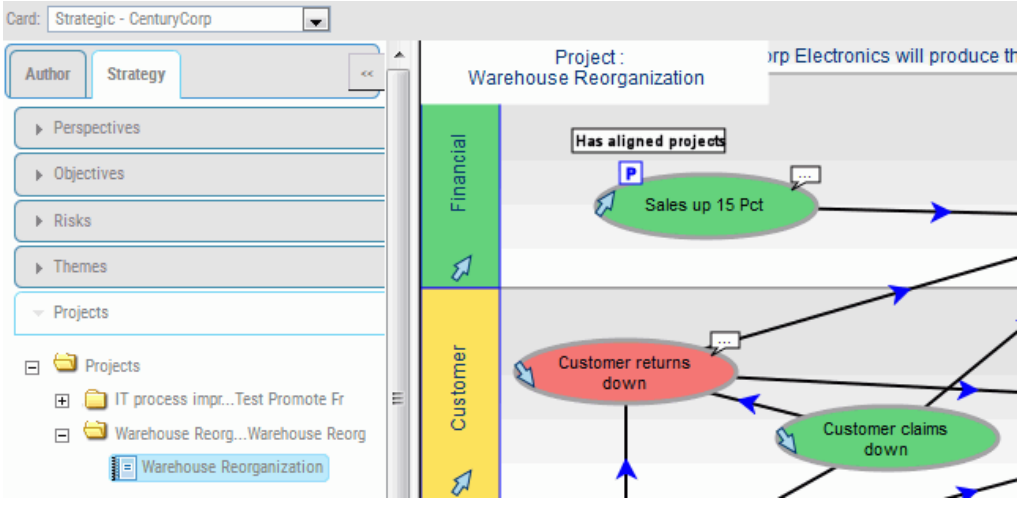
If a project is linked to an objective, the Strategy Map displays a Project icon P above the objective, as shown in the following image.



Procedure: How to Link Projects and Processes to Objectives in the Strategy Map

1. On the Strategy subtab, to display all of the objectives for a scorecard in the right pane, select the desired scorecard using the drop-down menu above Perspectives.
2. Expand either the *Projects* or *Processes* tree.
3. Click a desired project or process. It appears in the upper-left corner of the Strategy Map.
4. Click the objective you want to link to the desired project or process. The halo around the objective changes to green to indicate the project or process.

The following image shows the Customer claims down objective linked to the Warehouse Reorganization project.



To unlink any objective already linked with a project or process, click that objective. The halo changes to the background color to indicate that the project or process is no longer linked.

5. Click *Save* to save the Strategy Map.

   Refresh the contents of the map to see the Project icon for the objective.

6. To display the objectives currently linked with your project or process, click the page icon and select *Today*.

7. Click the dashboard icon and click the *Content* panel button from the side menu.

8. Select *Analysis* and click *Executive Booklet*.

9. Click the *Projects* or *Processes* link to see the objectives that are currently linked to your project or process.

Understanding Measures

PMF gives you a lot of flexibility in dealing with measurements. It supports quick one-off measurements you might add when prototyping a new scorecard. Additionally, it allows you to design deeply loaded measures that span multiple time periods.

PMF supports measure pooling, which enables you to create measures independent of specific scorecards. You can create a measure and link it to every scorecard in your organization, or unlink a measure and hold it for later use. Linked measures are controlled by data access security, which allows users to view only measures to which they have been granted access (for example, through an optional Organization dimension).

Adding and Editing Measures

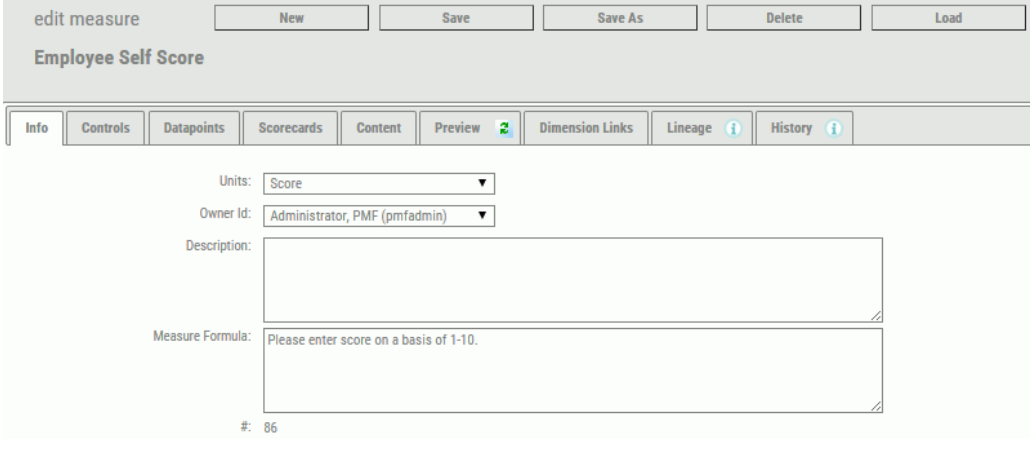
You can manually add one or more measures to PMF and quickly connect them to objectives in your system. For more information, see *Working With Measures* on page 305.

If you set up your scorecard using the Scorecard Wizard, and you selected objectives from the list, PMF automatically created measures for you. You can use the Measures panel button to edit these measures or convert them to loadable measures. After you have loaded measures with the loader, use the Edit Measure panel to edit their properties.

Procedure: How to Edit Measures

1. In the Author page, click the *Measures* panel button.
2. Select a measure.

   The Edit Measure panel opens, where you can edit any of the settings, as shown in the following image.



3. This panel contains the same fields available when the measure was created.

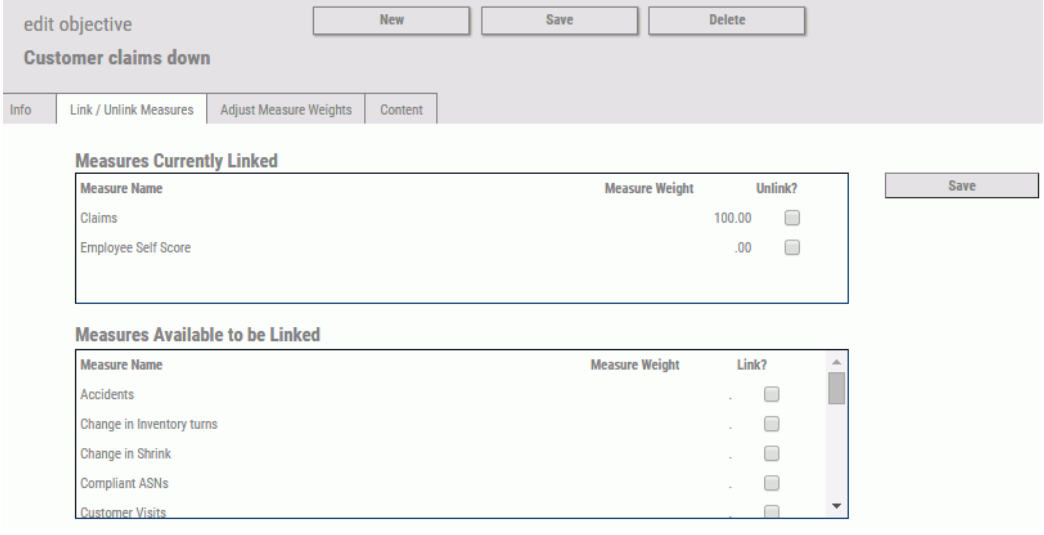
   For more information on this panel, see *Working With Measures* on page 305.
4. In each tab where you make changes, click *Save* before moving to another tab.

Procedure: How to Link or Unlink Measures

To modify the list of measures linked to an objective, perform the following steps.

1. In the Edit Objective or Edit Risk panel, click the *Link/Unlink Measures* tab.

   The Link/Unlink Measures tab opens, as shown in the following image.



2. To link a measure to the selected objective, find the desired measure in the Measures Available to be Linked section of the panel and select the *Link?* check box.

   You can link more than one measure by selecting all of the applicable check boxes.

3. To unlink a measure associated with the selected objective, find the measure under Measures Currently Linked.

   Select the *Unlink?* check box for the measure.

4. Click *Save* to make the changes to the list of measures linked to the objective.

   Your changes are reflected under Measures Currently Linked.

5. Click the *Adjust Measure Weights* tab to assign weighting percentages. For instructions, see *Weighting Measures Across Objectives* on page 184.

   It is strongly recommended that you adjust the weighting of measures after changing linking relationships. If you do not adjust weighting, metric totals may be inaccurate.

Indicator Concepts

PMF provides a rich model of mechanisms that control how metrics are evaluated against their targets and interact with each other. To give you a better understanding of how metrics are evaluated, this section provides a model of the indicators PMF works with to calculate the grading of measures:

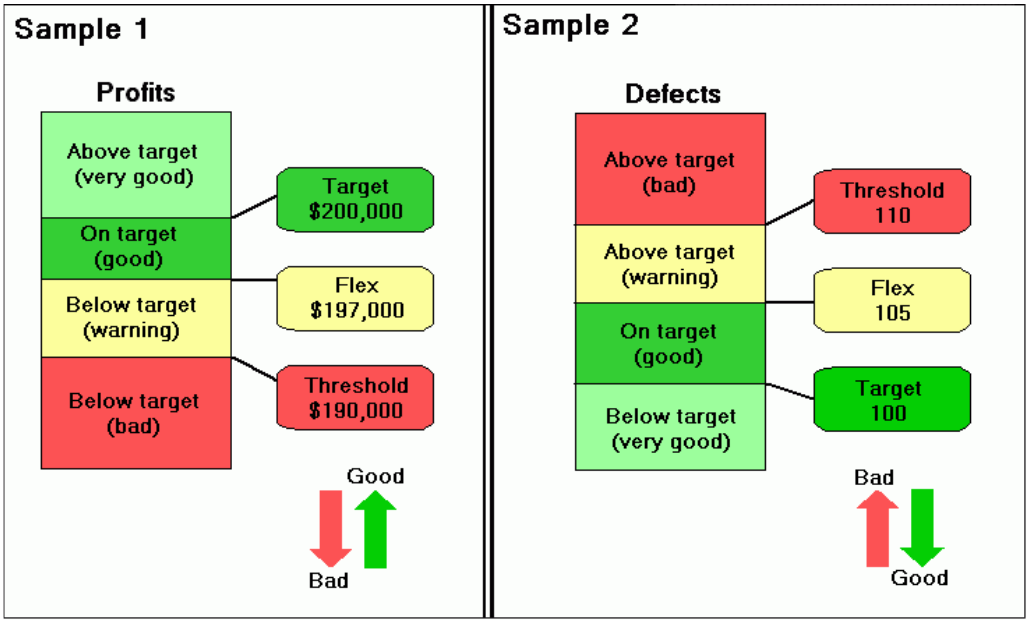
- **Target.** The goal for the measure.
- **Actual.** The actual value for the measure.
- **Direction.** The direction to be used to determine how thresholding is performed for the measure. The direction can be ascending (higher is better), descending (lower is better), or you can select a range (actual value should fall within the specified range).
- **Threshold.** The outer range of when an indicator shows red (poor performance).
- **Flex.** The margin of error, or the inner edge of the yellow zone (meaning that you failed to meet the target goal but are reasonably close to the target goal). Setting a flex of 0 indicates that the measure does not allow any deviation from the target.
- **Weighting.** The priority of the measure. The higher the weight of the measure, the greater its significance when calculating measures across objectives or scorecards.

There are alternate ways of expressing how your metrics are performing. You can define new scales or grading systems for displaying indicators. For example, you can display scales, such as 1-10 or A-J, alongside the standard red/yellow/green stop lights. You can also establish your own criteria for how these grading systems are defined. Grading systems can be based on scoring scales, indicators (colored dots, graphical, or character-based), or both. Grading systems are based on setting a varied number of breakpoints in a range of percent achieved. These breakpoints can then have tolerances set globally or dimensionally. Multiple grading systems can be applied at the same time, but only one grading system can control the indicators for all metrics.

Note: There is no user interface for establishing new grading systems. Setting up new grading systems requires direct manipulation of the PMF data mart and the assistance of a qualified PMF consultant.

Example: **Designing an Ascending or Descending Indicator**

The following image provides two samples of how designing an indicator works.



In Sample 1, the target value for the measure (profits) is set to $200,000. The direction is ascending, the threshold is $10,000, and the flex is $3,000. If the actual profit is:

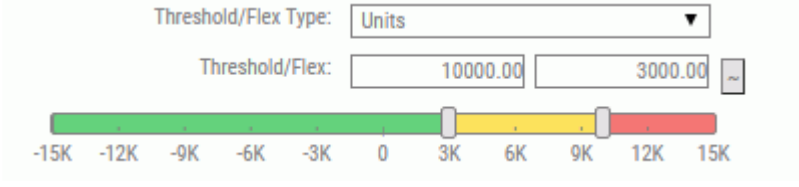
- Greater than $200,000, the indicator is light green, since you have exceeded the target value.
- Between $197,000 and $200,000, the indicator is dark green. Although you have not met the target value, you have come close enough to the target value to meet the flex criteria.
- Between $190,000 and $197,000, the indicator is yellow. You have not met the flex criteria, but you are still within the $10,000 threshold.
- Less than $190,000, the indicator is red, since your profits have fallen below what the acceptable threshold allows.

In Sample 2, the target value for the measure (defects) is set to 100. The direction is descending, the threshold is 10, and the flex is 5. If the actual number of defects is:

- Less than 100, the indicator is light green, since there are less defects than the target value.

- Between 100 and 105, the indicator is dark green. Although you have not met the target value, you have come close enough to the target value to meet the flex criteria.
- Between 105 and 110, the indicator is yellow. You have not met the flex criteria, but you are still within the threshold of 10.
- Greater than 110, the indicator is red, since you have more defects than what the acceptable threshold allows.

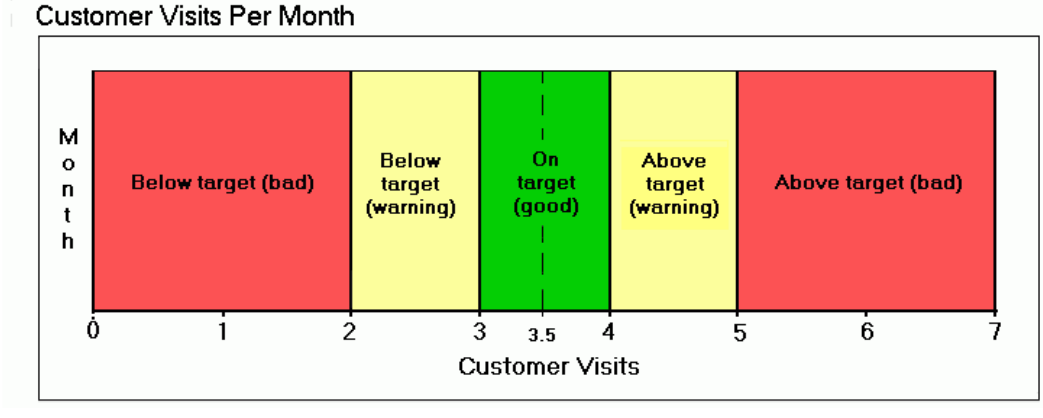
Clicking the *Controls* tab in the Edit Measures panel provides access to setting Measure controls. Here you can adjust the threshold and flex values for a measure by clicking and dragging the Threshold and Flex flags in either direction to change the values. The following image shows an example of the options available in the Controls tab, which used for adjusting descending threshold and flex values.



For more information about adjusting threshold and flex values, see *How to Set Measure Controls* on page 308.

Example: Designing an Indicator Range

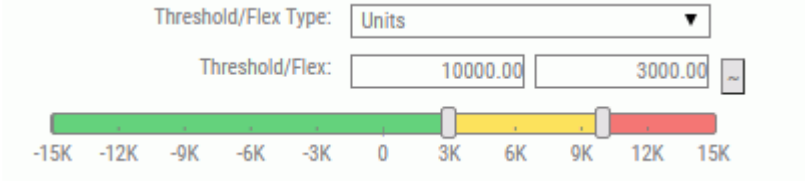
The following image shows how to design an indicator for the range direction.



In this example, the target value for the measure (customer visits per month) is set to 3.5. The threshold is 1.5 and the flex is .5, meaning that you should have at least 2, but not more than 5, customer visits per month. Ideally, you should have between 3 and 4 customer visits per month. If the actual number of customer visits per month is:

- Between 3 and 4, the indicator is dark green, since you have met the flex criteria.
- Between 2 and 3, or between 4 and 5, the indicator is yellow. You have not met the flex criteria of between 3 and 4, but you are still within the acceptable 1.5 threshold.
- Less than 2 or greater than 5, the indicator is red since your customer visits per month have fallen below or above what the acceptable threshold allows.

Clicking the *Controls* tab in the Edit Measures panel provides access to setting Measure controls. Here you can adjust the threshold and flex values for a measure by clicking and dragging the Threshold and Flex flags in either direction to change the values. The following image shows an example of the options available in the Controls tab, which used for adjusting descending threshold and flex values.



For more information about adjusting threshold and flex values, see *How to Set Measure Controls* on page 308.

Weighting Measures Across Objectives

An objective can be linked to no measures, one measure, or multiple measures. If an objective is linked to multiple measures, measure weighting controls the percentage that each measure represents as part of the objective to which it belongs. The weight for an individual measure can be set to any percentage, with no decimal places (integral weighting) or with 1 or 2 decimal places of precision. The sum of the weights for all the measures that make up an objective indicator will always be 100%.

The number of significant decimal places on the weighting panel is set by an administrator. For more information, see *Performance Management Framework Administrator* on page 217.

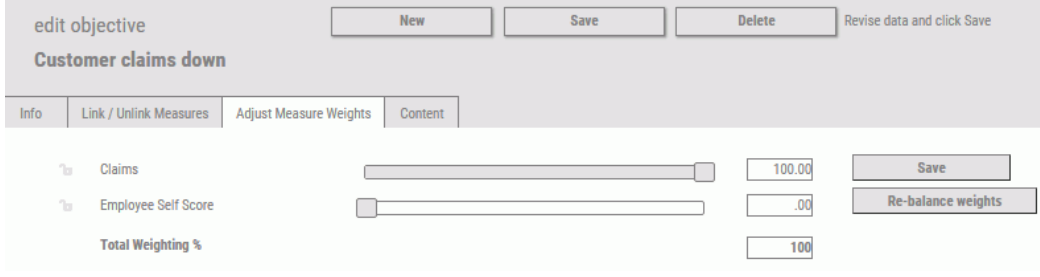
Procedure: How to Weight Measures Across Objectives

To set the priority of measures across objectives, perform the following steps.

1. In the Author page, click the *Objectives* panel button and expand the *Objectives* folder.
2. Click an objective, for example, *Customer claims down*.

   The Edit Objective panel opens.
3. Click the *Adjust Measures Weight* tab.

   The Adjust Measures Weight tab opens, as shown in the following image.



4. Click and drag the sliders to reassign the weights, or type the weighting percentage in the input field.

   Tip: Typed percentages are recognized when you move the mouse off the input field and click it.

   Note that the weights are automatically balanced across all the objectives. For example, if you change the Claims measure from 100.0% to 30.0%, the Employee Self Score measure automatically changes to 70.0%.

   The Total Weighting Percentage is displayed at the bottom of the weights column as a guideline when you make percentage adjustments.
5. Click *Re-balance weights* to assign an equal percentage to all measures.

   Note: If you do not want to re-balance a particular measure as you drag the sliders or type percentages, click the *Lock* button to the left of the measure to lock the weight of that measure.
6. Click *Save* to save your changes.

   If you try to save weights that do not add up to 100%, PMF automatically makes adjustments in proportional amounts so that the total adds up to 100%. It displays a message that gives you an opportunity to view the adjustments, by clicking Cancel, before saving them.

Weighting Objectives Across a Strategy

A scorecard, which represents a strategy, is composed of multiple perspectives, each of which is composed of multiple objectives. Objective weighting controls the percentage that each objective represents as part of the overall strategy. You can adjust the individual weights for any of the objectives, or you can let PMF automatically balance the weights to give each objective an equal share of the overall strategy.

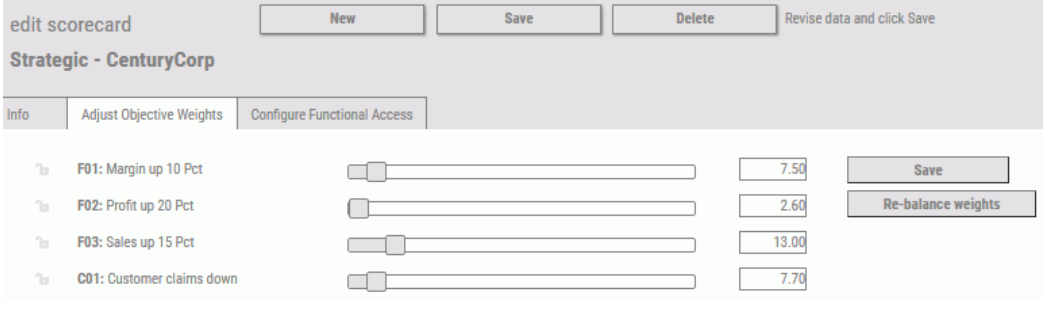
The weighting percentage can have no decimal places (integral weighting) or 1 or 2 decimal places of precision. The number of significant decimal places on the weighting panel is set by an administrator. For more information, see *Performance Management Framework Administrator* on page 217.

Procedure: How to Weight Objectives Across a Strategy

To set the priority of objectives across a strategy, perform the following steps.

1. In the Author page, click the *Scorecards* panel button.
2. Select a scorecard, such as, *Strategic - CenturyCorp*.
3. In the Edit Scorecard panel, click the *Adjust Objective Weights* tab.

   The Adjust Objective Weights tab opens, as shown in the following image.



4. Click and drag the sliders to re-assign the weights, or type the weighting percentage in the input field.

   Tip: Typed percentages are recognized when you move the mouse off the input field and click it.

   Note that the weights are automatically balanced across all the objectives.

   The Total Weighting Percentage is displayed at the bottom of the weights column as a guideline when you make percentage adjustments.

   Click *Re-balance weights* to assign an equal percentage to all objectives.

Note: If you do not want to re-balance a particular objective as you drag the sliders or type percentages, click the *Lock* button, to the left of the objective, to lock the weight of that objective.

5. Click *Save* to save your changes.

   If you try to save weights that do not add up to 100%, PMF automatically adjusts the total weighting and displays a message instructing you to adjust the sliders so the total equals 100 percent.

Automatic Equal Weighting

PMF automatically weights the relationships of lower-level to higher-level objects throughout the strategy linking system. This speeds up the creation of Strategy objects during modeling of a new strategy.

PMF automatically weighs these relationships, by default:

- Measures upward to Objectives or Risks.
- Objectives or Risks upward to Compound Objectives and Consequences.
- Objectives or Risks to Scorecards.

You can easily turn off automatic weighting and use preferential weighting by:

- Navigating to the Scorecard, Compound Objective/Consequence, Objective or Risk for which you want to switch to equal weighting.
- Deselecting the Use Equal Weighting check box in the panel.
- Changing the weights of the linked objects manually using the sliders or lock buttons.

Procedure: How to Disable or Enable Equal Weighting

You can enable or disable equal weighting for Scorecards, Compound Objectives/ Consequences, Objectives, or Risks. You need to alter the weighting mode from the “linked-upwards” object.

1. In the Author page, navigate to the object for which you want change the weighting mode (for example, Scorecard).

   The Edit Scorecard panel opens.

2. Select or clear the *Use Equal Weighting* check box, as shown in the following image.

3. Click *Save*.

Note:

- If you check the Use Equal Weighting check box, the Adjust Objective Weights tab is disabled because the system will take over Weighting, and will always do it equally among all linked child objects.
- If you uncheck the Use Equal Weighting check box, you will need to reset the weights across the Scorecard whenever you link or unlink an Objective, Risk, Compound Objective or Consequence to or from the Scorecard.

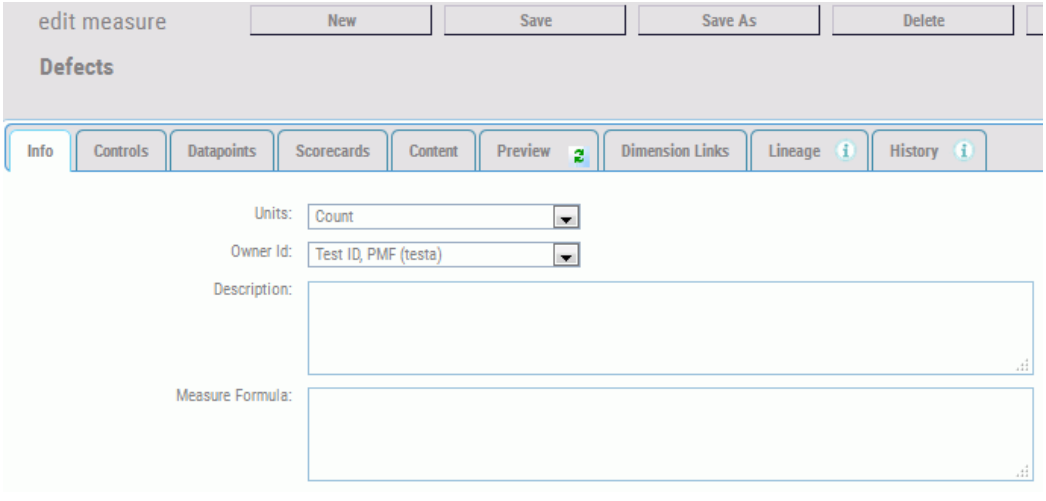
Setting a Basis for Descending Measures

You can specify how Percent Reached should be calculated for Descending Measures with targets that are very small or set at zero. This is also useful if you are viewing negative values for Percent Reached.

Procedure: How to Configure the Basis for a Descending Measure

1. From the Author or Manage page, click the *Measures* panel button.
2. Select the measure you want to change.

   The Edit Measure panel opens, as shown in the following image.



3. Click the *Controls* tab.

4. Select *Use Basis Value* from the Calculating % Reached drop-down menu. The Basis Value field becomes available, allowing you to enter a Basis Value, as shown in the following image.

Tip: The Basis Value can be set by analyzing the extent of your Actuals. For example, if your Target is set to zero, the median of your Actual values is 12, and the extent is 30, you can use 12f, since it is the median value. You can also do a Pareto analysis and decide that 80% of your measures should have positive Percent Reached. If you never want to see a negative Percent Reached, you should set the Basis to the extent of your values. Any Actual values that are precisely at the Basis will show a zero Percent Reached.

5. Click *Save* to save your changes.

Overriding Measures at the Measure Level

You can edit the default actual, threshold, flex, and alert amounts by editing the measure source record. For your reference, these defaults are also displayed on every measure record. You can enter actual, threshold, flex, and alert override amounts for each atomic measure in the Edit Measure panel. Threshold and flex values are used by the graphical tools to indicate the red/yellow/green stop light indications.

Be sure to perform careful analysis before setting these visual indicators because some executives and managers may rely on the colors alone when making decisions based on what the colors represent. Alert thresholds are values that work in a manner similar to thresholds. However, they trigger alert information to appear on the Today page.

Whether you are adding a new measure or editing an existing one, the same fields are available for creating or changing a measure. For more information, see *Adding and Editing Measures* on page 179.

Working with Projects

The new PMF Project system allows you to not only measure projects, but gives you the ability to also manage them:

- ❏ You can create, assign, track, and update the status on project-level tasks.
- ❏ The Project panel incorporates a quick-entry task grid, as well as a fast Gantt chart that allows graphical overview of project status.

- Task management is available to Project managers, as well as those responsible for performing Project Tasks. Task management allows rapid multi-editing using the Tasks panel.
- End users can focus on individual tasks, single Projects, or quickly scan across all Projects, depending on their level of access.
- A robust suite of reports are available that allow side-by-side analytics of project performance against strategic objectives.

Projects no longer have separate budget and schedule metrics. Instead, project budget metrics are based on analyzing the task-level spend vs. the project-level budget. Project schedule metrics are based on analyzing the task schedules (start dates, completed dates, and Progress) of each task.

Classic PMF Project reports report summaries of the tasks of a project. The reports available are:

- **Objective/Project and Project/Objective.** These reports show high-level summaries of metrics that are based on task-level data that has been input by the project participants.
- **Project Detail.** This report shows the overall project progress. Its metrics are based on task-level data that has been input by the project participants.
- **Project Properties.**

Each migrated project will have a single task pre-determined. The task will be named after the project (similar to what happens when you create a project and save it without altering it). Note that the start date of a migrated project, completed date, and total budget will reflect the data of the migrated project. Any project-level budget or schedule records will be deleted from the system.

Procedure: How to Create a New Project

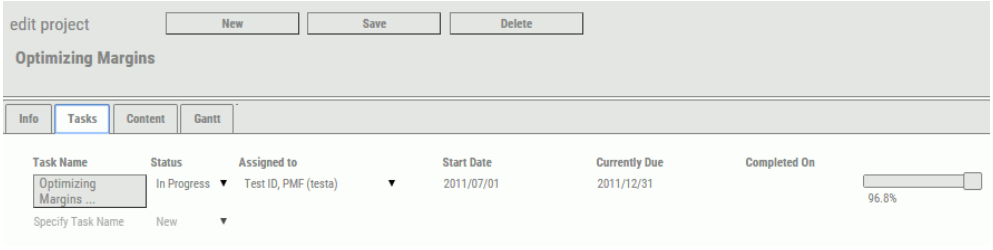
To create a new project, perform the following steps:

1. In the Author page, click the *Projects* panel button.
2. Click *New*.

   The New Project panel opens.
3. Enter a name for the project.
4. Click *Save*.

   Note: If you choose Save now, one Task will be automatically created in New mode. Every project must have at least one Task assigned to it. The name of the Task will be the name of the project.

5. You can enter a Description or Budget, or set tolerances at any time.
6. Click the *Tasks* tab, as shown in the following image.



You can enter tasks at will, or press the Tab key to move to the next row.

7. Click *Save*.

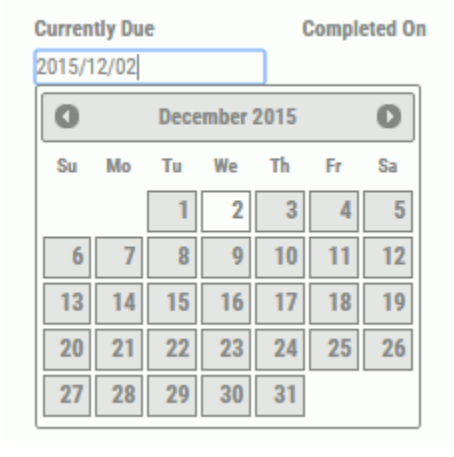
For more information on the available options on this panel, see *Projects* on page 208.

Procedure: How to Assign a Task

Note: You can drill into any individual Task from the Tasks panel in Projects, or the end-user Tasks gadget.

From the Tasks tab:

1. Select *Assigned* from the Status drop-down menu.
2. Select the Owner assigned to the task from the Assigned to drop-down menu.
3. Enter the current due date of the task from the calendar provided, as shown in the following image.



4. Click *Save*.

Procedure: How to Set Progress in a Task

Note: You can drill into any individual Task from the Tasks panel in Projects, or the end-user Tasks gadget.

From the Tasks tab:

1. Select *In Progress* from the Status drop-down menu.
2. Specify a Start Date using the calendar provided and modify the Currently Due date, if necessary.
3. Set the current progress of the project by dragging the progress bar, as shown in the following image.

4. Click *Save*.

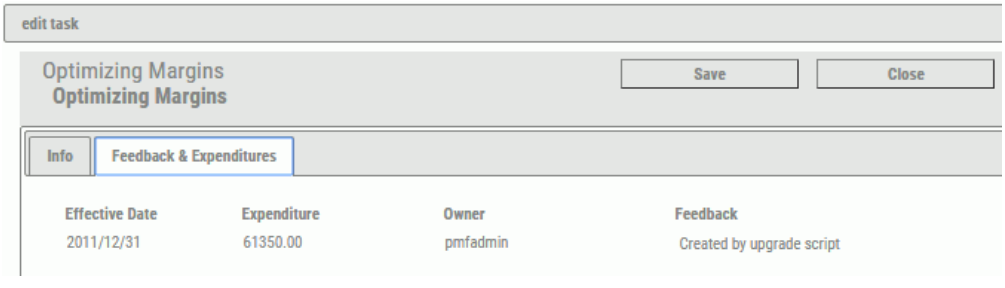
Note: If you switch the status from *In Progress* to *Assigned*, the Start Date will be cleared.

Procedure: How to Add Feedback or Expenditure to a Task

From the Tasks tab:

1. Click the task for which you want to add feedback or spending.

   The Edit Task panel opens.
2. Click the *Feedback & Expenditures* tab.
3. For the Effective Date, click the box and select the date from the calendar that opens.
4. Type any expenditure and task feedback items in the boxes provided, as shown in the following image.



Note: An Owner can only edit or delete their own Effective Date, Feedback, or Expenditure entries.

5. Click *Save*.

   The Info Tab in the Edit Task panel will display the aggregated Spend data in the Task Expenditure field.

Control Drill Menus for Projects and Tasks

You can control the content visible from the drill for each Project or Project Task in PMF using the Content tab on the Project panel. Any Content managed within PMF can be added to the menus.

There are two menus available. These options control the drill menu that is activated when you click:

- The name of a Project on any Grid or chart.
- The details of a task associated with that project.

Procedure: How to Add a New Drill Menu for a Project

By default, all Projects in PMF use the same menu. You do not need to do anything to configure this menu. It is automatically configured whenever a new Project is created in the system.

If you want to configure a menu for a particular Project:

1. In the Author page, click the *Projects* panel button.

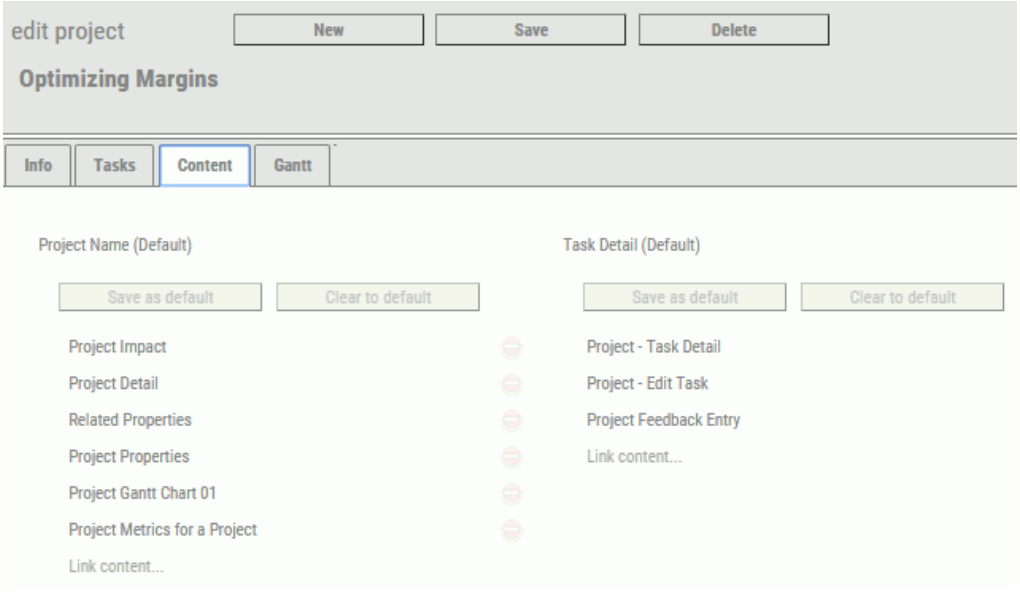
   The available projects display.

2. Select the project that you want to use.

   The Edit Project panel opens.

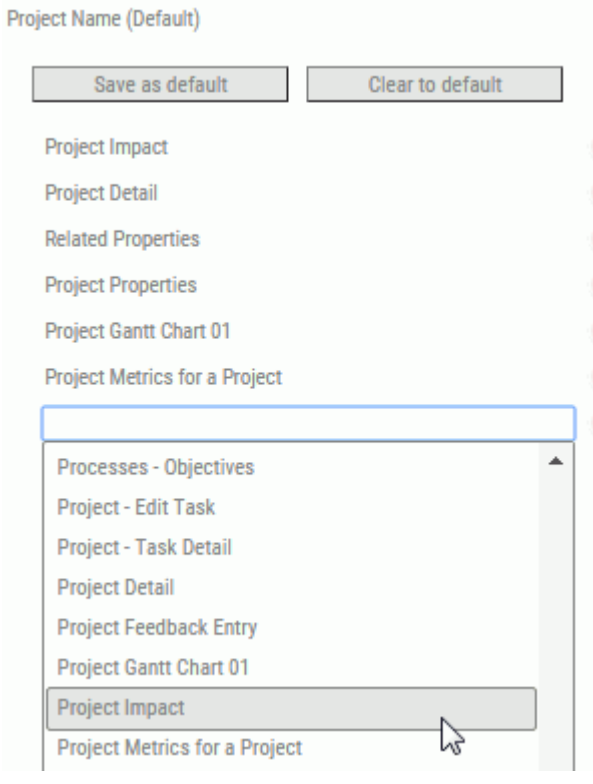
3. Click the *Content* tab.

The Content menus configured for that project display, as shown in the following image.

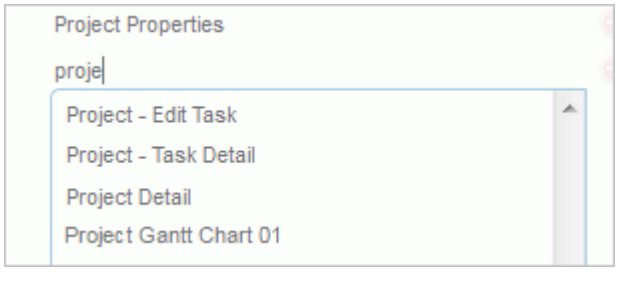


4. If you click the *Link Content* box, you can:

   - Add new (link) content to the Project Name or Task Detail menu by selecting the content item that you want to add from the drop-down menu, as shown in the following image.

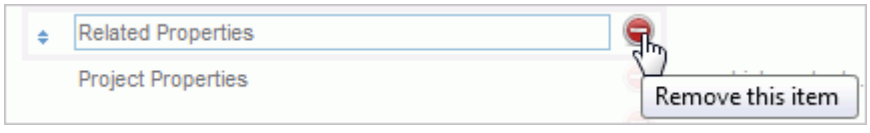


   - Add new (link) content by entering the name of the item in the box, as shown in the following image.



- Change the order of menu items by clicking the arrows next to the link name, and dragging the item up or down, as shown in the following image.

- Remove (unlink) any content from the Project Name or Task Detail menu for that metric by clicking the *Remove this item* button next to the item, as shown in the following image.



5. Click *Save* once you are done configuring the menu.

   The new menu is now configured. Whenever you select the name or values for that project, PMF displays the Content menus that you configured.

Procedure: How to Make a Content Menu the System Default

You can quickly design a default menu that all Projects will use. This gives all Projects that do not have specific menus a fallback. The system ships with a default menu configured. Performing the steps in the following procedure will override those settings.

To change the default menu for Project Name or Task Detail drills:

1. In the Author page, click the *Projects* panel button.

   The available projects display.

2. Select the project that you want to use.

   The Edit Project panel opens.

3. Click the *Content* tab.

   The Content menus configured for that project display,

4. Click *Save as default* for the menu that you want to make the system default.

The menu that you specified is now configured as the default. Whenever you click the name or task for any Project that does not already have a specific menu configured, PMF will display the default Content menu that you configured here.

Procedure: How to Clear a Specific Metric Menu to the Default

You can clear any specific metric menu that was previously configured for a Project. When you do this, the Project Name or Task Detail menu of the project will always display the default as currently configured.

1. In the Author page, click the *Projects* panel button.
2. Select the project that you want to use.

   The Edit Project panel opens.
3. Click the *Content* tab.

   The Content menus configured for that project display,
4. Click *Clear to default* for the menu that you want to restore to the system default.

Any specific metric menu for the Project is deleted, and the Project will now use the default. Whenever you click the name or task detail items for the project, depending on which menus you cleared, PMF will display the default Content menu that you configured here.

Procedure: How to Complete a Task

Note: You can drill into any individual Task from the Tasks panel in Projects, or the end-user Tasks gadget.

From the Tasks tab:

1. Select *Completed* from the Status drop-down menu.
2. Specify the Completed On date using the calendar provided.
3. Click *Save*.

Documenting Your Work

PMF provides you with the ability to document your work so that details about the process you use when scorecarding and designing metrics can be carried through to your end users, and to reporting you do for compliance purposes. PMF provides the following fields where you can document your measures:

- Comments field. Type information to describe what your measure is designed to do.
- Formula field (measures only). Type information that describes where your measure is derived and which database is used.

- Your comments field (Edit Feedback panel). Type any information to provide feedback for a specific measure series. For more information, see *Performance Management Framework User* on page 27.

Scorecard-Specific Data Access Security

For each scorecard in PMF, you can set scorecard-specific data access security by changing the default dimensional levels of measure data to which the scorecard has access. Granting users access to view a particular scorecard automatically allows them to view its measures dimensionally, as appropriate for that scorecard. You can either define access to levels of dimensionality by owner or set scorecard-specific data access. Using one method overrides the other. For more information about owner-based data access, see *Setting Measure Access for Users (Owners)* on page 272.

Before you can set scorecard-specific data access security, you must change Access Security in the Security panel on the Settings menu to S (Scorecard) from the default of O (Off). Setting scorecard-specific data access provides each owner, who has read access or higher for a scorecard, access to all of the measure values at the dimensional levels that the scorecard is set to access.

Note: If a particular measure has row-level security turned off, it will not be filtered for scorecard-specific data access. For more information, see *Excluding a Measure Series From Access Security* on page 319.

Scorecard-specific data access security overrides global access security, which determines access to dimensional levels by owner instead of scorecard.

Note: Global (owner-based) data access security is set by changing Access Security to G (Global) in the Security panel on the Settings menu.

Procedure: How to Set Scorecard-Specific Data Access Security

Verify that the Access Security setting in the Security panel on the Settings menu is set to S (Scorecard).

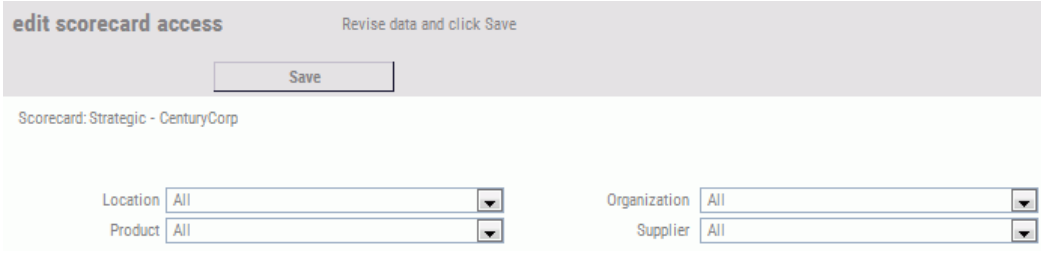
1. In the Author page, click the *Scorecards* panel button.
2. Select the Scorecard you want to change.

   The Edit Scorecard panel opens.
3. In the Access Security drop-down menu, select *Scorecard Limited*.
4. Click *Save*.

   The Access Security button appears in the panel.

5. Click the *Access Security* button.

   The Edit Scorecard Access panel opens, as shown in the following image.



6. Using each of the available dimensional drop-down menus, select the desired dimension limits for the scorecard.
7. Click *Save* to save the changes.

Author Scorecard Options

This section provides reference information about the scoreboard-related options you can access from the Author page. If you want to view, edit, create, or delete:

- Perspectives, see *Perspectives* on page 199.
- Objectives, see *Objectives* on page 201.
- Risks, see *Risks* on page 204.
- Themes, see *Themes* on page 206.
- Projects, see *Projects* on page 208.
- Processes, see *Processes* on page 213.

Perspectives

Perspectives indicate high-level classification for types of objectives. A given perspective is, literally, a container that holds objectives. You can view perspectives for any scorecard both on scorecard views and in the Strategy Map.

To view and work with perspectives, click *Scorecards*, expand the tree structure under *Perspectives* and then click a perspective. You can also click the *Perspectives* panel button, expand the Perspectives folder, and click the desired perspective. The following image shows the Edit Perspective panel.

In the Edit Perspective panel, the same fields are required for adding a new or updating an existing perspective. The following table lists and describes the fields and tabs available in the Edit Perspective panel.

Field	Description
Name	Name of the perspective. The maximum number of characters is 50.
Info Tab	
Scorecard	Name of the scorecard that contains this perspective.
Perspective Name	Perspective name. The maximum number of characters is 50.
Description	Text area to describe the intention of the perspective. The maximum number of characters is 1024.
Owner	Select the owner from the list.
Content Tab	

Field	Description
	Allows you to control the content available when selecting a perspective.

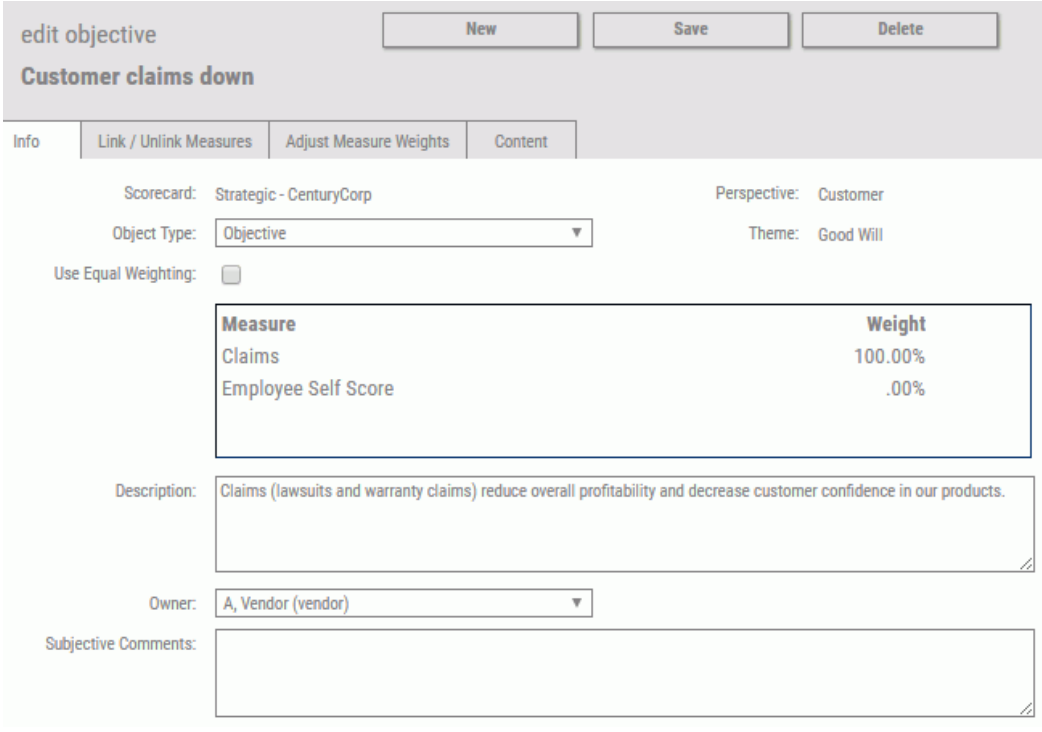
Objectives

Objectives relate to high-level goals for business action. Objectives are usually designed to be specific, measurable, action-oriented, results-driven, and time-based (SMART).

You can view and work with objectives in two ways:

- All objectives for a given scorecard are displayable regardless of whether they have been assigned to a perspective by clicking the *Objectives* panel button in the Author page. By expanding its tree structure, you will see all the objectives in the scorecard and also any measures linked to the objectives.
- Objectives that have been linked to a perspective can be displayed by expanding the perspective under the Scorecards panel button.

To edit, delete, or create an objective, select the *Objectives* panel button, expand an Objectives folder, and click a desired objective. The Edit Objective panel opens, as shown in the following image.



If you expand a specific objective, one or more underlying measures are displayed. You can select the measure to open the Edit Measure panel, where you can edit, delete, or create a measure. For details on the Edit Measure panel, see *Performance Management Framework Administrator* on page 217.

The same fields are required for adding a new or updating an existing objective. The following table lists and describes the fields and tabs available in the Edit Objective panel.

Field	Description
Name	Name of the objective. The maximum number of characters is 50.
Info Tab	
Scorecard	Name of the associated scorecard.

Field	Description
Perspective	Name of the perspective associated with the objective in the scorecard tree, unless no perspective is associated yet.
Theme	Name of the theme associated with the objective in the scorecard tree, unless no theme is associated yet.
Object Type	Shows whether the object is an Objective or a Risk.
Use Equal Weighting (checkbox)	If this is selected, the system takes over weighting and will always do it equally among all linked child objects.
Description	Text area used for providing a brief description of the objective. The maximum number of characters is 1024.
Owner	Defaults to the owner ID that is signed in, or you can select another owner.
Subjective Comments	Text area used for adding a lengthy text description. The maximum number of characters is 1024.
Link/Unlink Measures Tab	
	Panel where you can modify the list of measures linked to the objective. For details, see *How to Link or Unlink Measures* on page 180.
Adjust Measure Weights Tab	
	Panel where you can allocate the weighting percentages for the measures that are tied to an objective. There must be more than one measure associated with an objective to adjust the weights. The total weighting of all measures is always equal to 100 percent. If only one measure is tied to an objective, and you attempt to adjust the weights, a pop-up error message opens. This tab is only available if you are not using automatic weighting. For details on this capability, see *Weighting Measures Across Objectives* on page 184.
Content Tab	

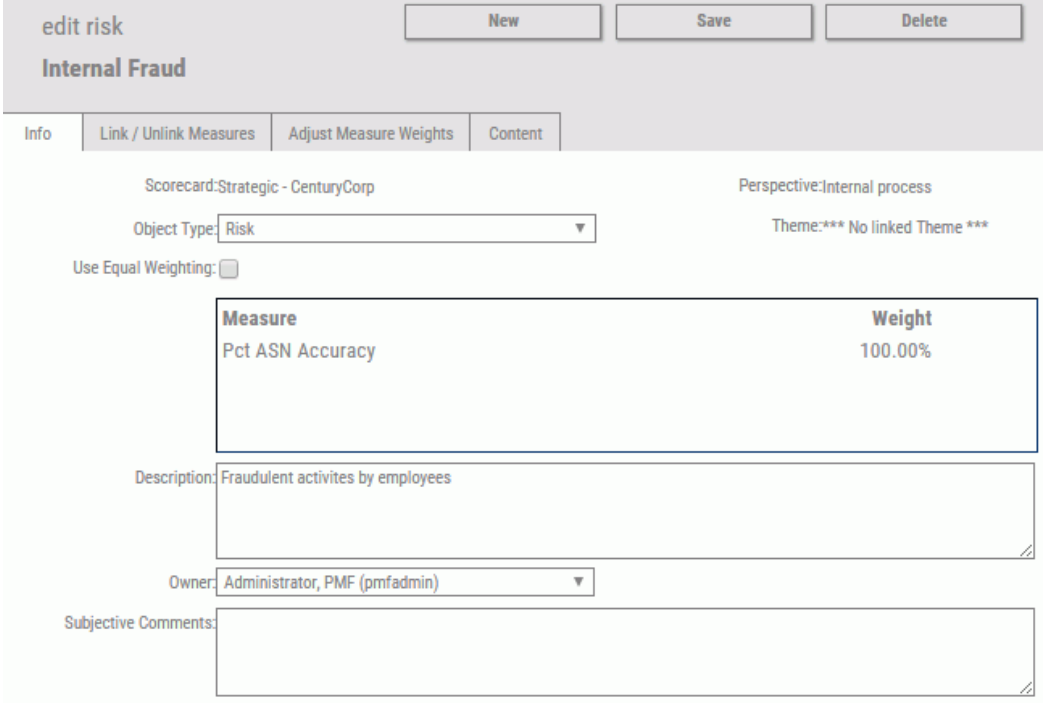
Field	Description
	Allows you to control the content available when selecting an objective.

Risks

A risk describes an area that you are measuring that represents a specific problem, or threat, to your enterprise. Risks can be placed on the Strategy Map, and you have the ability to link different metrics to each risk.

All risks for a given scorecard are displayable, regardless of whether they have been assigned to a perspective, by clicking the *Risks* panel button in the Author page. By expanding its tree structure, you can see all the risks in the scorecard, as well as any measures linked to the risks.

To edit, delete, or create a risk, select the *Risks* panel button, expand a Risks folder, and click a desired risk. The Edit Risk panel opens, as shown in the following image.



If you expand a specific risk, one or more underlying measures are displayed. You can select the measure to open the Edit Measure panel where you can edit, delete, or create a measure. For details on the Edit Measure panel, see *Performance Management Framework Administrator* on page 217.

The same fields are required for adding a new or updating an existing risk. The following table lists and describes the fields and tabs available in the Edit Risk panel.

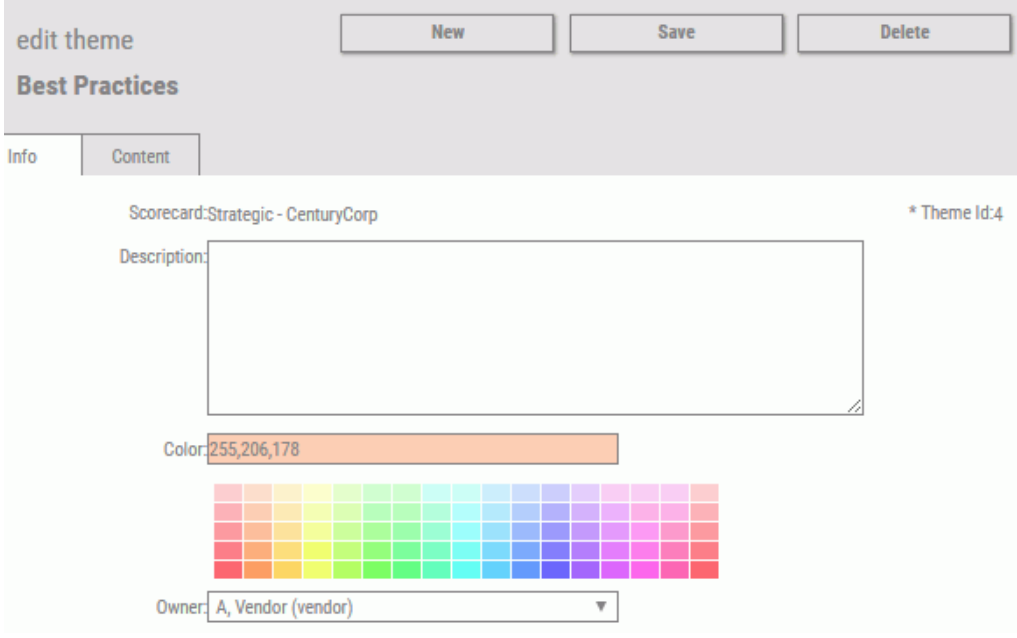
Field	Description
Name	Name of the risk. The maximum number of characters is 50.
Info Tab	
Scorecard	Name of the associated scorecard.
Perspective	Name of the perspective associated with the risk in the scorecard tree, unless no perspective is associated yet.
Theme	Name of the theme associated with the risk in the scorecard tree, unless no theme is associated yet.
Object Type	Shows whether the object is an Objective or a Risk.
Use Equal Weighting (checkbox)	If this is selected, the system takes over weighting and will always do it equally among all linked child objects.
Description	Text area used for providing a brief description of the risk. The maximum number of characters is 1024.
Owner	Defaults to the owner ID that is signed in, or you can select another owner.
Subjective Comments	Text area used for adding a lengthy text description. The maximum number of characters is 1024.
Link/Unlink Measures Tab	
	Panel where you can modify the list of measures linked to the risk. For details, see *How to Link or Unlink Measures* on page 180.
Adjust Measure Weights Tab	

Field	Description
	Panel where you can allocate the weighting percentages for the measures tied to a risk. There must be more than one measure associated with a risk to adjust the weights. The total weighting of all measures is always equal to 100 percent. If only one measure is tied to a risk and you attempt to adjust the weights, a pop-up error message opens. This tab is only available if you are not using automatic weighting. For details on this capability, see *Weighting Measures Across Objectives* on page 184.
Content Tab	
	Allows you to control the content available when selecting a risk.

Themes

Themes usually relate to high-level corporate principles that drive overall enterprise strategy.

To view and work with themes, click the *Themes* panel button, expand the *Themes* folder, and click the desired theme. The following image shows the Edit Theme panel.



The same fields are available whether you are creating a new, or editing an existing theme. The following table lists and describes the fields and tabs available in the Edit Theme panel.

Field	Description
Name	Name of the theme. The maximum number of characters is 50.
Info Tab	
Scorecard	Name of the scorecard that contains this theme.
Description	Text area to describe the intention of the theme. The maximum number of characters is 1024.
Color	Color you select from the color palette.
Owner	Select the owner from the list.
Content Tab	

Field	Description
	Allows you to control the content available when selecting a theme.

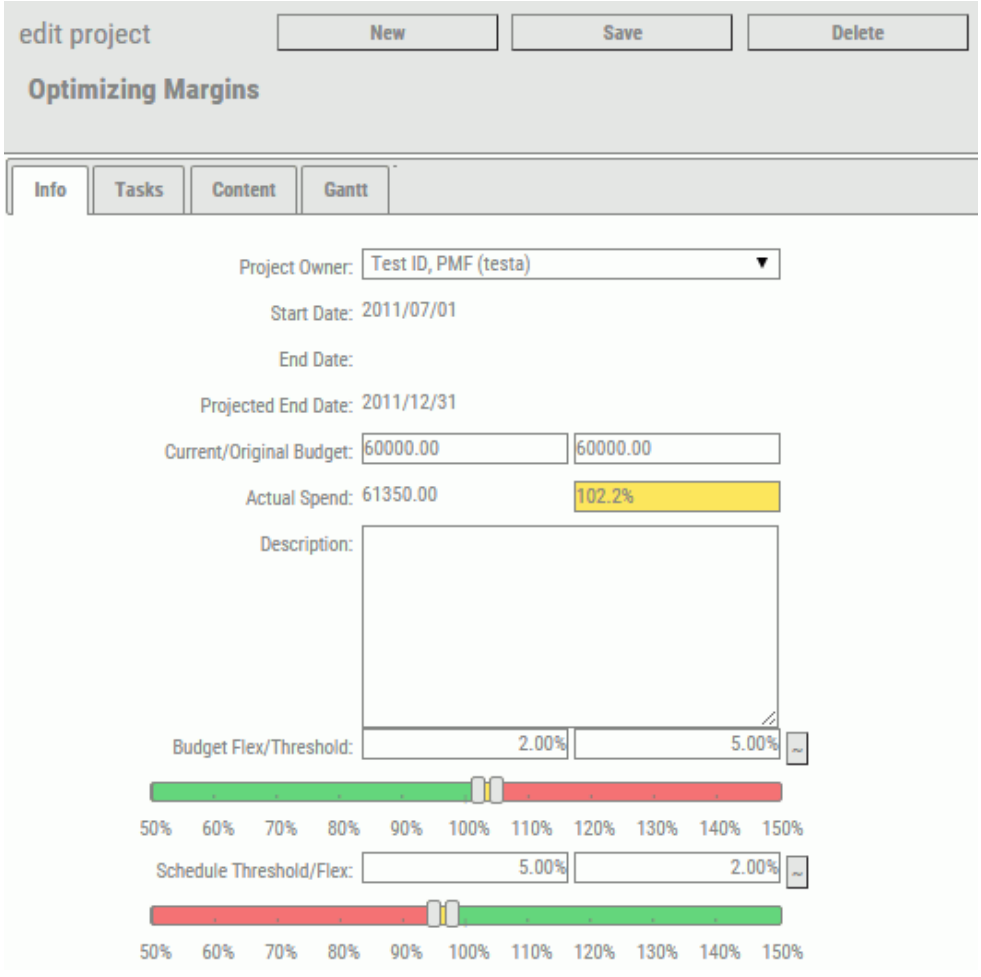
Projects

Projects enable you to create, assign, track, and update the status on project-level tasks.

To edit, create, or delete a project, click the *Projects* panel button in the Author page, and select the desired project.

Alternatively, you can access projects in an existing scorecard from the scorecard tree. To do this, expand the desired Perspectives subfolder, expand the desired Objectives folder, and then expand the specific Objective folder for which you want to add or edit a project. Click *Projects*, and then click the specific project.

The following image shows the Edit Project panel.



For the fields that prompt you for a date, for example, the Start Date of a Task, click the field and select the date from the calendar that opens.

The system creates any new measures needed - one budget measure and one schedule measure for each time period indicated in the start and end date fields.

Users enter the Finish Date, which causes the percent done measure target to be automatically generated for each time period over which the project spans. Changes can add or delete records, and adjust targets.

The same fields are required for adding a new or updating an existing project.

The following table lists the tabs and describes the fields and tabs available in the Edit Project panel.

Field	Description
Info Tab	
Project Name	The name of the project. The maximum number of characters is 50. Click the field to enter or edit the project name.
Project Owner	Select the owner from the list.
Start Date	Start date for this project. **Note:** This value is set in the Tasks tab.
End Date	The date this project was completed. **Note:** This value is set in the Tasks tab. If your End Date shows as Delayed, this means that the current date is later than the currently set planned end date for the task with the last end date on the project.
Projected End Date	The projected end date of the project.
Current Budget	The current cost value of this project.
Original Budget	The original target cost value of this project.
Actual Spend	The actual cost value of this project.
Description	Text area to describe the project. The maximum number of characters is 1024.
Budget Flex	Percent value to be used to determine the inner edge of the yellow indicator zone for the budget of the project. The scale represents the Pct used, not Pct reached. If you need to go below or above scale, you can enter the value in the text field and the slider will pin the value at the appropriate end.

Field	Description
Budget Threshold	Percent value to be used for the threshold, which determines when an indicator shows red for the budget of the project. The scale represents the Pct used, not Pct reached. If you need to go below or above scale, you can enter the value in the text field and the slider will pin the value at the appropriate end.
Schedule Flex	Percent value to be used to determine the inner edge of the yellow indicator zone for the schedule of the project. The scale represents the Pct used, not Pct reached. If you need to go below or above scale, you can enter the value in the text field and the slider will pin the value at the appropriate end.
Schedule Threshold	Percent value to be used for the threshold, which determines when an indicator shows red for the schedule of the project. The scale represents the Pct used, not Pct reached. If you need to go below or above scale, you can enter the value in the text field and the slider will pin the value at the appropriate end.
Tasks Tab	
Task Name	The name of the task.

Field	Description
Status	The current status of the task. The following options are available: ❑ **New.** Only requires a task name. ❑ **Assigned.** Requires an assignee and due date. ❑ **In progress.** Requires an assignee, start date, and due date. ❑ **Deferred.** Requires an assignee, start date, and due date. This status shows the task is in progress, but suspended. ❑ **Completed.** Requires an assignee, start date, due date, and completed date. By default, the current date is the completed date. ❑ **Milestone.** Requires a due date only. This option represents a point in time that a project phase ends, and the next one starts. **Note:** If the status is set to *In Progress*, a slider appears to the right of this field. This shows a percent value to be used to show how much of the task has been completed.
Assigned to	The user this task is assigned to for completion.
Start Date	The date this task was started. **Note:** If you move the start date forward in time for an existing project and you cross a time period boundary, PMF deletes all existing measures created prior to the new start date. If you move the start date back in time and cross a time period boundary, PMF creates new measure entries for time periods prior to the previous start date. In both situations you can enter a revised total budget. Also, PMF adjusts the percentage reached figures.
Currently Due	The current due date for this task.
Originally Due	The original due date for this task. **Note:** This tab is only available when you select a task to view from the Tasks tab.

Field	Description
Completed On	The date the task was completed. This date is automatically set when the Status of the task is set to *Completed*. **Note:** Tasks will be ordered by this date.
Assigned by	The user that assigned the selected task.
Description	Text area to describe the task. The maximum number of characters is 1024.
Feedback & Expenditure Tab	Allows you to add feedback or expenditure for a task. **Note:** This tab is only available when you select a task to view from the Tasks tab.
Content Tab	
	Allows you to control the content available when selecting a project.
Gantt Tab	
	Shows a Gantt chart, which is a time analysis of tasks and the milestones associated with them.

Processes

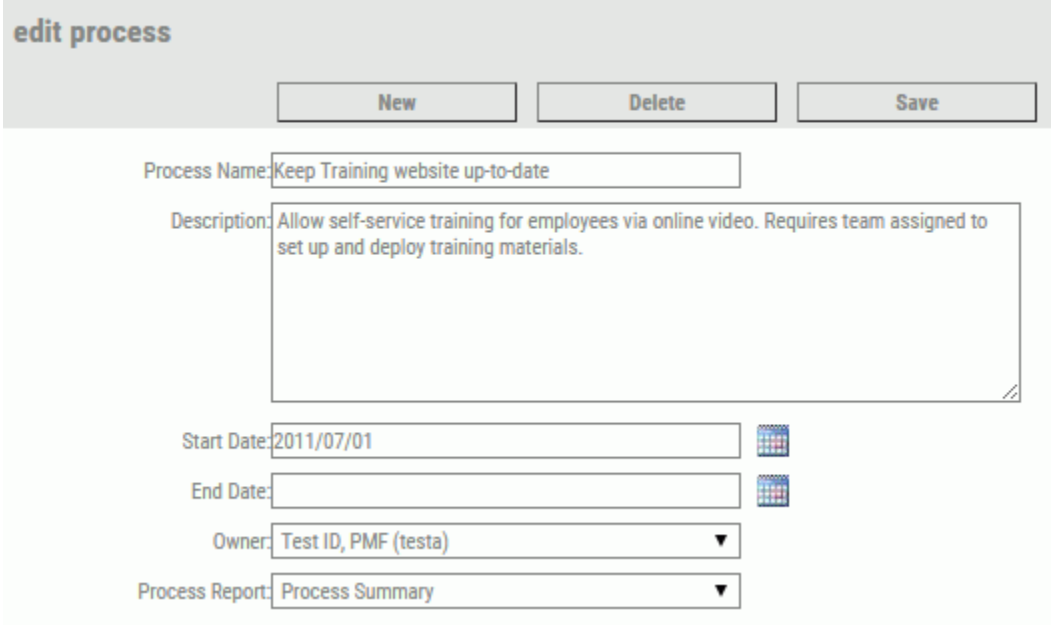
Process tracking enables you to align objectives to core business processes and to link your processes to supporting documentation. You can align any existing process to one or more objectives with the Strategy Map. One measure series is defined and named for each process, and can be input using the New Measure Wizard.

Processes can be linked to operational views including a WebFOCUS view showing project detail, a web-based project or document, BPM systems, or any other source. You have to set up an internal or external process related source as a PMF launch page before you can establish an Operational Report link to a PMF process.

To edit, create, or delete a process, click the *Processes* panel button in the Author page, and select the desired process.

Alternatively, you can access processes in an existing scorecard from the scorecard tree. To do this, expand the desired Perspectives subfolder, expand the desired Objectives folder, and then expand the specific Objective folder for which you want to add or edit a process. Click *Processes*, and then click the specific project.

The following image shows the Edit Process panel.



For the fields that prompt you for a date, for example, a Start Date, click the date and time icon to supply the information.

The same fields are required for adding a new or updating an existing process. The following table lists and describes the fields and tabs available in the Edit Process panel.

Field	Description
Process Name	The name of the process. The maximum number of characters is 50.
Description	Process description. The maximum number of characters is 1024.
Start Date	Start date for this process.
End Date	End date for this process.

Field	Description
Owner	Select the owner from the list.
Process Report	Select from the Process Report drop-down menu to establish a link that drills out to an internal (WebFOCUS) or external (web-based) Project, report, or other documentation source. To view the selected Process Report, select the name of the process that you edited from any report in PMF and select *Operational Report* from the pop-up menu.

Chapter 4

Performance Management Framework Administrator

This chapter provides instructions for administering a Performance Management Framework application. It describes how to implement a scorecard at a customer site. It is recommended that you have strategic meetings with the customer before you create formal scorecards.

In this chapter:

- Getting Started as a PMF Administrator
- Managing Metadata
- Thinking About Users and Security
- Adding, Changing, Deleting, and Importing Users (Owners)
- Understanding Functional and Access Roles
- Working With Scorecard Security
- Working With the New Data Model
- What Are Sources?
- What Are Datapoints?
- Scheduling Loads and Updates
- Setting Measure Access for Users (Owners)
- Specifying Dimensions and Measures
- Creating Units of Measure Conversion Profiles
- Planning Considerations for Loading Dimensions
- Working With a Dimension Load
- Setting Up a Distinct Count Dimension
- Inputting User-Entered Dimensions
- Editing Existing Loaded Dimension Values
- Planning Considerations For Loading Sources
- Working With Measures
- Specifying Alternate Targets
- Excluding a Measure Series From Access Security
- Previewing Loadable Sources and Load Measure Data
- Managing Content
- Working with Snapshots
- Administration Views
- Designing Gadgets
- Designing a Dashboard
- Manage Page - Quick Reference
- Viewing and Editing Default Settings

Getting Started as a PMF Administrator

As an administrator, you are responsible for ongoing maintenance of the PMF system, and its structures and controls. You will also load dimensions and measures, and set up owners and roles within the organization.

Before you can administer a PMF application, you must do the following:

- Meet the personnel who will author PMF applications.
- Have access to the sources of customer data and its timeliness and dependencies.
- Have access to existing measures and Key Performance Indicators (KPIs).
- Know the RDBMS used.
- Know the security systems used.
- Have access to the personnel who understand the various user groups at the customer site and their respective roles.

Functions of a PMF Administrator

An administrator of a PMF application can do the following:

- Interact with the authors.
- Acquire measures.
- Load dimensions and measures.
- Configure feeds.
- Test loads.
- Interact with users requiring access to the PMF application.

Managing Metadata

PMF stores the data it needs to operate within its own data mart. If you add a type of metadata in this tab, it will appear in a drop-down menu within administrative forms.

On the Manage page, you (the administrator) can manage metadata for the following components:

- **Dimensions.** Enables you to create new dimensions and access the Dimension Loader to load dimensions.

- **Sources.** Enables you to create and modify source data.
- **Datapoints.** Enables you to create and modify the different datapoint types.
- **Measures.** Enables you to create and modify measures metadata, which controls the measure series. Each measure series is a distinct measure that you can link to an objective in a PMF scorecard. You can also load measures with the measure loader.
- **Schedules.** Enables you to schedule load-related activity.
- **Owners.** Enables you to add new system users, make existing users active or inactive, and modify the Today page for each user.
- **Functional Roles.** Enables you to create and modify functional roles to control the level of access to all of the systems in PMF for all users assigned to a functional role. The default roles are Admin w Access Security, Administrator, Analyst, Author, Consumer, and Planner.
- **Scorecard Security.** Enables you to control scorecard user access. You can control which scorecards each user can access, and also determine which users have access to a specific scorecard. Access levels include no access, viewer, editor, and administrator.
- **Access Roles.** Enables you to create and modify access roles to control the level of access to measures and dimensions for all users assigned to an access role.
- **Gadgets.** Enables you to design types of gadgets, create and modify individual gadgets, and add gadgets to report pages. A gadget is usually a small graph or data grid.
- **Content.** Enables you to select the specific content to be displayed on the Today page for each user. A variety of content can be available in the application.
- **Units of Measure.** Enables you to create and modify units of measure, which determine the types of actual quantities being measured in PMF. Each measure is linked to a unit of measure.
- **Time Ranges.** Enables you to create and modify time ranges, which can be used wherever trending data appears in views throughout PMF.
- **Settings.** Enables you to set system and default settings, such as organization name, corporate logo, style sheet, indicator set, Today date, and more.
- **About PMF.** Displays the version and release dates.

Thinking About Users and Security

PMF is designed to work with your on-site web security system, whether you use Netegrity SiteMinder, EnTrust, LDAP, RACF, or any other security system. As an administrator, you will set up the following:

- **Authentication.** This determines which users can access PMF. This requires integration with your on-site web security system to recognize your list of authentic users. You must ensure that the user ID has been entered in the security system files. For example, if you use an LDAP system, ensure that the user ID is valid in that system and that you have specified that they have access to WebFOCUS and PMF.
- **Authorization.** This determines which tabs, data, and capabilities users can access within PMF. You can also specify for each user, or groups of users, the level of access permitted in terms of organizational levels. This requires creating owner records (user IDs) and assigning roles that determine the privileges for each user ID or groups of user IDs. User IDs must match those in your on-site web security system, while roles must match those as assigned for use with PMF.

For information on restricting user access to data based on dimension values, see *Setting Measure Access for Users (Owners)* on page 272.

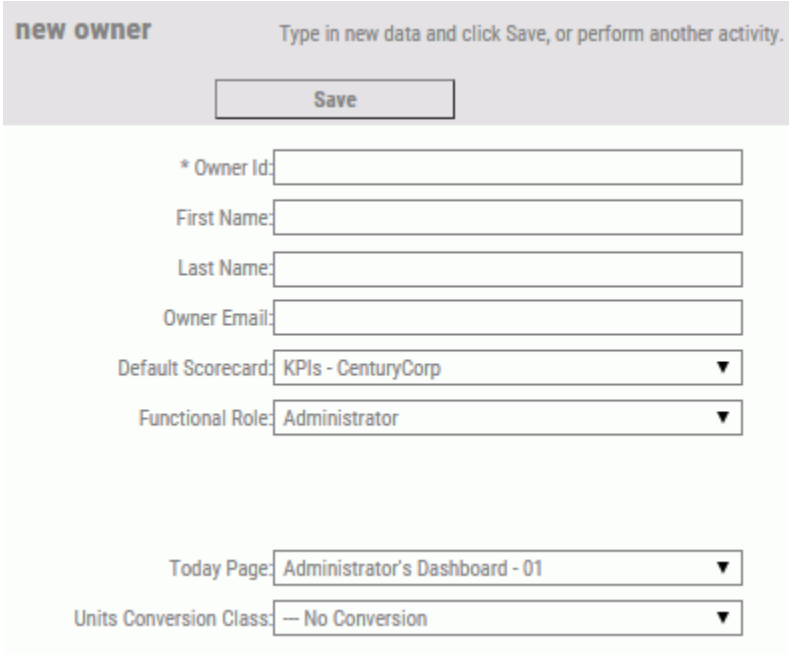
Adding, Changing, Deleting, and Importing Users (Owners)

You can add individual users who need access to PMF to your system by adding a new owner record for each user. Owner records can be changed or deleted, as needed. You can also import users from the WebFOCUS Managed Reporting/Centralized User Services (MR/CUS) environment directly into PMF as owners.

Procedure: How to Add a New Owner

1. In the Manage page, click the *Owners* panel button.
2. Click *New*.

The New Owner panel opens, as shown in the following image.



3. Specify values for all necessary fields. For more information about these fields, see *Fields in the Owner Panels* on page 221.
4. Click *Save* when you have finished typing information into the appropriate fields. The tree refreshes to show the new owner.

Reference: Fields in the Owner Panels

The following table lists and describes the fields in the New Owner and Edit Owner panels.

Field	Description
Owner Id	Sign-in ID for the user to enter on the sign-in page. Read-only in the Edit Owner panel (after a new owner record has been saved).
First Name	First name for the owner. The maximum number of characters is 20.
Last Name	Last name for the owner. This is the field that appears in the tree, by default. The maximum number of characters is 30.
Owner Email	Used for alerts and other notifications.

Field	Description
Default Scorecard	Select a scorecard that will serve as the default to display on the owner Today page.
Functional Role	Roles determine system-level access to program functions for this owner. Select a default role value (Admin with Access Security, Administrator, Analyst, Author, Consumer, or Planner). You can also create new roles in the Functional Roles panel. For more information, see *Working With Functional Roles* on page 225.
Today Page	Select a default Today page.
Units Conversion Class	Choose a conversion profile to recalculate measure actuals and targets (available only if created by the Administrator).

Procedure: How to Change an Owner Record

1. To change an existing owner record, navigate to the Owners tree and click the owner you want to change.

   The Edit Owner panel displays for that owner.

2. Make the changes you want and click *Save* when you have finished.

   Note that the Last Name and First Name fields appear in the tree. If you edit these fields, click the *Refresh content* icon to see the updated name in the Owners tree.

Procedure: How to Delete an Owner Record

1. To delete an existing Owner record, navigate to the Owners tree and click the owner you want to delete.
2. In the Edit Owner panel that opens, click the *Delete* button. PMF asks you to confirm your deletion.
3. Click *OK* to confirm.

Note: If you are using a security system, the owner record will not lock the user out of other web systems you might be using. PMF will have no authorization for the user, and the user will not be able to access PMF data or views.

Importing Users (Owners)

To simplify coordinating PMF with your WebFOCUS installation, you can import users from the WebFOCUS Managed Reporting/Centralized User Services (MR/CUS) environment directly into PMF as owners. This gives you the ability to import all PMF-flagged users from your LDAP or Active Directory repositories, and easily integrate PMF with your single-source security environments.

PMF can synchronize users between the WebFOCUS MR/CUS repository and the PMF Owners authorization table. If CUT is configured for Realm Driver, this capability enables PMF to import Owners from repositories, such as active directory and LDAP. Synchronizing users analyzes data in your user repository, compares users with PMF domain access to the list of current owners configured in PMF, and enables you to add all users at once, setting up the most necessary parameters for each.

The process of synchronizing users automatically detects the following:

- If a user has been authorized for PMF from any MR/CUS group that is enabled for the Performance Management Framework MRE Domain.
- If a user is already added to the system.
- If a user was added to the system but removed from the MR/CUS access.

Procedure: How to Import Users From MR/CUS to PMF

1. Optionally, you can set up new PMF users in the MR/CUS User Administration tool.

   Make sure each new user has been added to a standard PMF Group, such as Consumers, Analysts, or Administrators, or a custom PMF Group that has been granted primary access to the Performance Management Framework MRE Domain.

2. In the Manage page, click the *Owners* panel button.

   The Owners panel opens.

3. Click the *Sync* button.

   PMF displays the Synchronize Users panel.

   The Synchronize Users panel displays the following next to each user in the Owner column:

   - **Green plus sign.** User is already a PMF Owner.
   - **Check box.** User is enabled as a Managed Reporting user, has access to the Performance Management Framework MRE domain, but needs to be imported into PMF to become a PMF Owner, which is done by selecting the check box next to that user.

- **Red minus Sign.** User is in the Owners table, but needs to have access setup in the Performance Management Framework MRE domain.

Note: The Synchronize Users panel can also be used to check the health and status of your basic authorization security in PMF.

4. You can specify a different default Scorecard for each user by selecting the desired scorecard from the Scorecard drop-down menu.
5. Select the check boxes for each user you want to import.
6. For each selected check box, select a value in the Role drop-down menu or use the default role already displayed.

   Note: By default, PMF uses the current primary Group in the user repository to display the (Functional) Role for each user.
7. Click *Synchronize* to synchronize the two systems.

Understanding Functional and Access Roles

PMF provides you with the flexibility to create, modify, and set access levels for functional roles and access roles. A functional role is a class of user that controls access to systems when performing work in PMF. An access role is created and assigned to a group of users who are granted the same level of access to the measures and dimensions in PMF.

Administrators can edit functional roles to control the system-level functions each type of user is allowed to perform. Users are assigned one of the functional roles that ship with PMF, which are Admin w Access Security, Administrator, Analyst, Author, Consumer, and Planner. You can also add as many new functional roles as are needed for maintenance of your system.

In most organizations, a Business Strategy Committee has the responsibility to assign functional roles. By default, when a user is added to the PMF application, the user is assigned an administrator role. Because an administrator grants user IDs and passwords, you should assign each user an appropriate functional role for their area of responsibility in your organization.

Planning Considerations for Functional Roles

When you determine functional roles, consider the following factors:

- Only a few individuals are granted access as administrators, authors, or planners. This should be based on their responsibilities for the PMF application.

- Executives, managers, and planners are those participants who have budget responsibilities and are helping to define the strategies. Their areas of responsibility within the customer site provide critical feedback for the representation of the strategies and required modifications.
- Before you set up a new role in this panel, you must set up a corresponding group in Managed Reporting using the Managed Reporting Administration Interface. For details about using this interface, see the *WebFOCUS Managed Reporting Administrator's Manual*.

All others will generally be granted user access, though there might be exceptions based on the particular needs of your installation.

Working With Functional Roles

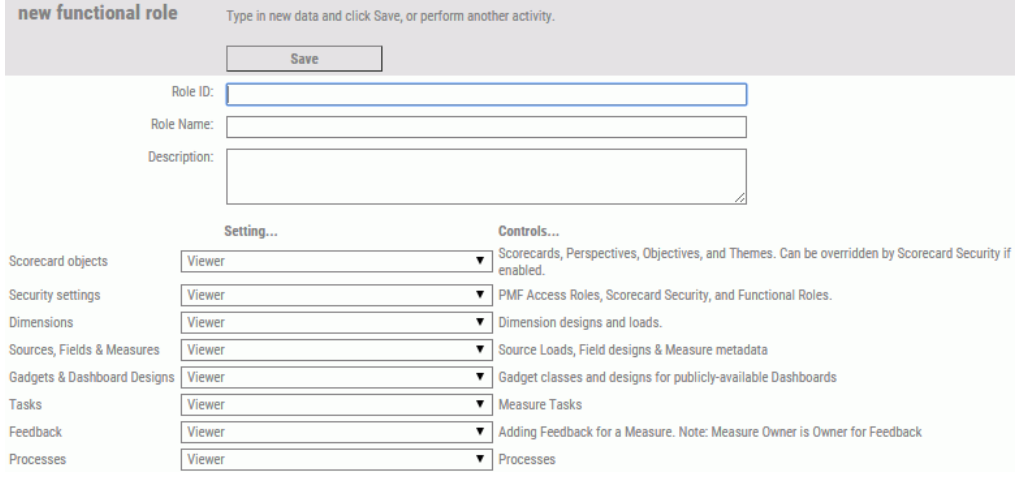
Functional roles are assigned to each user in the New Owner and Edit Owner panels, and determine access to the systems throughout PMF.

Procedure: How to Create a New Functional Role

Before you set up a new functional role, you must set up a corresponding group in Managed Reporting using the Managed Reporting Administration Interface. For details about using this interface, see the *WebFOCUS Managed Reporting Administrator's Manual*.

1. In the Manage page, click the *Functional Roles* panel button.
2. Click *New*.

   The New Functional Role panel opens, as shown in the following image.



3. In the Role ID field, type a unique identifier for the functional role. The maximum number of characters is eight. This field cannot be edited after the functional role is created.
4. In the Role Name field, type an intuitive name for the role. The maximum number of characters is 20. This name appears in selection lists.
5. Select access levels from the drop-down menus for each of the PMF settings listed in the panel. Choose from the following access level values:

   - Admin
   - Editor
   - No Access
   - Admin (if owner) else Editor
   - Admin (if owner) else Viewer
   - Viewer

   For more information about setting access levels, see *Access Levels for Functional Roles* on page 229.

   The systems listed in the panel include Scorecard Objects, Security Settings, Dimensions, Measures Loads & Metadata, Gadgets and Dashboard Designs, Tasks, Processes, Projects, System Objects & Settings, Actuals, Targets, Benchmarks, Forecasts, and Stretches. For more information about these fields, see *Fields in the Functional Role Panels* on page 226.
6. Click *Save* when you have finished selecting appropriate access levels for all settings. The tree refreshes to show the new functional role.

Reference: Fields in the Functional Role Panels

The Functional Role panels contain three fields that are manually entered. The Role ID, which is a permanent ID used to track a role (cannot be edited after the role is created), the Role Name, and the Description.

The following table lists and describes the fields you can use to set access levels in the New Functional Role and Edit Functional Role panels.

Field	Controls the ability to add/change/delete/view
Scorecard objects	Scorecards, Perspectives, Objectives, Objective-to-Measure Linkages, Objective-to-Measure Weights, and Themes.

Field	Controls the ability to add/change/delete/view
Security settings	Access Roles and Owners.
Dimensions	Dimension designs and Dimension loads.
Sources, Fields & Measures	Source Loads, Field designs & Measure metadata.
Gadgets & Dashboard Designs	Gadgets, Gadget Default Settings, Dashboard Designs.
Tasks	Measures Tasks.
Feedback	Feedback for a Measure.
Processes	Processes.
Projects	Projects and Project Measures.
System objects & settings	PMF System Settings, Time Ranges, Units of Measure, and Content (including links to external web content and WebFOCUS operational reports).
Data Mart	Snapshots, Audit, and resynch.
Actuals	Measures Actuals data entry for User-Entered Measures.
Targets	Measures Targets data entry for User-Entered Measures.
Benchmarks	Measures Benchmarks data entry for User-Entered Measures.
Forecasts	Measures Forecasts data entry for User-Entered Measures.
Stretches	Measures Stretch Targets data entry for User-Entered Measures.

Procedure: How to Edit Functional Role Properties

1. To edit an existing functional role, navigate to the Functional Roles tree structure and click the role you want to change.

The Edit Functional Role panel opens for that role.

2. Make the changes you want and click *Save* when you have finished.

Editing a functional role changes program access for all users currently connected to that role, so make changes carefully. Also, it is possible to remove other functional roles access to change owners. As a result, no users would be able to change program access within PMF. If this happens, contact Customer Support Services.

Note: If you rename a functional role, you must update the dashboard for that new role name in the Dashboard View Builder.

Procedure: How to Delete a Functional Role

1. To delete an existing functional role, navigate to the Functional Roles tree structure and click the functional role you want to delete.

   The Edit Functional Role panel opens for that role.

2. Click *Delete* and then click *OK* to confirm the deletion.

Caution: Deleting a functional role deletes program access for all users currently connected to that role, so make changes carefully. Also, it is possible to delete the last functional role that has access to change owners. As a result, no users would be able to change program access within PMF. If this happens, contact Customer Support Services.

Procedure: How to Limit Functional Roles to Enter Only Actual or Target Values

By default, all functional roles are given Admin access. You can limit users to input only actuals or only targets, by editing the functional role to which they belong using the Edit Functional Role panel.

1. Navigate to the Functional Roles tree structure and select the functional role assigned to the users that should have limited access to entering actual or target values.

   The Edit Functional Role panel opens for that role.

2. To prevent users of this functional role from:

   - Entering Actuals values, select *Viewer* from the Actuals drop-down menu.
   - Entering Targets values, select *Viewer* from the Targets drop-down menu.

3. Click *Save*.

Reference: **Access Levels for Functional Roles**

The following table lists and describes the different access levels that can be set for functional roles.

Access Level	Description
Admin	Allows add/change/delete/view access to object forms, and to any dependent objects, if applicable.
Editor	Allows change/view access to object forms, and to any dependent objects, if applicable.
Admin (if owner) else Editor	Access depends on object Ownership. If the Owner is designated as the object Owner, they are given add/change/delete/view access to object forms, and to any dependent objects, if applicable. If the Owner is not designated as the object Owner, they are given change/view access to object forms, and to any dependent objects, if applicable.
Admin (if owner) else Viewer	Access depends on object Ownership. If the Owner is designated as the object Owner, they are given add/change/delete/view access to object forms, and to any dependent objects, if applicable. If the Owner is not designated as the object Owner, they are given view-only access to object forms, and to any dependent objects, if applicable.
Viewer	Allows view-only access to object forms, and to any dependent objects, if applicable.
No Access	Does not allow the user to view object forms.

Note: If a role does not have a corresponding access to the page in question, it does not make sense to grant read/write access. For example, by default, consumers and analysts have no access to the Manage page. If you grant them access to Add/Change/Delete Owners, it is meaningless unless you add that page to their Group View as well.

Caution: Deleting a functional role deletes program access for all users currently connected to that role, so make changes carefully. Also, it is possible to delete the last functional role that has access to change owners. As a result, no users would be able to change program access within PMF. If this happens, contact Customer Support Services.

Reference:

Gadgets and Dashboard Design Security

The following table lists the security settings that are available in PMF for gadgets and dashboards.

Security Setting	Authorized to...
Admin	❑ Create Public and Private dashboards. ❑ Delete Public and Private dashboards. ❑ Edit (Save) Public dashboards. ❑ Change dashboard parameters. ❑ Change dashboard viewed. ❑ Apply all changes to dashboards that are set in the Look & Properties panel.
Editor	❑ Create Private dashboards ONLY. ❑ Delete Private dashboards ONLY. ❑ Change dashboard parameters. ❑ Change dashboard viewed.
Admin (if owner) else Editor	❑ Create Private dashboards ONLY. ❑ Delete Private dashboards ONLY. ❑ Edit (Save) Public dashboards, for which you are owner. ❑ Change dashboard parameters. ❑ Change dashboard viewed.

Security Setting	Authorized to...
Admin (if owner) else Viewer	❑ Edit (Save) Public dashboards, for which you are owner. ❑ Change dashboard parameters. ❑ Change dashboard viewed.
Viewer	❑ Change dashboard parameters. ❑ Change dashboard viewed.
No Access	❑ Change dashboard parameters.

Reference: **Default Functional Roles in PMF**

Each default functional role in PMF has access to a particular combination of pages in the PMF dashboard. If you want to change these pages, you need to use the WebFOCUS Dashboard View Builder. For more information on using the WebFOCUS Dashboard View Builder, see the *WebFOCUS Managed Reporting Administrator's Manual*.

The following table lists and describes the default functional roles that are provided with PMF.

Role/Group	Function	Pages Available
Admin w Access Scrty	Allows an Administrator to test Access Security without having to sign out and sign back in with a different user.	All tabs are available.
Administrator	Performs and checks every facet of the application. Assigns users to roles, sets up the initial operational data in the application, and enters other application-specific data for each site. Also responsible for ongoing maintenance of the application.	All tabs are available. The only other role with access to Administration is the Planner.

Role/Group	Function	Pages Available
Author	Sets up the structure of the scorecard, specifies the measures to be used, and links them to the scorecard. This role has the authority to update all fields in the scorecard and all updates are kept historically by date of the entry.	Today, Analysis, Author, Strategy. This is the only role with author and strategy update capabilities.
Analyst	System users who analyze data, view scorecards, view and comment on their own measures and those of their staff, and perform forecasting functions. Cannot enter values.	Today, Analysis
Consumer	System users who can display their own views and provide comments on the results of a scorecard. Cannot enter values.	Today
Planner	Sets up targets for one, many, or all measures in the system.	Today, Analysis, Administration.

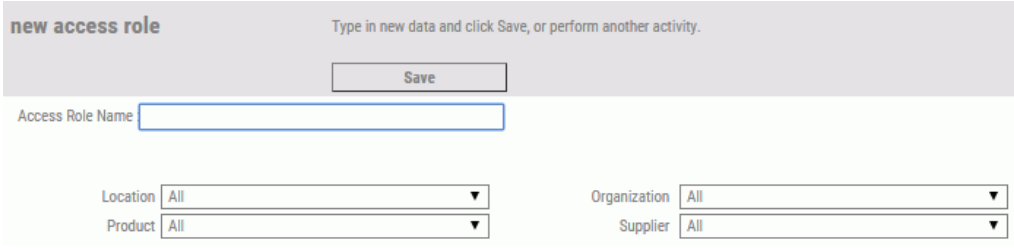
Working With Access Roles

Access roles can be created and assigned to multiple users to set up the exact same level of access to the measures and dimensions in PMF. In the future, if you need to change access to measures and dimensions for that group of users, editing the access role is all that is required.

Procedure: How to Create Access Roles

1. In the Manage page, click the *Access Roles* panel button.
2. Click *New*.

The New Access Role panel opens, as shown in the following image.



3. Type a name for the new access role in the Access Role Name field (for example, Consulting).
4. Using the drop-down menus for each dimension, select the measure level at which you want to limit access for the access role.

   For each level you select, all users (owners) linked to that access role will only be able to view measures at or below that level. If the access role should be allowed to view all measure data for a dimension, select *All* in the drop-down menu for that dimension.
5. When you are finished setting measure access for each dimension, click *Save* to create the new access role.

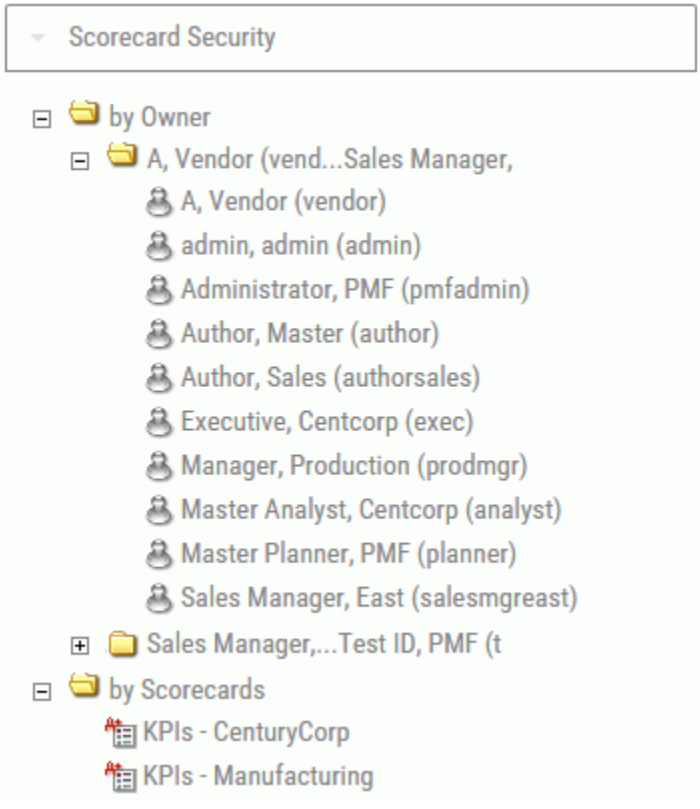
Procedure: How to Edit Access Roles

1. In the Manage page, click the *Access Role*s panel button.
2. Click the access role you want to edit in the tree.

   The Edit Owner Access panel opens.
3. Using the drop-down menus for each dimension, select the measure level at which you want to limit access for the access role.
4. When you are finished editing the measure access level for each dimension, click *Save* to save your changes.

Working With Scorecard Security

Scorecard Security enables you to control scorecard user access. You can control which scorecards each user can access, as well as determine which users have access to a specific scorecard. Access levels include no access, viewer, editor, and administrator. The following image shows the owners and scorecards to which you can control access when you click the *Scorecard Security* panel button in the Manage page.



Scorecard Functional Access

Scorecard Functional Access is a new Functional Role model that overrides the older default Functional Role behavior for Scorecards and their dependent objects. Dependent objects include perspectives, objectives, objective weights, measure weights, objective linkages to measures, objective linkages to projects, objective linkages to processes, cause and effect linkages, and themes. Depending on how Scorecard Functional Access is configured, it controls user ability to edit dependent objects.

The following are considerations related to Scorecard Functional Access:

- Only Administrators can create scorecards. You cannot grant or remove access to create scorecards from Administrators.
- You cannot hide (set to No Access) a scorecard from the administrator of that scorecard. Scorecard administrators are users with Admin-level access set for scorecard objects in their Functional Role configuration. Scorecard administrators have global access to all scorecards.
- Only a scorecard owner or scorecard administrator can delete a particular scorecard. Users with only Editor-level access set for scorecard objects in their Functional Role configuration cannot delete scorecards.
- If you want to hide (set to No Access) a scorecard from a user, but the scorecard is the default scorecard for the user, then you must first change the default scorecard for the user to a different scorecard.
- Depending on how access roles are set up, data access to measures aligned to a scorecard is also controlled by the owner or the scorecard access security setting and the measure row security setting.

Procedure: How to Change Scorecard Functional Access for a Scorecard

1. In the Manage page, click the *Scorecard Security* panel button.

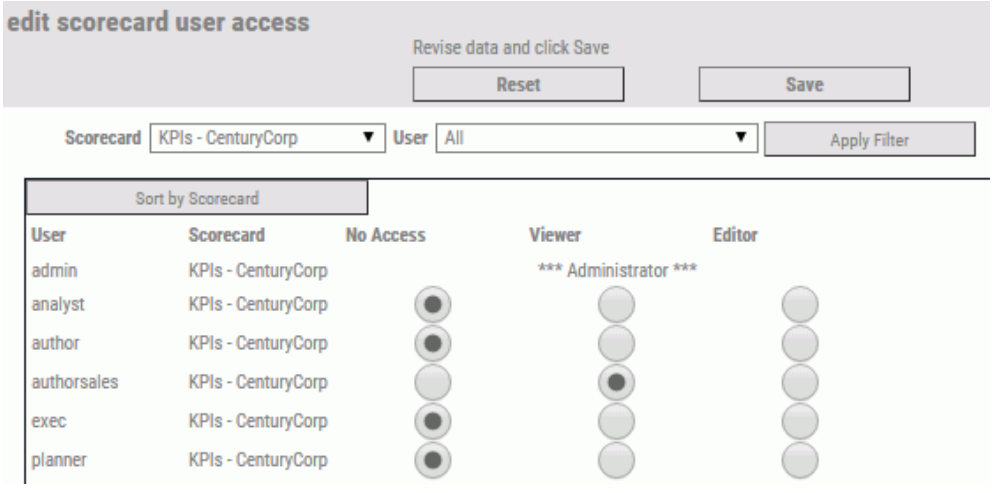
   Select the Scorecard for which you want to change Scorecard Functional Access.

   The Edit Scorecard User Access panel opens.

2. For each scorecard whose functional access you want to change, select one of the following:

   - *No Access*. Do not allow the user to view or access this scorecard.
   - *Viewer*. Allow the user to view the scorecard, the related measure data, and all dependent and linked scorecard objects.
   - *Editor*. Allow the user to view the scorecard, the related measure data, and all dependent and linked objects. Also allow the user to add, change, and delete all dependent scorecard objects.

The following image shows the Edit Scorecard User Access panel.



The No Access setting hides the scorecard from a user. If Administrator or Scorecard Owner is displayed in the Viewer column for a user, scorecard functional access cannot be changed for that user.

3. Click *Save* to save the changes.

Procedure: How to Change Scorecard Functional Access for a User (Owner)

1. In the Manage page, click the *Scorecard Security* panel button.
2. Select the user whose Scorecard Functional Access you want to change from the *User* drop-down menu.
3. Click *Apply Filter*.

   The Edit Scorecard User Access panel opens.
4. For each Scorecard that you want to change the Scorecard Functional Access for the selected user, select one of the following:

   - *No Access*. Do not allow the user to view or access this scorecard.
   - *Viewer*. Allow the user to view the scorecard, the related measure data, and all dependent and linked scorecard objects.
   - *Editor*. Allow the user to view the scorecard, the related measure data, and all dependent and linked objects. Also allow the user to add, change, and delete all dependent scorecard objects.

The No Access setting hides the scorecard from the selected user. If Administrator or Scorecard Owner is displayed in the Viewer column for a user, scorecard functional access cannot be changed for that user.

5. Click *Save* to save the changes.

Reference: Fields in the Edit Scorecard User Access Panel

The following table lists and describes the fields you can use to set scorecard functional access in the Edit Scorecard User Access panel.

Field	Description
Scorecard	Selects the desired scorecard or all scorecards.
User	Selects the desired user or all users.
Apply Filter	Applies the values selected in the Scorecard and User drop-down menus.
Sort by Scorecard	When Sort by Scorecard is displayed, all selected and filtered scorecards are listed in alphabetical order. Each user (owner) is listed in the next column.
Reset (button)	Resets all selections to the default values.
Save (button)	Saves your changes.

Working With the New Data Model

As of PMF 5.3.2, the model where each individual measure needs to be loaded as a separate, schedulable entity is no longer applicable. Instead, PMF now allows you to group (and to schedule loads for) your loadable data by its source.

You can specify how that data should be harvested from individual physical data sources. You can:

- Harvest field values directly, aggregating the values you acquire by dimensionality. You can either aggregate all matching values or filter only particular sets of values.
- Count occurrences of particular flags on one or more fields per record in your source. These counts are automatically kept at the dimensional levels, as indicated on the loadable source.

- Distinctly count occurrences of particular flags on one or more fields per record in your source. These counts are automatically kept at the dimensional levels, as indicated on the loadable source. Additionally, a distinct count is applied on the field you indicate.
- Create custom formulas to describe how data should be harvested, for more complex harvesting techniques.

You can also specify that some datapoints are acquired from end users. Typically, you do this if you do not already have a physical source for this data, but want PMF to become the system of record for the data and to track it as it is captured.

PMF provides user-input features that allow it to capture, update, validate, and store the data in datapoints for use downstream.

When setting up user-entered sources, specify the level of dimensionality common to all datapoints in a single source group. At capture time, end users can input all datapoints at the same time, increasing the speed and convenience for end users.

Once data has been harvested from physical sources or data has been entered by the user, PMF can regularly recalculate any derived datapoints. Recalculation is performed in lineage order. This means that PMF itself determines which derived datapoints have dependencies, and waits to perform recalculation on any datapoint until all of its precursor dependencies have been resolved.

After all datapoints are reloaded, and derived datapoints are fully recalculated, PMF checks for measure dependencies of these datapoints. It then copies the data, as you designed it, to the measures.

The Core Paradigm

The new metrics model in PMF allows you to think differently about measure loads than in previous versions of PMF:

- You can now time a single source load to harvest all values needed from any particular external RDBMS system. You no longer have to think about timing multiple separate measure loads to events in external systems. PMF determines the timing for you, harvesting the data at the time you set, and then pushing the data downstream to derivations and then to each dependent measure in the system.
- PMF now knows the lineage of each calculation and the order in which each dependency must be calculated, so you do not have to determine dependency order for calculated fields.

- PMF can now mix user-input data with loadable data. You do not have to create special interim data tables and user interface schemas to accept user input that needs to be combined on measures or sub-calculations (either as separate measure components or as dependent components in complex calculations).
- PMF can now synthesize data at will, using rules that allow you to determine dimensional depth and method of generation. This means that creating demonstrations of new metric models does not require spending time generating data in Excel and figuring out how to load that data into PMF.
- Determining dimensional dependencies is now more automatic. Since dimensional dependencies are attributes of sources and datapoints, just connecting datapoints to a measure automatically determines the dimensions and levels that will be available to that measure.

Migrating to the New Architecture

PMF allows you to automatically migrate legacy measure load scripts that were created prior to PMF Release 5.3.2 to the new architecture.

How the Migrator Works

If you were a PMF user prior to release 5.3.2, you used legacy measures and set up loads directly on them. There were no sources or datapoints. Automated Migration enables PMF to automatically migrate all old measure components to use the new architecture.

- The migrator attempts to find common data sources for your measures, examines the dimensional intersections these use, and binds the ones that have common data sources and common dimensional intersections into sources.
- When creating Sources during migration, the migrator names the created sources sequentially. You can rename these sources at any time after the migration completes.
- Naming of datapoints is based on the option you choose:
  - You can choose to have PMF name the datapoints tied to these sequential sources based on the source name.
  - You can choose to name the datapoints after their linked measures.

Note: You can rename the created datapoints at any time after migration is completed.

Should I Upgrade Legacy Measures?

Legacy Measure support was stated as deprecated in 2011, and as of PMF 8.2.1 and higher, support has been removed for Legacy Measures.

Before upgrading legacy measures, take the following into consideration:

- If you plan to use the new architecture features, immediately migrate your data mart to use the new architecture. The PMF migrator requires that you take an either/or approach. Once you begin creating new-style measures, PMF will not be able to both preserve them and to migrate your legacy measures for you.
- You should always run a snapshot before attempting migration. This will enable you to quickly revert back to using legacy measures and retrying migration with other options if the result is not what you expected.
- If you want to continue to use legacy measures unchanged, note that migration to the new architecture is currently an optional step. PMF 8 supports legacy measures, as well as new measures. It is strongly recommended that you upgrade to the new model as the legacy measures are deprecated. The new model will be required in a future release.
- Automated migration to the new architecture is not required to upgrade the PMF data mart version. That operation is done when you first start log in to PMF as an administrator after upgrading.

Procedure: How to Perform a Migration

Before performing a migration, note the following:

- You should always run a snapshot before attempting migration. This will enable you to quickly revert back to using legacy measures and attempting another migration, with other options, if the results of the initial migration are not what you expected.
- It is recommended that you use migration using the default options and then examine the results. If the results are now what you expected, restore your backup snapshot and perform the migration again after tweaking the options.
- If you were using PMF prior to release 5.3.2, it is not recommended that you add any new sources, datapoints, or measures to PMF until you complete the legacy migration. If there are already existing sources, datapoints, or new measures, the migration operation will quit. You can delete these components before performing the migration using the option available, but this is not advised if you spent a lot of time in the new architecture.

To perform a migration to the new architecture:

1. From the Manage page, click the *Data Mart* subtab.
2. Click *Migrate Legacy Measures*. The Migrate Legacy Measures to New panel opens.

The following options are available:

Retain the Legacy Load Mode

Enable this option to transfer the deletion option used by the migrated measures into its equivalent default Wipe setting on the sources to be created. This setting is enabled, by default.

Retain Alternate Targets

If you are using Alternate Targets (for example, Benchmark, Stretch, Budget, and Forecast targets), enable this option to make sure that they are migrated.

If you are not using Alternate Targets, it is recommended that you leave this option disabled. This is the default setting.

Delete Measures that do not migrate

If enabled, the migrator will delete any measures that do not migrate. It is recommended that you select this option after doing a test migration and determining that it is safe to do so. This option is disabled, by default.

Note: Generally, legacy measures that are incomplete will not be migrated, since PMF does not have any way to map these into the new architecture. You can always choose not to delete these, manually set them up as new measures, and then delete the unconverted legacy measures.

Delete any existing Sources and dependent objects

If enabled, the migrator will delete any existing sources and datapoints that were created using the new architecture. This will delete any new sources, datapoints, and measures in your system.

If you have this option disabled, and you have new measures, existing sources and existing datapoints, the migrator will produce an error. This is to prevent the overwriting of any new components. This option is disabled by default.

Base Loadable Datapoint names

The following options are available:

- **on legacy Measure names.** This option names loadable datapoints created in each source using the names of the measures to which the migrator links them.

- **on new Loadable Source names.** This option names loadable datapoints created in each source using the source name, so that the names contain the Master File information.

3. Click *Migrate*.

   PMF will perform the migration. This operation can take a few minutes and it is important to wait until it is complete before performing another operation. Once done, a status message will confirm that migration is completed.

4. Once the migration is done, return to the Manage page and review the results.

Data Lineage

Data lineage refers to the entire path of data through the PMF load architecture.

Step 1

For PMF, data lineage starts at the source. Datapoints that are linked to a source are left-side endpoints in the lineage. This means they are harvested directly from:

- Physical database tables or views, or various flat file formats.
- User entry of data, in situations where there is no physical representation of the data.
- Generated data (in the exception where no data exists, and is being created for various demonstration purposes).

Example 1: In the case of a manufacturing company, there might be sources defined to harvest data from systems in Warehousing, Production Line, Quality Control, Shipping and Logistics, Supply Chain/Purchasing, Prospect Management, and Wholesale Sales. PMF harvests data as follows:

- **Warehousing.** Average cost of storage per item, per warehouse.
- **Production Line.** Average cost of labor per item, per plant.
- **Quality Control.** Average cost of testing, per item, per plant.
- **Shipping and Logistics.** Cost to ship, per item, per plant, per customer.
- **Supply Chain/Purchasing.** Cost of supply, per item, per plant.
- **Prospect Management.** Average Cost of Customer Acquisition, averaged per item, per customer.
- **Wholesale Sales.** Sale Amount, per item, per customer.

Step 2

Lineage then proceeds through each generation of derived datapoints. There is no limit to the number of phases possible.

Example 2: Continuing from Example 1, you can derive the following datapoints from those you loaded:

- Total Product Cost = Average cost of storage per item + Average cost of labor per item + Average cost of testing, per item
- Total Sale Cost = Average Cost of Customer Acquisition + Shipping Cost
- Net COGS = Total Product Cost + Total Sale Cost
- Profit = Total Sale – Net COGS
- Margin = Profit/Total Sale (as a %)

These datapoints need to be calculated in the following order:

1. Total Product Cost, Total Sale Cost
2. Net COGS
3. Profit
4. Margin

Step 3

Lineage then ends at measures.

Load, Recalculate, and Copy (LRC) Loads

To load measures, the PMF load architecture puts data through three phases:

1. **Load.** All sources indicated for Load are loaded, and data is fed into the datapoints for each source.
   - **Volitional load.** The Load button is clicked on any source. In this case, the only source that will be loaded is the one you indicated for load.
   - **Scheduled direct load.** A source load is scheduled to run at that time.
   - **Scheduled optional cascaded load.** If any of the dimensions that are linked to the source are reloaded, a source load could be forced (cascaded), depending on how the dimension Cascade Load settings are configured.

- **Scheduled forced cascaded load.** If any of the dimensions that are linked to the source are reorganized, a source load will always be forced (cascaded), regardless of how the dimension Cascade Load settings are configured.

Note: During schedule processing, if more than one source has to be loaded during the scheduled run, all scheduled sources would be loaded before the next step runs. This prevents inefficiently repeating the recalculation.

2. **Recalculate.** PMF looks at all the sources that were reloaded, and analyzes all derived datapoints with dependencies on the sources that were loaded. PMF then analyzes the lineage of all derived datapoints to determine the correct order to recalculate them, respecting their dependencies. Finally, PMF performs the recalculation step, in phases, with the number of phases determined by the generations of lineage of the derived datapoints.
3. **Copy.** PMF analyzes all measures that use the datapoints that were recalculated in Step 2. It then copies the data for the linked datapoints into the measures cube, making the data ready for reporting and dashboard publication.

Reference: Checking the Administrative Log Reports

PMF logs all activity that involves load, recalculation, or copy actions. Logged data is stored as peer data in the PMF Data Mart.

PMF captures the following data in its source load logs:

- Earliest and latest effective dates for the source data.
- What dimensions were processed on the load.
- Status of the load:
  - Running: The load is currently running.
  - Success: The load completed successfully.
  - Error: The load operation completed with an error thrown.
- How many source records were retrieved to process the load.
- How many datapoint records were inserted, updated, and deleted.
- How many dimensional linkage mismatches were processed.
- Gaps in dimensional intersections.
- Datapoint sparsity count (how much of the potential total Cartesian cross product was not loaded).

- LRC load type:
  - Load a source.
  - Load a datapoint.
  - Recalculate.
  - Copy to measure.
- Owner ID under which the load ran.
- Start and end time of the load.
- Messages that were returned from the server during the load.
- Compare mode that was flagged for the load:
  - NO_DATA: There is no incoming/parent data ready to process.
  - NEW: All ready parent data is new (outside the range of the target data), and all parent data is in the lineage for all incoming datapoints for at least one common time period.
  - NEW_W_MISSING: All ready parent data is new (outside the range of the target data), but data is missing for at least one required parent data point in the lineage.
  - POSS_UPD: All incoming ready data falls within the range of current data, but there is no ready data for at least one incoming data point. There is no possibility of new rows being generated.
    - For Copy to Measure, there are possible updates.
    - For Recalculation, there are also possible updates if there is available data for all other parents (this has not yet been coded).
    - It is possible that there is some ready data that is new for some parents, but not for all parents. Since we are lacking new data for at least one parent, there can be no new processing.
  - POSS_UPD_NEW: Similar to POSS_UPD, except that there is ready data for all parents in the lineage, so it is possible that there is some new data.

    The most likely scenario for this would be that you source loaded EAST for 2012/01 and then separately source loaded WEST for 2012/01. In order to process the POSS_UPD_NEW mode, you need to split out those incoming or parent rows that match the dimensionality existing/child rows versus those that are new. For those that are new, you have to check for gaps.

- MIXED: Similar to NEW, except there is also some ready parent data which overlaps existing data. For incoming data that falls within the range of existing data, it is possible that:
  - The data will not be in the current child data, in which case, the data will be New provided that there is already data in all required parents.

    or
  - It may be that the child data already exists, in which case, we can do C2M update processing OR recalc updates (if there is available data for all other parents).

What Are Sources?

A source allows you to map inbound data to PMF elements, called datapoints, that will become elements in measures, such as Actual, Target, and so on.

There are currently three types of sources available:

- **Loadable Source.** Allows you to map inbound data from physical data tables and views to datapoints, regardless of their format.
- **User-Entered Source.** Allows you to map inbound data from your user input to datapoints, regardless of who is doing the input across your organization.
- **Generated Source.** Allows PMF to automatically create sample data for your models.

Note:

- Define dimensional linkages at the source level. These linkages are then inherited by all of the datapoints of a source at once.
- You can quickly edit and change all the individual datapoints on a source using the new source panel.
- Data values for numbers will be stored in internal floating point format and can be different than displayed values, depending on the display format you have selected for these values. For example, if you chose to display numbers with less precision (smaller number of decimal places) than is stored, WebFOCUS will reformat the numbers to the level of precision you request.

Procedure: How to Wipe Source Data

All loaded data from a loadable, user-entered, or generated source can be wiped out or deleted in a single operation. This is useful when you have loaded data that is invalid. It is a simple way to delete all the data.

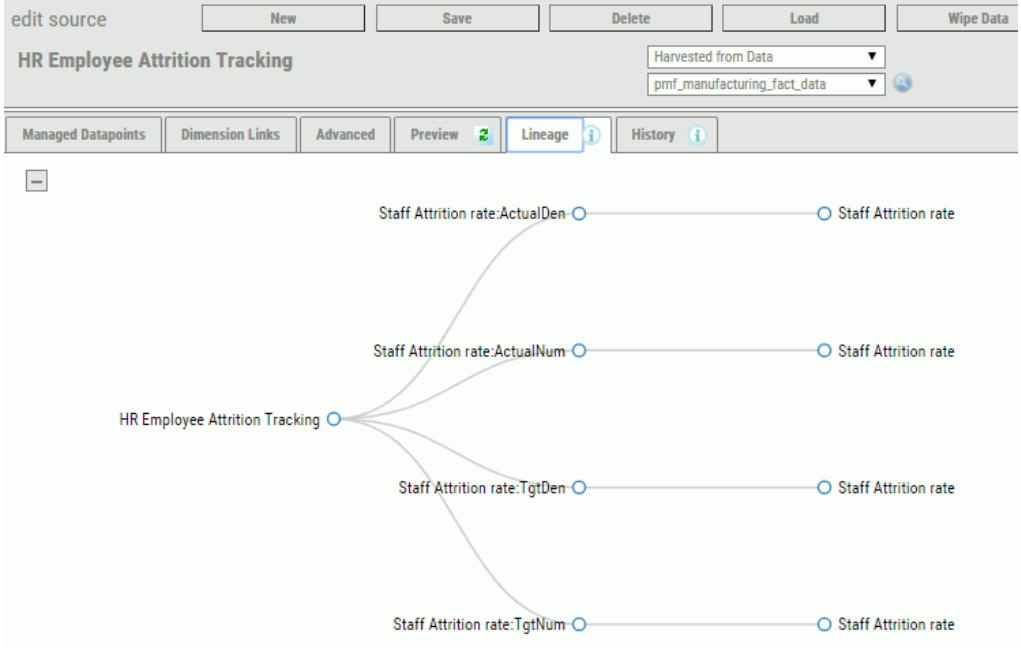
1. From the Manage page, click the *Sources* panel button.
2. Select the source that needs data to be deleted. The Edit Source panel opens.
3. Click the *Wipe Data* button. PMF will ask you to confirm the data purge.
4. Click *OK*.

Note: It may take PMF a moment to purge all of the data.

Reference: Lineage Tab

You can view the lineage for all datapoints for any loadable, user-entered, or generated source by selecting the *Lineage* tab in the New Source or Edit Source panel. Lineage shows the progress of data through PMF, starting from the external data harvested into datapoints, through any derived datapoints, and finally, all terminal points in measures.

The following image shows an example of the Lineage tab for a loadable source.

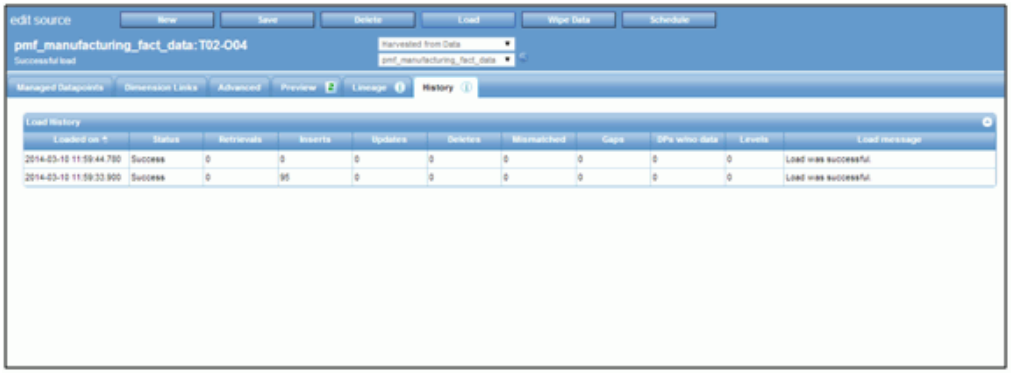


The lineage tab automatically displays the entire lineage. You can click the *Collapse All* button to hide the entire lineage.

Reference: Load History of Sources

PMF keeps track of each load that is executed for each source in the system, regardless of whether you loaded it manually or the load was called by the scheduler. This data is stored in a special logging section of the PMF data mart.

The History tab on each loadable, user entered, or generated source displays the history of all loads that have been logged, as shown in the following image.



The history of the source shows:

- The dates that the loads ran.
- The count of rows that were retrieved, inserted, updated, and deleted.
- The count of total mismatches that occurred between the source data and the PMF metrics mart. Mismatches are source data rows that do not match to any existing keys for one or more dimensions.

  The total count of mismatches for generated sources should always be zero.
- The count of gaps in data continuity, which indicate the sparsity of the data. This does not mean that there are errors, but, if paired with mismatches, this can help you debug any unexpected data discontinuities.

  The total count of gaps in data discontinuity for generated sources should always be zero.
- Any messages returned from the load system. If there is an error, the exact error is displayed in the information shown in this tab.

Errors are unlikely for generated sources.

Working With Loadable Sources

Loadable sources in PMF:

- Let you harvest data from external data tables, views, flat files, Excel files, and so on. Typically, you would define a loadable source for every single separate and distinct physical data source from which you wanted to acquire metric data. For more information on harvesting data, see *Harvesting Loadable Sources* on page 249.
- Allow immediate loading of data, or you can load data on a schedule.
- Contain one or more loadable datapoints each. A loadable source is a logical grouping of datapoints that all come from the same physical data location.

Reference: Harvesting Loadable Sources

Data harvesting is the process of taking data from a source and processing it into information that is then loaded into one or more datapoints needed by the PMF source.

Note: The result of any data harvesting operation is always numeric.

Typical data harvesting actions are:

- Summarizing aggregated values of an inbound numeric field.
- Summarizing values of an inbound numeric field, but only if certain conditions are true. Otherwise, they are ignored.
- Counting occurrences of a particular set of field conditions (Counting *when*).
- Distinctly counting occurrences of a particular set of field conditions. Distinct counting is a method to prevent double-counting fixed assets, people, and so on.
- Writing a custom load for a datapoint, where the logic is freeform. For example, it is possible to perform custom operations or calculations on the data inbound or implement more complex or nested filters. These use WebFOCUS programming logic, functions, and operations. The PMF source loader allows all the data harvesting methods above.

In PMF, all data harvesting is done across a potential Cartesian cross product of dimensional intersection. Nearly every load involves a fairly high degree of sparsity against this cross product, but in most cases, it also involves creating multiple records that follow a particular pattern against the source data.

In many cases, depending on the degree of granularity of the inbound loadable data from the source, PMF requests the data to be aggregated, even when loaded at the lowest level of its dimensionality. This happens when the physical data table or view contains more detailed records that go to a lower logical level than the source requests. Some examples of this include the following:

- If the physical data of the source is stored at a daily or hourly level, and the source load needs it summarized at a monthly level.
- If there is a location dimension, and the source stores data at the geocode or ZIP code level, and the PMF source wants this data at the city or regional level.

In the examples listed, the PMF loader will be aggregating records from the source inbound during the load process.

Reference: Lineage and Recalculation With Loadable Sources

Loadable Sources are primary sources for data in PMF. PMF treats them as *first generation* in any lineage, along with user-entered datapoints and generated datapoints.

Loadable data is treated as updated on the date of load, but is effective as of the time dimension linkages for the data.

Procedure: How to Set Up Loadable Sources and Datapoints

To set up a new Loadable source:

1. In the Manage page, click the *Sources* panel button.
2. Click *New*.

   The New Source panel opens.
3. Name your new source and select *Harvested from Data* from the first drop-down menu, as shown in the following image. This option lets PMF know that you want this source to harvest data from an existing table, view, flat file, and so on.

4. Select the metadata file for the existing table from the second drop-down menu. If the file you want to use is not listed, expand the File Picker by selecting *Show More...* from the drop-down menu.

   The File Picker allows you to look at all of the available metadata files in your currently configured WebFOCUS app path. The icons to the left of each file name let you explore the contents of the file to make sure that it is the correct one. To select the file to use, click the name once and close the File Picker.

5. Specify the datapoints to be harvested. For each line where you want to add another field from the source, you can do the following:

   - To harvest by *summarizing the values of the field*, select the field you want to harvest from the Source field name drop-down menu. You can use the default name assigned to the datapoint, or change the name at anytime.
   - To harvest by *summarizing the values of the field only when conditions are matched*, select the field you want to harvest from the Source field name drop-down menu and create filters by clicking the *Filters* button to choose your filters.
   - To harvest by *counting*, select *[Count]* from the Source Field Name drop-down menu and specify the conditions to count by clicking the *When* button. You are required to provide a name for the datapoint.
   - To harvest by *counting distinctly*, select *[Distinct Count]* from the Source Field Name drop-down menu. Specify the conditions to count by clicking the *When* button, and specify the matching field for distinct counting. You are required to provide a name for the datapoint.
   - To create a *custom formula for calculating the field during harvesting*, select *[User Defined]*. You are required to provide a name for the datapoint. Specify filters to be used by clicking the *Filters* button and specify the WebFOCUS code-based formula for harvesting the field by clicking the *Code* button.

     PMF creates the following template code:

     ```
     SRC_DATA_COLnn/D20.2 MISSING ON = MISSING ;
     ```

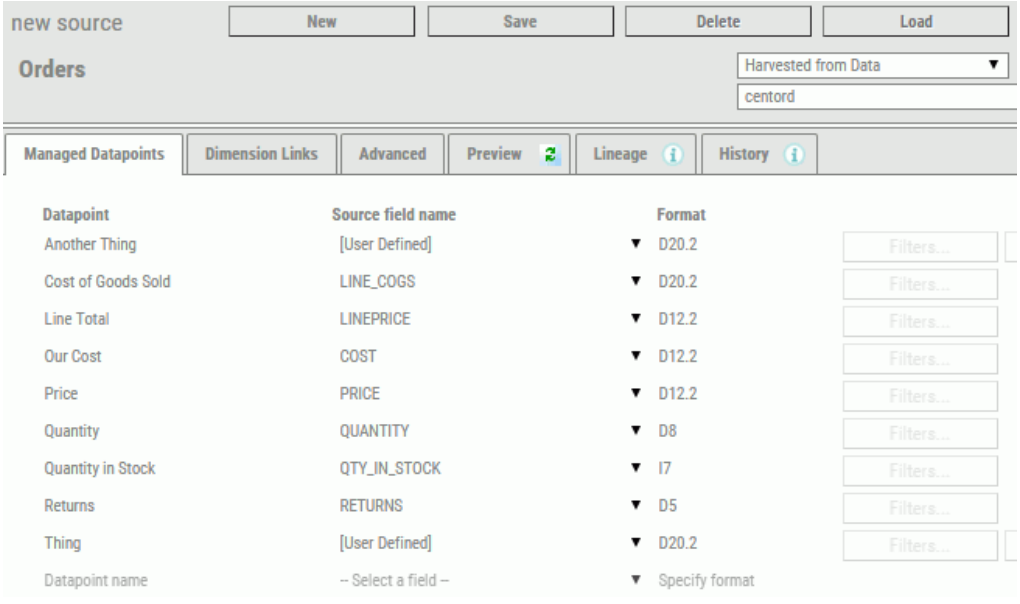
     where:

     nn is the one up datapoint number within the Source. The left side of the code should not be changed. The right side must be syntactically correct FOCUS code.

     Note: If you are coding an advanced Global Filter, you must use the WHERE verb:

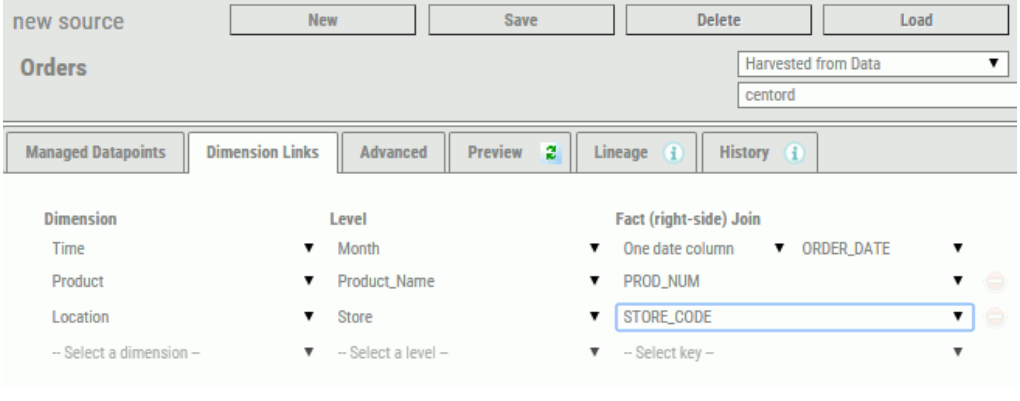
     ```
     WHERE (M_NAME EQ 'COGS')
     ```

Your datapoints should look similar to the following image.



Note: You can save your work-in-progress at any time. PMF will not be able to actually harvest data into the datapoints that were set up until the needed harvesting details and dimensionality have been specified.

6. Click the *Dimension Links* tab and specify Time, as well as other dimensional linkages, as shown in the following image.



Note: The fields you select for dimensional linkages must contain values that match up to those you loaded for the dimension keys in the Dimension Loader. PMF will alert you if there is an issue.

7. Once the dimensional linkages are set up, click the *Preview* tab. The data that is being set up for harvesting can be seen.

   Note:

   - The Preview pane is very flexible and shows the row values that will be added, changed, or deleted from your source, in separate sections.
   - You can resort the contents of the Preview pane by clicking a column heading. The sort toggles between ascending and descending order.
   - You can scroll the Preview pane vertically and horizontally, and drag the navigation bar divider to make more room onscreen.
   - You can refresh the Preview pane at any time by clicking the *Refresh* button on the Preview tab.
   - You can switch back and forth between the Datapoints, Dimension Links, and Preview tabs to alter the patterns you are using for harvesting, adjust the linkage keys and dimensions that you are linking to, and refresh the preview, as needed.

8. Click *Save* before concluding your session to ensure that the datapoints and source you have set up are correctly stored in the system. After saving the data, you can click *Load* to harvest initial data for your new source.

Procedure: How to Update a Loadable Source

To update a loadable source:

1. From the Manage page, click the *Sources* panel button.
2. Select the source you want to update. The Edit Source panel opens.
3. Make the desired changes. You can rename the datapoints, change their field linkages, format, filters, when conditions, or code. You can also revise dimensional linkages and change Advanced properties of the source.
4. Click *Save* when you are done making edits. PMF will perform the actions on the source and/or save the changes into each datapoint for the source.

Procedure: How to Change the File, Table, or View Used for a Loadable Source

If the name of the Master File or other physical connection information used by a loadable source changes, you can adapt those changes into the source in PMF.

1. From the Manage page, click the *Sources* panel button.
2. Select the source you want to edit. The Edit Source panel opens.

3. Select the new Master File for the new data source you want to use from the drop-down menu. PMF will automatically clear the fields from the data source, so you can choose the correct new ones from your new source.
4. Click *Save* to save your changes.

Working With User-Entered Sources

User-entered sources in PMF:

- Let you harvest data from groups of your end users. Typically, you define a user-entered source for every single separate and distinct physical group of inputs from which you acquire metric data among your users.
- Allow updating measures on a recalculation schedule. You can also recalculate during normal daytime processing, if you want.
- Contain one or more user-entered datapoints. A user-entered source is a logical grouping of datapoints that all come from the same subject matter or groups of users.

User-entered sources let you collect data from groups of end users.

- These are typically needed when your measure data is not an actual source in an existing data source, but is entered ad hoc.
- User-entered sources let you harvest data from these users and operationalize that data in PMF, without requiring any intermediate files, such as flat files or Excel files.
- Apps do not need to be built to collect this data. PMF provides an easy-to-use, lightweight, fast, online, spreadsheet-like user interface, with full validation, that can instantly display within the browser of any end user.

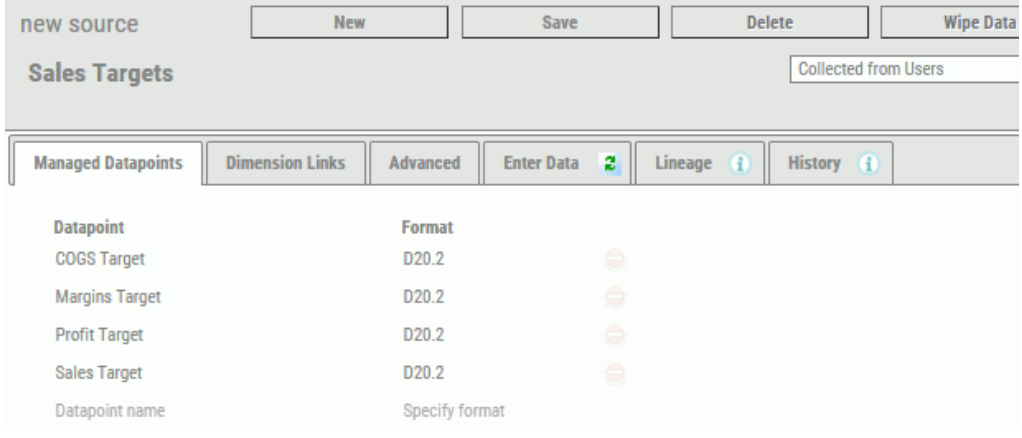
Procedure: How to Create a User-Entered Source

1. From the Manage page, click the *Sources* panel button.
2. Click *New*.

   The New Source panel opens.
3. Name the source, and from the first drop-down menu, select *Collected from Users*. This lets PMF know that the source will harvest data from the user-entered source.
4. Define each user-entered datapoint for this source by entering a name and format for each datapoint. You can quickly enter this information by pressing the Tab key to move from field to field. You can create multiple user-entered sources, and each user-entered source can represent all the datapoints you would collect from a particular user population.

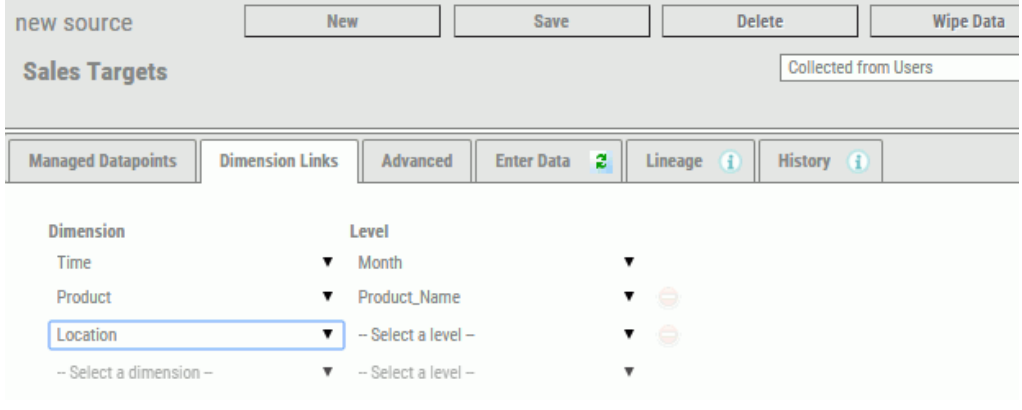
For example, if you are collecting input from HR staff for HR metrics, you could create a user-entered source called HR Input, and in that source, you could define the datapoints to be collected from that group.

For each datapoint you define, you can also define the numeric validation format. The PMF input facility will enforce that data format during collection, as shown in the following image.

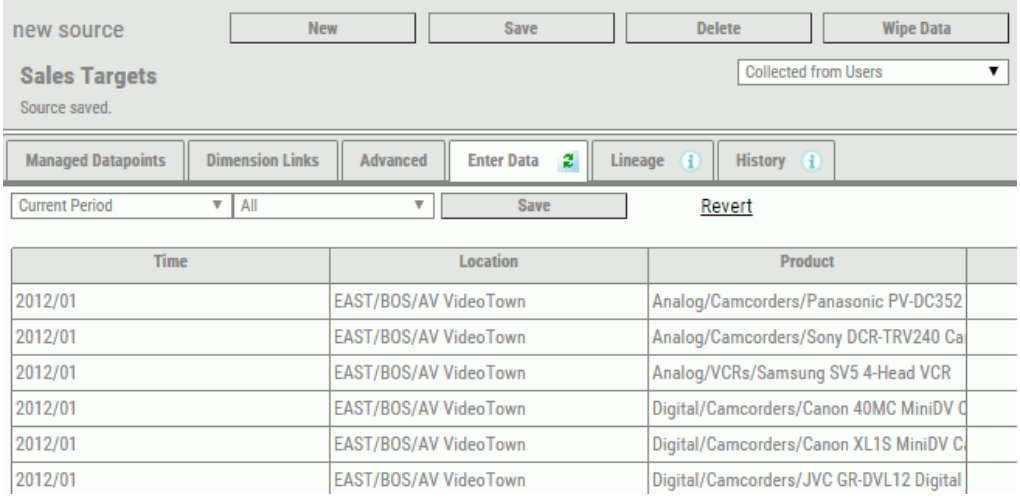


Note: You can save your work and leave the session at any time. If all the steps are not completed, the Source panel will mark this source as incomplete. End users will not be able to enter data until the source is complete, and incomplete components do not participate in recalculation.

5. Click the *Dimension Links* tab and define the dimensionality to be collected for the user-entered datapoint. Select the dimensions and levels to link for each, as shown in the following image.



6. Click *Save*.
7. Click the *Enter Data* tab to view the data structure or input data, as shown in the following image.



If data entry is already displayed, click the *Refresh* button to refresh the contents in the Enter Data tab.

In this tab, PMF displays the rows that are ready to receive data from input and allows you to enter data.

- You can sort the contents of the Enter Data tab by clicking the column headings. The arrow next to the heading tells you the direction of the sort.
- You can click on any row or column to highlight it and get a more detailed view.
- You can resize the columns by dragging its borders in the headings.

Click the *Save* button within the Data Entry tab to save the data you entered into the individual datapoints on the Data Entry tab.

Note:

- If you leave any open boxes blank, PMF will not create an intersection for them. That intersection will be treated as a NULL (for example, MISSING).
- Zeros entered will be treated as entered data, and an intersection will be created.
- If you blank out an entered number, its intersection will be deleted when you click *Save*.

Reference: **Lineage and Recalculation With User-Entered Sources**

User-entered data differs from standard loaded data in the following ways:

- It is dependent on users supplying their data. If users fail to supply their data, no data will be available for the datapoints, or downstream, to be used in any calculations for derived datapoints, or for copying into measures.
- The timing of the data entry is unpredictable. It is therefore difficult to predict when the automatic population of the data should be done.

  As a result, you need to schedule recalculation more frequently.

Note: User-entered data is treated as updated on the date of entry, and the downstream datapoints and measure copies are treated as loaded on the day they were scheduled to update.

Updating User-Entered Sources

You can update user-entered sources at any time. PMF adjusts existing user-entered data for the datapoints in a user-entered source as follows:

- Changing the name for any datapoint causes the datapoint to be renamed, with no side effects.
- Adding new datapoints causes them to be added to the source, and to take on the dimensional linkages already configured for that source.
- Changing the format for any datapoint has no effect on the underlying data, because PMF stores all numbers internally in floating-point format. If you change the numeric format to remove or shorten the mantissa (for example, changing the format from D12.2 to D12) when the data is re-displayed for entry, PMF will automatically truncate the mantissa when the data is saved. This might have an effect on values shown for measures on various views and charts in PMF.
- Adding dimensional linkages causes PMF to wipe the data. This is because PMF does not know how to reallocate data that has already been entered.
- If the dimensional level is changed to a lower level for any linked dimension, it causes PMF to wipe the user-entered data for the datapoints. This is because PMF does not know how to reallocate the rolled-up data. The individual dimension-linked values will be lost.

- If the dimensional level is changed to a higher level, PMF attempts to roll the data up. Once the rollup is completed, changing the level back to a lower one will cause PMF to wipe the data, for the same reason as above.

Working With Generated Sources

Generated sources in PMF enable you to:

- Indicate to PMF the maximum and minimum values to generate for each datapoint in the source.
- Specify which dimensional intersections should contain the generated data.
- Use different sampling methods to generate data.

Generated sources enable PMF to automatically create sample data for your models. They should be used in the following situations:

- When you need to demonstrate metrics in dashboards, but only have a rough idea what the data should look like.
- When a sponsor can give you more specific guidelines as to the data they want to see, but you do not want to spend time modeling the data in a tool.
- When you are creating a new metrics model, and want to spend your time on it, rather than on the data.

Note: Data that is generated should not be treated as real performance data. PMF cannot distinguish between generated and performance data, so use generated sources only for non-production work.

Procedure: How to Create a Generated Source

1. From the Manage page, click the *Sources* panel button.
2. Click *New*.

   The New Source panel opens.
3. Name the source, and from the first drop-down menu, select *Generated (sample data)*. This indicates to PMF that the source will be generated automatically.
4. Define each datapoint that you want to create. As you enter each datapoint, PMF will set default rules to be used between the generated source and datapoint. You can quickly enter this information by pressing the Tab key to move from field to field.

If you choose to specify the rules that PMF should use to generate data, the following options are available:

Decimal Format

Specifies the decimal format of the data generated:

- The first character can be D (Decimal) or I (Integer).
- The next characters are numbers to specify the total length of the field.
- You can indicate a period and number of digits of decimal precision.

Examples of typical decimal formats are: D12.2, I8, D20.6, and I32.

Method

Controls how PMF will calculate the sample values:

- **Normal (Bell Curve) Distribution.** PMF generates a range of values that favors the center of the numeric range you type for Lower/Upper Bounds.
- **Uniform Random Distribution.** PMF generates an even distribution of values that favors no point in the numeric range.

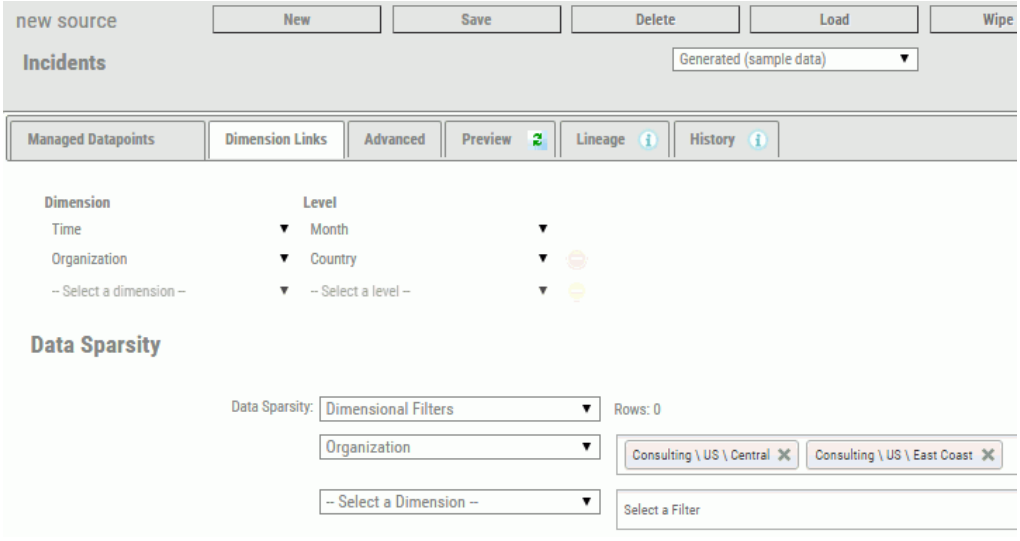
Lower/Upper Bounds

The lowest and highest number for the range of possible values PMF will generate. The numbers will be formatted using the mask you entered in the Decimal Format field.

Note: You can save your work and leave the session at any time. If minimum necessary entries are not set up to generate data, PMF will mark the generated source as Incomplete. Incomplete sources and their datapoints do not participate in recalculation. You need to complete the source to allow its datapoints to participate, or you will not be able to get the data published using measures.

5. Click the *Dimension Links* tab and define the dimensions and levels for which PMF will generate data. This will affect some options in the Rules tab, so perform this step next if you know the dimensions you want to use for generating, as shown in the following image.

Note: If you are setting up a trained generated source, you do not have to specify dimension links because they will be inherited from the source.



The following option is available:

Data Sparsity

Controls the amount of data PMF generates by letting you focus the data on dimensional choices:

- **None.** Generates a Cartesian cross-product of all possible dimension values.
- **Dimensional Filters.** You can specify filters for the dimension levels for the generated datapoint. To specify the filters, select this option and use the drop-down menus.
- **Train.** You can base the dimension level values along which PMF generates data on another datapoint. This lets you keep a limited amount of data together.

  You can specify any datapoint to train from a loadable datapoint, user-entered datapoint, derived datapoint, or another generated datapoint.

6. Click *Save*.

Tip: When generating random data for generated datapoints, PMF will wipe all existing data before regenerating it using your new rules. Generally, with generated datapoints, the Preview tab is useful for new data you are planning to generate into an empty datapoint, or when changing rules. If your rules have not changed, and data is showing up on Preview as 100% added and deleted, you should not regenerate data.

Procedure: How to Update a Generated Source

To update a generated source:

1. From the Manage page, click the *Sources* panel button.
2. Select the source you want to update. The Edit Source panel opens.
3. Make the desired changes. You can rename or delete datapoints, change the generation method or values for any datapoint, or delete the entire generated source.

   Note:

   - Datapoints are included in formulas and linked to measures by reference. Renaming them will percolate through the entire system.
   - Altering the generation method formula or the range values for a generated source automatically flags its data, and any later generations in the lineage for that Generated Source (including child-derived datapoints and measure values) for a one-time wipe. If the data is also scheduled for reload, PMF performs that load after wiping the data.
4. Click *Save* when you are done making edits. PMF will perform the actions on the source and/or save the changes into each datapoint for the source.

Reference: Lineage and Recalculation With Generated Sources

Generated sources are primary sources for data in PMF. As such, PMF treat these source types as first generation in any lineage, along with loadable and user-entered datapoints.

Promoting a Generated Source

Generated sources are used when you lack real data to prove that your model works, or they are needed for a demonstration. Once you are ready to use a working model with real data, generated sources are no longer necessary to feed your metrics.

To promote the generated source:

- Add it as a loadable source so that its data can be harvested from an existing file, table, or view.

- ❑ Add it to a user-entered source, so that the data can be collected from end users.

Reference: Previewing Generated Data

You can preview the data that PMF will generate by clicking the *Preview* tab.

The Preview tab generally shows rows that are new, or will be updated or deleted.

Tips:

- ❑ The Preview tab shows data to be handled before any operations occur. It divides this data up into the following sections, based on what will happen to the rows that are displayed:
  - ❑ New rows to be created by generation.
  - ❑ Rows to be updated by generation.
  - ❑ Rows to be deleted by generation (depending on the Wipe Data setting on the Advanced tab).
  - ❑ Rows that will be kept, but whose values do not match the new data to be generated (depending on the Wipe Data setting on the Advanced tab).
- ❑ Opening the Preview tab will force the navigation bar to close, in order to use as much screen width as possible. You can reopen it by clicking the expand button at the top of the navigation bar.
- ❑ You can resort the preview contents in any order by clicking the column headings. Note that the Preview will show data based on the display limit set in the Load settings. To change this value, see *Load Settings* on page 380.

Load Now Panel

The Load Now panel lets you automatically refresh the entire PMF cube from Source data. It runs the following:

- ❑ All loads for any Harvested Dimensions
- ❑ All Source loads for any Harvested Sources.
- ❑ A complete data regeneration cycle for any Generated Sources
- ❑ If the Recalculate and Load all option is set on Sources (and this is the default for any Source), each Source reload automatically pushes all data through the lineage to any Derived Datapoints, and copies the calculated data to each Metric in the system.

Note: If any Dimensions or Sources are incomplete, the Load Now operation will fail. But this is one way to quickly show you what Dimensions, Sources, Derived Datapoints, or Metrics you still need to complete.

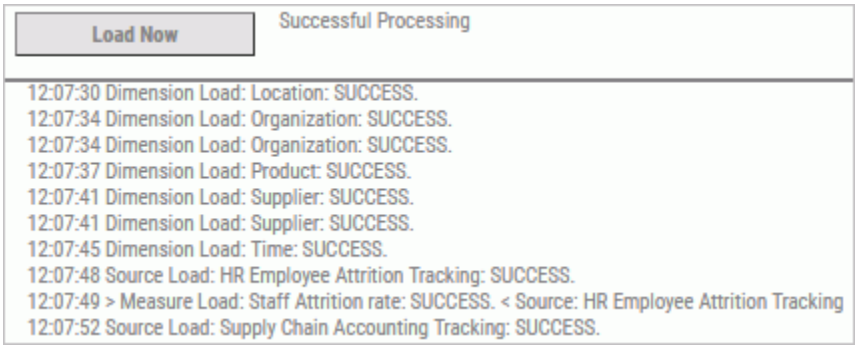
Procedure: How to Perform a Load Now Operation

To perform a Load Now operation:

1. From the Manage page, click the *Data Mart* subtab.
2. Click the *Load Now* panel button.

   The Load Now panel opens.
3. Click the *Load Now* button.

   A confirmation dialog box opens.
4. Click *Load Now*. PMF performs the operation and displays a status log, as shown in the following image.



What Are Datapoints?

A datapoint is similar to a field in a table, but with built-in dimensional linkages. It also has linkages back to sources and forward to measures, which provide a clear lineage from harvest point to presentation.

There are four different types of datapoints in PMF:

- **Derived datapoint.** A datapoint based on a calculation that uses data from other datapoints and is usually free-standing.
- **Loadable datapoint.** A datapoint that comes from a loadable data source and typically belongs to a loadable source.

- **Generated datapoint.** A datapoint based on data that is generated by an algorithm, and represents sample or demonstration data. This type of datapoint is free-standing.
- **User-entered datapoint.** A datapoint based on data entered by end users and typically belongs to a user-entered source.

Procedure: How to Edit Loadable, Generated, or User Entered Datapoints

Note: Most of the information for Loadable, Generated, or User-Entered datapoints are read-only. The only thing you can change about them is their name or description.

1. In the Manage page, click the *Datapoints* panel button.
2. Expand the *Loaded Datapoints*, *Generated Datapoints*, or *User Entered Datapoints* folder and select the datapoint you want to view.

   The Edit Datapoint panel opens.
3. Edit the Name or Description of the loadable datapoint.
4. Click *Save*.

Derived Datapoints

Derived datapoints let you create calculations that include dimensional metadata. For example, you can create a series of derived datapoints that perform a series of calculations on Sales performance for your manufacturing company:

- Cost of Supply (by Product, Location and Time)
- Cost of Labor (by Product, Location and Time)
- Cost of Warehousing/Storage (by Product, Location and Time)
- Cost to Ship (by Product, Location and Time)

These datapoints can now be added up to become Total Cost (by Product, Location and Time).

You can then set Total Cost against your Sales (by Product, Location and Time) to calculate Profit.

You can also load precalculated Total Costs and Profit datapoints from an external Source, but there is no guarantee the data will be calculated in the proper order. If you use derived datapoints to calculate the values:

- The data will be calculated in the correct order, by using the generations in the datapoint lineage. PMF will also recognize incomplete data and handle it accordingly.

- You will be able to deconstruct the calculations performed for all derived datapoints using Lineage Chains.

  Lineage Chains are currently available in the Lineage tabs on dimensions, sources, datapoints, and measures panels.

- Derived datapoints allow deep models of recalculation, that let many measures share the same common root calculated values.

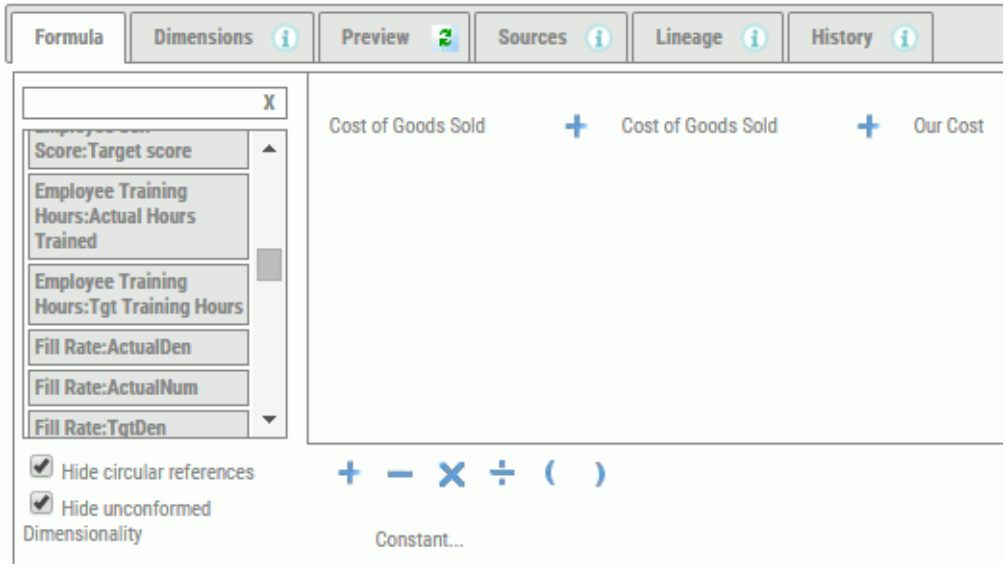
- Derived datapoints let you mix and match any data source in one contiguous data mart, and are much easier to set up than ETL jobs. This is because dimensional aggregation logic is included in the calculations, so you do not have to write complex dimensional logic in an ETL tool.

Procedure: How to Create a Derived Datapoint

To create a derived datapoint:

1. In the Manage page, click the *Datapoints* panel button.
2. Click *New*.

   The New Datapoint panel opens.
3. Name the new derived datapoint.
4. Drag the datapoints you need for your calculation into the canvas. Each datapoint must be separated by its operation, as shown in the following image.



Calculations can also include constants. To add a constant, drag the Constant object into position on the canvas, and type in the constant value inside the Constant object.

Separate datapoints for WebFOCUS functions are typically created during the source load, since capturing these calculations is done best in the first-generation in the lineage, during harvesting.

For example, if you want to capture counts of a particular condition, rather than trying to save all those attributes somewhere so you can perform the filtering later, you can determine When, that is what filters should be true, for the count. You can then pull that count into a loadable datapoint. Approaching data this way allows you to make calculations in the lineage after this harvesting phase simpler for you to manage.

5. Click *Save*. If the calculation is not complete, PMF recognizes this, and marks the derived datapoint as Incomplete. Incomplete derived datapoints do not participate in recalculation.

Procedure: How to Change Datapoints

To change a derived datapoint:

1. In the Manage page, click the *Datapoints* panel button.
2. Select the derived datapoint you want to change. The Edit Datapoint panel opens.
3. Make your desired edits. You can change anything in a derived datapoint, including the name and its formula.

   Note:

   - Datapoints are included in formulas and linked to measures by reference, so renaming them changes their name through the entire system.
   - Altering the formula for a derived datapoint automatically flags its data, and any later generations in the lineage for that datapoint, including child derived datapoints and measure values, for a one-time wipe. If the data is also scheduled for reload, PMF performs that load after wiping the data.

Procedure: How to Copy Derived Datapoints

You can make an exact copy of any existing derived datapoint. After making the copy, you can immediately alter it as needed. To copy a datapoint:

1. From the Manage page, click the *Datapoints* panel button.
2. Select the derived datapoint you want to copy. The Edit Datapoint panel opens.
3. Click *Save As*. You will be prompted for a new name for the derived datapoint.

4. Click *Save*. PMF will make an exact copy of the derived datapoint. You can edit and save your changes at any time, and click *Save As* again if you want to make more copies. This datapoint is what will be loaded for editing.

Procedure: How to Wipe Derived Datapoint Data

All loaded data from a derived datapoint can be wiped out or deleted in a single operation, because they are not attached to a source.

Note: Wiping data affects downstream datapoints for the datapoint you wipe. Every datapoint downstream is marked as having incomplete components. Incomplete components do not participate in recalculation.

1. From the Manage page, click the *Datapoints* panel button.
2. Select the datapoint that needs to be deleted. The Edit Datapoint panel opens.
3. Click the *Wipe Data* button. PMF will ask you to confirm the data purge.
4. Click *OK*.

Note: It may take PMF a moment to purge all of the data.

Creating Calculated Measures With Derived Datapoints

PMF allows you to create an unlimited number of calculations for your measures using special datapoints that store and process calculations, known as derived datapoints. These calculations can be based on one or more existing datapoints, of any kind, including loadable, user-entered, generated, and other derived datapoints. Note the following:

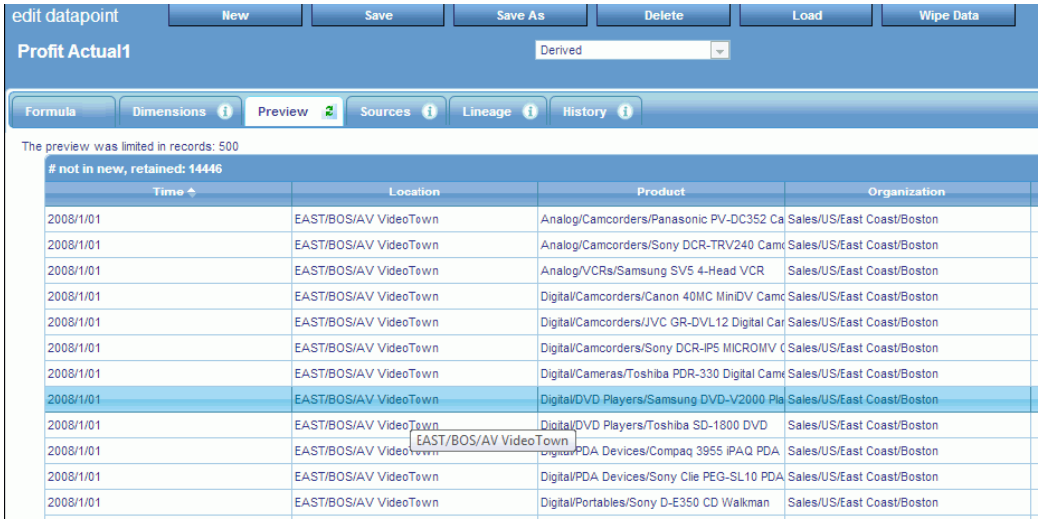
- If you create a derived datapoint that uses data from loadable, user-entered, or generated datapoints, PMF will recalculate the results every time the data for these are changed. The data goes through the lineage, through all of your steps of calculation, until it is copied to any measures linked to your datapoints.
- If you create a derived datapoint that uses data from another derived datapoint, PMF knows that the “parent” derived datapoint must be calculated before calculating your new derived datapoint. Logic built into PMF understands that calculations must use generations in the datapoint lineage.

  Recalculating a complex lineage chain through possibly hundreds of thousands or millions of row values can be an expensive operation, so you have full control over how much of this calculation is performed during normal processing hours.

  Note: During scheduled load cycles, since PMF is less used during scheduled load times (usually overnight), recalculation can always go through the entire lineage.

Reference: Previewing Derived Datapoints

You can preview the data that PMF will generate by clicking the *Preview* tab, as shown in the following image.



The Preview tab generally shows rows that are new, or will be updated or deleted.

Tips:

- The Preview tab shows data to be handled before any operations occur. It divides this data up into the following sections, based on what will happen to the rows that are displayed:
  - New rows to be created by generation.
  - Rows to be updated by generation.
  - Rows to be deleted by generation (depending on the Wipe Data setting on the Advanced tab).
  - Rows that will be kept but whose values do not match the new data to be generated (depending on the Wipe Data setting on the Advanced tab).
- Opening the Preview tab will force the navigation bar to close, in order to use as much screen width as possible. You can reopen it by clicking the expand button at the top of the navigation bar.

- You can resort the preview contents in any order by clicking the column headings. Note that the Preview will show data based on the display limit set in the Load settings. To change this value, see *Load Settings* on page 380.

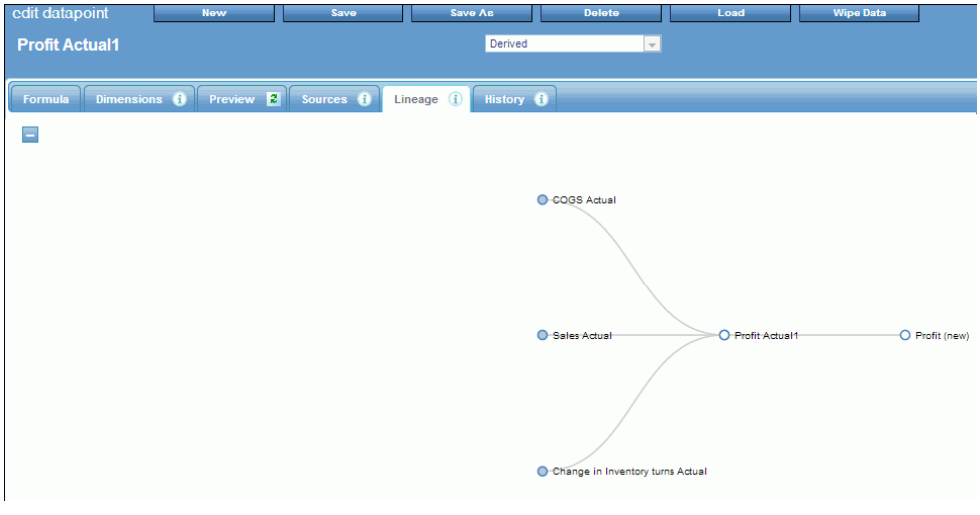
Reference: Lineage and Recalculation With Derived Datapoints

Derived datapoints can have a complex, multi-part lineage, depending on their relationship to other derived datapoints.

- In the lineage directionality of derived datapoints, the data in derived datapoints always progresses to the left, from first-generation datapoints (loadable, user-entered, and generated) toward measures.
- PMF automatically handles figuring out the generation of each derived datapoint in the lineage, by analyzing the first point in the lineage where a derived datapoint sends its data onward.

Reference: Derived Datapoint Lineage Tab

You can view lineage for all datapoints for any derived datapoint. Lineage shows the progress of data through PMF, from the external data harvested into datapoints, through any derived datapoints, and finally all terminal points in Measures. The Lineage tab displays the components in the generated source by default, as shown in the following image.



The lineage tab automatically displays the entire lineage. You can click the *Collapse All* button to hide the entire lineage.

Reference: Derived Datapoint Load History

PMF keeps track of each load that is executed for each derived datapoint in the system, regardless of whether you loaded it manually or the load was called by the scheduler. This data is stored in a special logging section of the PMF data mart.

The History tab on each derived datapoint displays the history of all loads that have been logged.

The history of the derived datapoint shows:

- The dates that the loads ran.
- The count of rows that were retrieved, inserted, updated, and deleted.
- The count of total mismatches that occurred between the source data and the PMF metrics mart. Mismatches are source data rows that do not match to any existing keys for one or more dimensions.
- The count of gaps in data continuity, which indicate the sparsity of the data. This does not mean there are errors but, if paired with mismatches, can help you debug any unexpected data discontinuities.
- Any messages returned from the load system. If there is an error, the exact error is displayed in the information shown in this tab.

Loadable Datapoints

Loadable Sources manage Loadable datapoints. You can drill into any datapoint on a Loadable Source to view the specifics about the datapoint, or you can access Loadable datapoints from the separate panel button for them.

Generated Datapoints

Generated Sources manage Generated datapoints. You can drill into any datapoint on a Loadable Source to view the specifics about the datapoint, or you can access Loadable datapoints from the separate panel button for them.

Generated datapoints are designed for the following situations:

Reference: Lineage and Recalculation With Generated Datapoints

Generated Datapoints are primary sources for data in PMF. They are treated as first generation in any lineage, along with loadable datapoints and user-entered datapoints.

Promoting a Generated Datapoint

Generated datapoints are used when you lack real data to prove that your model works, or they are needed for a demonstration. Once you are ready to use a working model with real data, generated datapoints are no longer necessary to feed your metrics.

To promote the generated datapoint:

- ❑ Add it to a loadable source so that its data can be harvested from an existing file, table, or view.
- ❑ Add it to a user-entered source, so that the data can be collected from end users.

User Entered Datapoints

User Entered Sources manage User Entered datapoints. You can drill into any datapoint on a Loadable Source to view the specifics about the datapoint, or you can access Loadable datapoints from the separate panel button for them.

Scheduling Loads and Updates

PMF allows scheduling loads. Recalculation is performed automatically when data from sources has changed. The recalculation can be made to run during the daytime, whenever you choose, or nightly, on schedule.

Typically, you would schedule only the following:

- ❑ Dimension loads and refreshes
- ❑ Source loads and refreshes

PMF populates the model. Scheduling no longer requires you to schedule individual measure loads. You need to only schedule source loads, and PMF automatically does the rest.

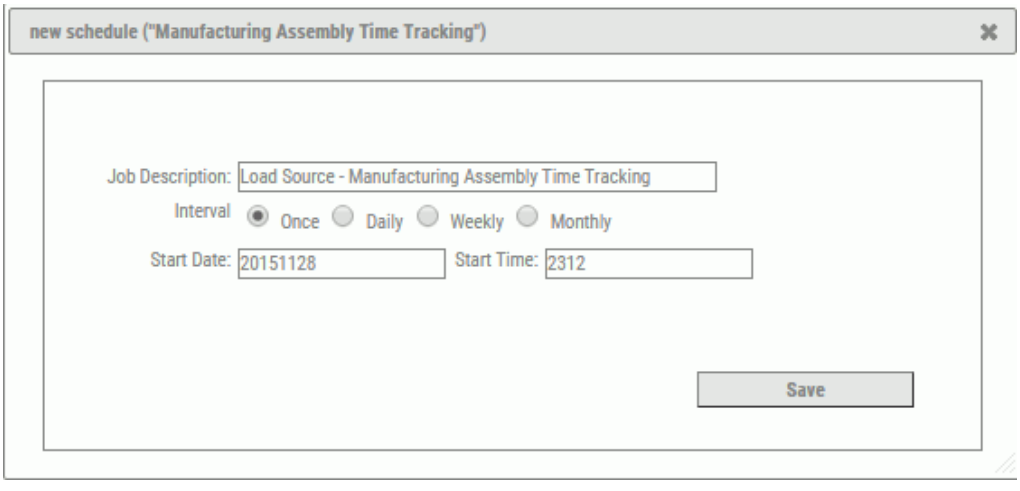
Procedure: How to Schedule Source Loads

To schedule a source load:

1. In the Manage page, click the *Sources* panel button.

2. Select the source you want to schedule.
3. Click *Schedule*.

   The New Schedule panel opens, as shown in the following image.



4. Specify when the schedule should run.
5. Click *Save*.

Setting Measure Access for Users (Owners)

You can use PMF to select the level of access for each dimension that users are allowed to see their measures.

For each user, you can set up measure access by:

- **Owner,** for individual users who need to have their own customized level of access to measures.
- **Access Role,** for multiple users who require the same level of access to measures. If you have a group of users that perform the same job functions, assigning each to the same access role reduces the time it takes to manage measure access.

You can use either of the two access methods listed above, but these methods are mutually exclusive, so you cannot use both.

Note: To set measure access for a specific owner or access role, make sure Row Level Security is enabled (set to Y) in the Edit System Settings panel, which you can access by clicking the *Setting*s panel button in the Manage page. If Row Level Security is not enabled, you cannot set measure access.

Procedure: How to Set Measure Access by Owner

To set measure access levels for a specific owner only:

1. In the Manage page, click the *Owners* panel button and select the desired owner.

   The Edit Owner panel opens. For details, see *General Tab - Owners* on page 366.

2. Select *User Basis* from the Access Security By drop-down menu, as shown in the following image.

3. Click the *Configure Owner Access* button.

   The Edit Access Role panel opens.

4. Using the drop-down menus for each dimension, select the measure level at which you want to limit access for the owner.

   For each level you select, the owner will only be able to view measures at or below that level. If the owner should be allowed to view all measure data for a particular dimension, then select *All* in the drop-down menu for that dimension.

5. Click *Save* when you are finished selecting measure access for the owner.

Procedure: How to Set Measure Access by Access Role

To assign the level of measure access already set for an existing access role:

1. In the Manage page, click the *Owners* panel button and select the desired owner.

   The Edit Owner panel opens. For details, see *General Tab - Owners* on page 366.

2. Select *Role Basis* from the Access Security By drop-down menu.
3. Select an access role to link to this owner from the Access Role drop-down menu.

   The owner is automatically assigned the level of measure access already set for the selected Access Role. For more information about access roles, see *Working With Access Roles* on page 232.

4. Click *Save* when you are finished assigning an access role to the owner.

Specifying Dimensions and Measures

PMF is primarily designed as a way to measure how organizations are doing against their stated strategy. Strategy means many things in the real world, but when it applies to creating scorecards, it specifically refers to the definition of objectives and the description of how they are linked together.

You can determine how an organization is doing against an objective by setting targets for measures and then grading those measures.

As an administrator, you work closely with scorecard authors to set up the scorecard logic and load measures as defined and approved by the strategy committee in your enterprise.

You can always change anything you set up or load into PMF at a later date. Business processes normally change over time, so you will need to change PMF to reflect external changes.

The sections in this topic describe a methodology to ensure that dimensions and measures support the objectives.

PMF Objectives

When you create objectives, remember to make them SMART:

S = Specific

M = Measurable

A = Achievable

R = Results Oriented

T = Time Based

The following table lists and describes in greater detail the principles to follow when creating objectives in PMF.

Principle	Description
S = Specific	Objective must be specific and cannot be vague. An example of a bad objective would be *Do Better*, whereas a good objective is *Improve Sales*. However, you need to define what *Sales* means.

Principle	Description
M = Measurable	Objective must be measurable. If your objective is to improve sales, and there are multiple sales components, such as Sales-Dollars and Sales-Margins, then this objective can be split into two objectives, such as *Improve Sales Dollars* and *Improve Sales Margins*.
A = Achievable	Objective must be controllable. An example of a bad objective is *Reduce Loading Dock Time* when there is no capture of such time. There must always be data to support the objective. On a personnel performance review, a bad objective would ask the staff to achieve a goal that is not under their control.
R = Results Oriented	Objective must indicate actions to achieve a goal. In the sales example, consider *Improve Sales Margins for Q2 2006 over Q2 2005*. This clearly states that there are results that are measurable at the end of the two quarters for comparison.
T = Time Based	Objective must be time-based. In the sales example, consider *Improve Sales Margins for Q2 2006 over Q2 2005 by end of Q2*.

By following the SMART principle when working through the statement of an objective, there will be clear objectives. If any of the components are not clearly formalized in the objective, then finding the measures will not be clear.

PMF Measures

Measures (or *metrics*) are the data component of a scorecard. Each measure should clearly belong to at least one objective and you should be able to answer the following questions for each measure:

- How is the measure calculated? Are you already measuring data for this measure?
- Is the data for the measure available? Is the data regularly updated?
- Where are the data files for the measure located, and do you have access to them?

PMF Dimensions

PMF supports 16 user-configurable dimensions that can go to 16 levels deep, so you can describe complex multi-dimensional structures. There is only one default dimension in PMF, the Time dimension, and multiple Time dimensions are supported.

The following steps are helpful for analyzing your dimensions:

- Ask users to describe how they understand their organization structure. This may relate to their customers, locations, and products.
- Speak to more than one business representative to understand the view of the business. It is important to speak with personnel who know the business.
- Speak with Information Technology (IT) personnel and Database Administrators (DBAs).
- The default Time dimension is built in the data load process by specifying the start and end year values, where the end year is one year ahead of the current year.
- You can create and use an Organization dimension to control data security access across the organization. PMF enables you to filter measures data by specifying for users, or groups of users, the level of data access depending on dimensional values.
- If you create a Customer dimension (which is recommended), consider the following example for a vendor who deals with many clients. Level 1 is the organization or business name and level 2 is the contact name at the customer site.
- Understand how the business is divided geographically.

  Consider a high level break-down of region where there are four regions in the USA and two regions in Canada. From the standpoint of collecting data, decide whether you keep the data in six regions, or two countries with regions as the next level.
- Levels in dimensions must make sense. In a geographical example, in the United States, putting State below City is incorrect.
- Consider systems where there are input capable fields for text entries such as states and provinces. These are highly prone to error and it is better to define a set of accepted names for these states and provinces rather than build a list of names from data that could have many inconsistent spellings.
- For fields that have a large number of possible values, but the data only uses a subset, consider populating that dimension with the content of the data.
- Ensure that the dimensions are available. Either they are in an existing data file or they must be input into a flat file or spreadsheet for loading.

At the end of dimension gathering, an agreement must be reached on the types of dimensions, their levels, and the contents at each level. No loading of dimensions should occur prior to the sign-off of the agreement.

Procedure: How to Create a New Dimension

The following procedure outlines the steps required when creating a new dimension. For information about editing an existing dimension, see *How to Design a Simple Dimension Load* on page 285.

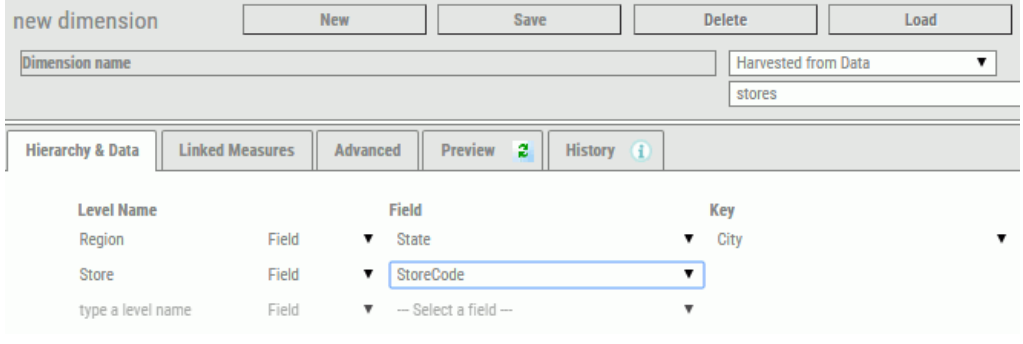
1. In the Manage page, click the *Dimensions* panel button.
2. Click *New*.

   The New Dimension panel opens.

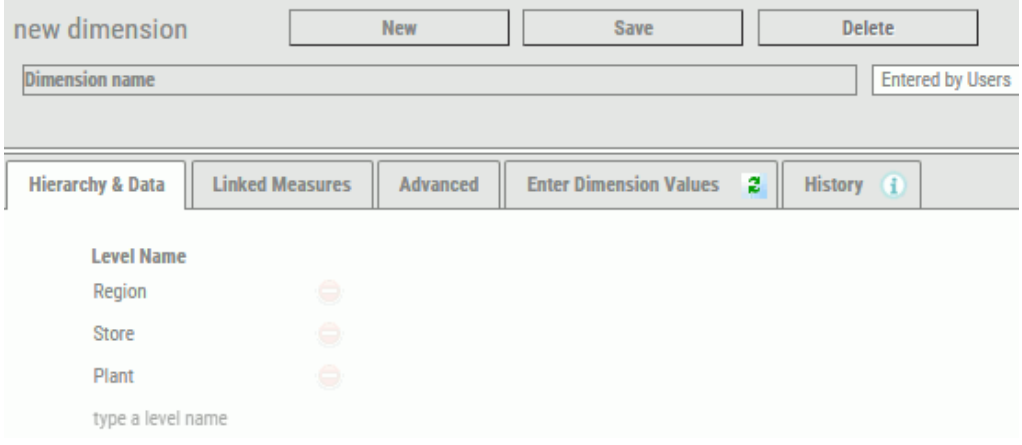
   Note: You can also click *New* in the Edit Dimension panel to create a new dimension.
3. Enter a name for the dimension in the field box.
4. From the drop-down menu, select one of the following options:

   - *Harvested from Data*. Choose this option to immediately start creating a structure from a preexisting data source.
   - *Collected from Users*. Choose this option if you want to create a structure yourself.
5. Do one of the following:

   - If you chose *Harvested from Data*, enter a Level Name and set its properties. As you enter information for each line, a new one opens, as shown in the following image.



- If you chose *Entered by Users*, start by creating a structure in the Hierarchy & Data tab by entering Level names, as shown in the following image.



Click *Save*.

Click the *Edit Dimension Values* tab to set dimension properties for the Levels that were created.

6. Click *Save*.

Procedure: How to Edit a Dimension

1. In the Manage page, click the *Dimensions* panel button.
2. Click the dimension you want to edit in the tree.

   The Edit Dimension panel opens.
3. Using the drop-down lists for each dimension, make your desired changes and click *Save*.

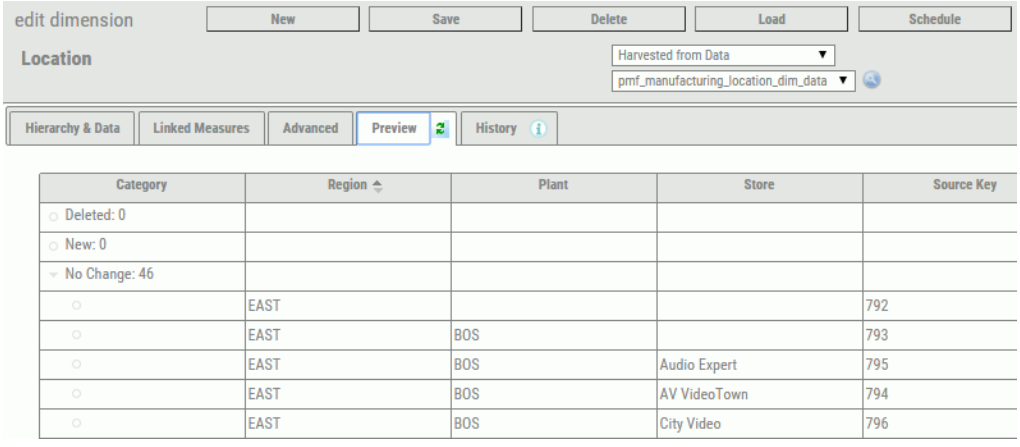
   Note: To change the order of the dimension levels, place the mouse over the dimension you wish to move and use the icon to drag the dimension up or down.

Procedure: How to Preview a Dimension Load

1. In the Manage page, click the *Dimensions* panel button.
2. Click the dimension you want to edit in the tree.

   The Edit Dimension panel opens.

3. Click the *Preview* tab. The Dimension Load information opens, as shown in the following image.



To refresh the Preview contents, click the Refresh icon that is shown on the Preview tab.

Procedure: How to Rename a Dimension

1. In the Manage page, click the *Dimensions* panel button.
2. Click the dimension you want to rename in the tree.

   The Edit Dimension panel opens.
3. Click the dimension name at the top of the panel tab. The field becomes editable.
4. Enter the new dimension name and click *Save*. The dimension is automatically renamed throughout PMF.

Procedure: How to Delete a Dimension

1. In the Manage page, click the *Dimensions* panel button.
2. Click the dimension you want to delete in the tree.

   The Edit Dimension panel opens.
3. Click *Delete*.

   A delete confirmation dialog box opens.
4. Click *OK*.

When a dimension is deleted, all measures that were linked to it have their dimensional linkage deleted. The measure records are automatically re-summarized, and any orphaned extra records are automatically cleaned up.

Note: Re-summarization is a one-time change and cannot be reversed. Once you perform a re-summarization, measure values are now permanently changed. It is strongly recommended that you take a snapshot of your PMF data mart before making this change.

Reference: Dimensions Load History

PMF keeps track of each load that is executed for each dimension in the system, regardless of whether you loaded it manually or the load was called by the scheduler. This data is stored in a special logging section of the PMF data mart.

The History tab on each dimension displays the history of all loads that have been logged.

The history of the dimension shows:

- The dates that the loads ran.
- The count of rows that were retrieved, inserted, updated, and deleted.
- The count of total mismatches that occurred between the source data and the PMF metrics mart. Mismatches are source data rows that do not match to any existing keys for one or more dimensions.
- The count of gaps in data continuity, which indicate the sparsity of the data. This does not mean there are errors, but, if paired with mismatches, can help you debug any unexpected data discontinuities.
- Any messages returned from the load system. If there is an error, the exact error is displayed in the information shown in this tab.

Creating Units of Measure Conversion Profiles

A conversion profile is a group of settings that recalculates measure actuals and targets from one unit of measure to a related unit of measure. Profiles are typically created for international unit conversion, for example, to convert from pounds to kilograms. Administrators can create conversion profiles to enable users to automatically convert their measures and refresh the values displayed in their dashboards and views.

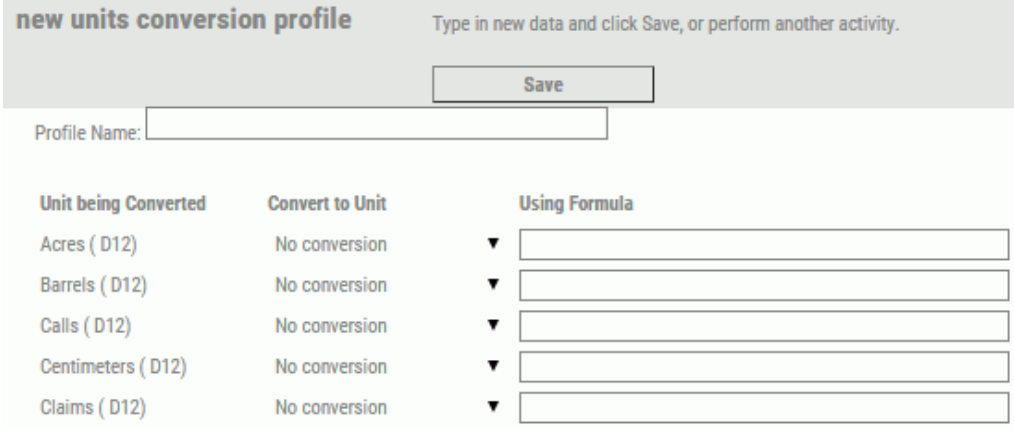
Note: When creating a new conversion profile, make sure you select units of measure that are related. It would not make sense to convert quantities in a unit of measure like euros to those of a unit of measure like incidents.

Procedure: How to Create a Conversion Profile

1. In the Manage page, click the *Units of Measure* panel button.
2. In the Units Conversion folder, click a conversion profile.

   The Edit Units Conversion Profile panel opens.
3. Click *New*.

   The New Units Conversion Profile panel opens, as shown in the following image.



4. Type an appropriate name for the conversion profile in the Profile Name field box.
5. For each existing unit of measure that you want to convert in the new profile, select the desired conversion unit of measure in the Convert to Unit drop-down menu to the right of the existing unit listed in the Unit being Converted column.
6. In the Using Formula input area, enter the conversion formula you want PMF to use to convert each of the existing units to the desired conversion units.

   In the conversion formula, you can use an opening and closing square bracket to represent the unit being converted as shown in the image below. This allows you to just type [] instead of the actual unit name. The use of complex formulas including parentheses and multiple operations is also supported.

7. Click *Save* when you have selected a conversion unit and typed a formula for each of the units being converted.

The new conversion profile will be immediately available for end users.

Procedure: How to Assign a Conversion Profile to an Owner

You can enable owners to perform measure conversion by selecting a unit of measure conversion profile in the Edit Owner panel. To set a default conversion profile for an owner:

1. Click the *Owners* panel button in the Manage page.
2. Select the owner for whom you want to assign a conversion profile.

   The Edit Owner panel opens.
3. In the Units Conversion Class drop-down menu, select an existing conversion profile.

   You can also select *No Conversion* to prevent conversions.
4. Click *Save* after you make your selection.

Planning Considerations for Loading Dimensions

As an administrator, you need to design dimensions that will satisfy the needs of all groups across the organization. You should design dimensions so that you can adapt them in the future, as necessary.

In PMF, metrics cascade from higher aggregated levels down through levels of responsibilities. They allow employees at all levels to track their own progress to see how their work integrates with the overall enterprise strategy. As you plan what levels of dimensionality you will need, think of levels of responsibility rather than levels of analysis and sketch those levels out. You should do this before you use the tools to design how dimensions are physically loaded in PMF. For details about sketching dimension levels, see *Designing a Simple Dimension Load* on page 284.

Analyze all measures to load and make sure that your dimension structure accounts for the different ways your users will want to slice and dice the data.

Before you can load dimensions, you must answer the following questions:

- What linkages do you need to perform for the measures to be used? It is probably a good idea to examine all the measures to be loaded before beginning the process of creating and loading dimensions.
- How deep should each dimension be? If it is a Time dimension, are you planning on measuring years, quarters, and months, or do you need more granular atomic data?
- What data sources and tables contain values you might use to determine dimensions?

- Do you need to perform any calculations to create the levels in your dimensions?

Working With a Dimension Load

The following topics describe dimension related concepts including designing a simple dimension load, interpreting a Dimension Loader report, and running and scheduling a dimension load.

Designing Dimension Loads

The Manage page provides access to the dimensions loaders. These tools are fully integrated into your Administration view. As you load data, you can immediately test new dimensions and measures you have loaded.

Using the loaders, you can do the following:

- Define external data that is retrieved and transformed in PMF.
- Define transformations for the data and create a central view of data to use when loading measures.
- Add FOCUS code to execute MATCH or HOLD commands.

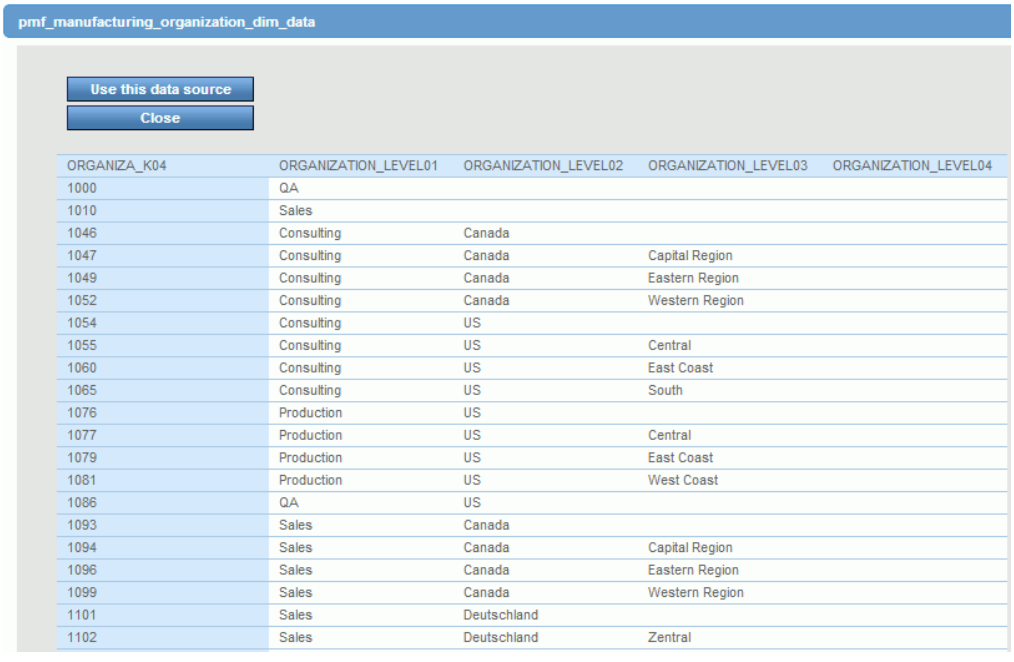
Data loads control all source data used for analysis and aggregation in PMF. When you design loads, you are designing data loads for each measure in the database, and also for the dimensions used to slice and dice the data.

Reference: Sample Data From Source Tables

In the Dimension Loader and Measure Loader, the Sample Data button enables you to view data from any of your source tables. Viewing source table data is useful for determining which fields to use when designing data loads for your measures and dimensions.

To view sample data, select the desired source table data from the Source Table drop-down menu, then click the *Sample Data* button .

Sample Data is displayed in a new browser window, as shown in the following image.



pmf_manufacturing_organization_dim_data

Use this data source

Close

ORGANIZA_K04	ORGANIZATION_LEVEL01	ORGANIZATION_LEVEL02	ORGANIZATION_LEVEL03	ORGANIZATION_LEVEL04
1000	QA			
1010	Sales			
1046	Consulting	Canada		
1047	Consulting	Canada	Capital Region	
1049	Consulting	Canada	Eastern Region	
1052	Consulting	Canada	Western Region	
1054	Consulting	US		
1055	Consulting	US	Central	
1060	Consulting	US	East Coast	
1065	Consulting	US	South	
1076	Production	US		
1077	Production	US	Central	
1079	Production	US	East Coast	
1081	Production	US	West Coast	
1086	QA	US		
1093	Sales	Canada		
1094	Sales	Canada	Capital Region	
1096	Sales	Canada	Eastern Region	
1099	Sales	Canada	Western Region	
1101	Sales	Deutschland		
1102	Sales	Deutschland	Zentral	

Tip: To avoid connection errors when designing a load, you can use the Sample Data button to test the selected data source to make sure it has been set up correctly.

Designing a Simple Dimension Load

As you load dimensions, ensure that the metrics in PMF show the correct level of responsibility in the hierarchy. The Dimension Loader tools allow you to quickly map the tables and fields that will serve as the source for the dimensions you will need to load.

The Dimension Loader controls the levels for dimensions used throughout PMF. When you first create a new dimension, determine its logical levels. For example, a Customer dimension might include country, region, state, and city.

The mainstreet_century data mart supplied with PMF uses four typical business dimensions: Location, Organization, Product, and Time. All PMF applications must include a Time dimension.

Important: If you have existing measures, and dimensions are loaded or reloaded, changing this information has a ripple effect throughout the system, so make changes carefully. If you change the intended value member or number of levels in any dimension, you will probably need to reload all data for that dimension, as well as reload all measures.

Procedure: How to Design a Simple Dimension Load

Note: If your procedures and metadata are not located in the Mainstreet application, make sure you have added the WebFOCUS application containing them to the WebFOCUS Reporting Server APP PATH setting before you attempt a load operation. You can do this using the Web Console.

The following procedure outlines the steps required when designing a simple dimension load. For information about designing a complex dimension load when customizing the Time dimension, see *Designing a Custom Time Dimension Load* on page 295.

1. In the Manage page, click the *Dimensions* panel button.
2. Click a dimension, for example, *Organization*.

   The Edit Dimension panel opens.

   Note: The Dimension Loader automatically loads and displays the levels defined for the metadata and checks the dimension to make sure it is correctly set up. If anything is wrong, the Load status list displays the error.
3. From the first drop-down menu, select one of the following options:

   - *Harvested from Data*. Choose this option to immediately start creating a structure from a preexisting data source.
   - *Collected from Users*. Choose this option if you want to create a structure yourself.
4. From the second drop-down menu, select a source table or Master File for the dimension.
5. In the Level Name field, type a dimension level name for each dimension you add.

   Note: To change the order of the dimension levels, place the mouse over the dimension you wish to move and use the icon to drag the dimension up or down.
6. From the drop-down menu, select *Top*, *Field*, or *Define*.

   Note: This field is only available if you have selected the *Harvested from Data* option from the first drop-down menu.

7. Do one of the following:

   - If you selected *Top* from the drop-down menu, in the Field box, type the name you want to display as the top-level dimension value (for example, Company-wide or All). You will most likely want to add a new level above all existing levels before using the Top option.
   - If you selected *Define* from the drop-down menu, type the code in the Field box. Code can span multiple lines, and this field can only display one line of code at a time.

     To view, and optionally edit, multiple lines of code displayed at the top of the Dimension Loader, click the *Edit* button. Click the *OK* button to save any changes, otherwise click the *Cancel* button.
   - If you selected *Field* from the drop-down menu, select a field from the Field drop-down menu.

   Note: Whenever you make any changes in the Dimension Loader, the changes will not be effective until you save the changes and load the dimension and any associated measures.

Reference: Dimension Loader Options

When you design a dimension load, the following options are available in the Dimension Loader.

Option	Description
New	This button opens a new Dimension loader.
Save	This button saves metadata information for this dimension. You must save any changes you make before you can perform a dimension load.
Load	This button performs the dimension load. Use this to load dimensions after you add new or edit existing information in the Dimension Loader.
Delete	This button deletes the selected dimension.
Schedule	This button opens the Dimension Load Schedule panel where you can schedule a one-time or recurring dimension load. For more information, see *Running and Scheduling a Dimension Load* on page 290.

Option	Description
Sample Data	This button displays a report in a new browser window, showing sample data for the source table you selected in the Source Table drop-down menu. For more information, see *Sample Data From Source Tables* on page 283.
Advanced Tab	
Description	This button opens a field box in which you can type a description of the dimension load. Click *OK* to save the description or *Cancel* to close the field box without saving your changes.
Dimension Type	Shows the dimension type, as well as the Internal MFD number of the Dimension in the system.
Default Level	Select the dimension level that will be automatically displayed for the dimension. The available options are *Region*, *Plant*, and *Store*.
Dimensional Tolerances (check box)	Selecting this check box activates dimensional tolerances for this dimension. This enables you to select a measure and configure tolerances for each dimension level value. **Note:** This option will only be available if Dimensional Measure Tolerances in the Tolerances settings is enabled. For more information, see *How to Set Dimensional Measure Tolerances* on page 288.
Dimensional Weighting (check box)	Selecting this check box activates dimensional measure-to-objective weighting for this dimension. This enables you to select an objective and configure tolerances for each dimension level value. **Note:** This option will only be available if Dimensional Measure Weights in the Tolerances settings is enabled. For more information, see *How to Set Dimensional Measure-to-Objective Weighting* on page 289.
Distinct Count Aggregation (check box)	Enable this option to allow aggregate measure values with distinct Dimension counts for higher-level aggregation.
If data changes	

Option	Description
Also use surrogate keys (check box)	
Prefix Code	In the field box type FOCUS or SQL code that will run before the dimension is loaded. Click *OK* to save the code or *Cancel* to close the field box without saving your changes. If the table you are using is DBA protected, you can type the command SET USER = *user_DBA_ password* before you select the source table. For example, the sample Century Corp data uses the password WEBFOCUS.
Preview Tab	
	This tab runs and displays the Dimension Loader report in the *Data for* tab of the Dimension Loader. This report shows you how the load will be performed. For more information, see *Interpreting the Dimension Loader Report* on page 290. **Note:** You must select at least a Level 1 field in order to activate this option.

Note: As you load dimensions, make sure to document them in the Description field box.

Setting Dimensional Measure Tolerances

Dimensional measure tolerances enable you to set different measure tolerances for different dimension levels. Setting dimensional measure tolerances controls how threshold and flex values are applied to percent reached values in measure calculations. This functionality enables you to vary targets and the amount of difference from targets for each level in a dimension. By default, PMF uses global measure tolerance settings unless you have set tolerances for specific measures at specific dimension levels.

Procedure: How to Set Dimensional Measure Tolerances

1. In the Manage page, click the *Dimensions* panel button.
2. Select the desired dimension.

   The Edit Dimension panel opens.

3. Select the *Advanced* tab.
4. Select the *Dimensional Tolerances* check box to activate dimensional measure tolerances for this dimension.
5. Click *Save*.
6. Click the *Measures* panel button (in either the Manage or Author page).
7. Select the desired measure to set tolerances at different dimension levels.
8. Click the *Tolerances* button to open the Dimensional Tolerances panel.
9. Configure tolerances for each desired dimension level.
10. Click *Save*.

Setting Dimensional Measure-to-Objective Weighting

Dimensional measure-to-objective weighting enables you to set different weighting values for different dimension levels. Weighting determines the proportional contribution of measures linked to an objective. This functionality enables you to vary the degree each linked measure contributes to an objective at specific dimension levels. By default, PMF uses global dimensional weight settings unless you have set specific objective weighting at specific dimension levels.

Procedure: How to Set Dimensional Measure-to-Objective Weighting

This functionality is only available for new dimensions created in PMF Release 5.

1. In the Manage page, click the *Dimensions* panel button.
2. Select the desired dimension.
3. Click the *Advanced* tab.
4. Select the *Dimensional Weighting* check box to activate dimensional measure-to-objective weighting for this dimension.
5. Click *Save*.
6. In the Author page, click the *Objectives* panel button.
7. Select the desired objective to set weights at different dimension levels.
8. Click the *Adjust Measure Weights* button to open the Measure Weights panel.
9. Configure weights for each desired dimension level.

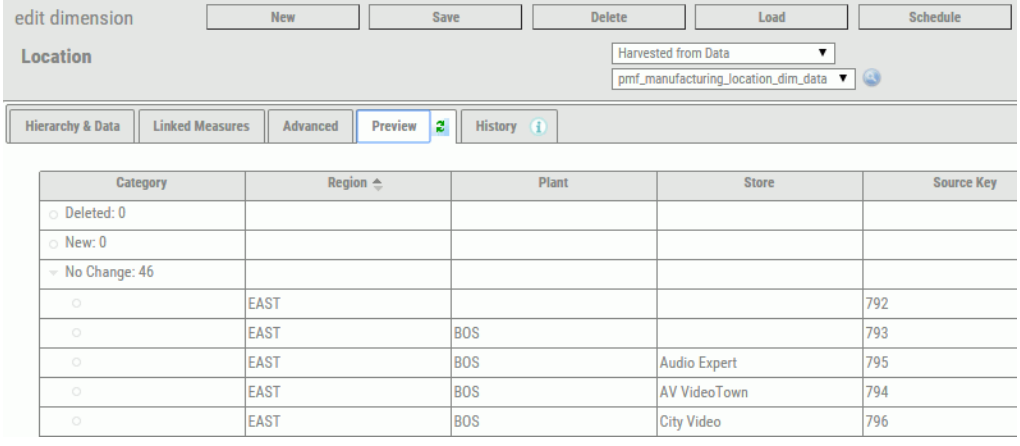
   Use the sliders or type in weighting values. Weights must total exactly 100%.
10. Click *Save*.

Interpreting the Dimension Loader Report

After you have designed the dimension load, click the *Preview* tab to open the preview of the Dimension Loader report.

Note: You must select at least a Level 1 field in order to activate the Preview option.

The following is an example of the Dimension Loader report.



Category	Region	Plant	Store	Source Key
Deleted: 0				
New: 0				
No Change: 46				
	EAST			792
	EAST	BOS		793
	EAST	BOS	Audio Expert	795
	EAST	BOS	AV VideoTown	794
	EAST	BOS	City Video	796

The Dimension Loader report displays the hierarchy of dimension values to be loaded. The report compares data to be loaded to what is already loaded so you can tune Dimension loads. The report shows you the changes you will make when you load the new data.

Minus (-) signs appear next to records to indicate that the records will be deleted. Plus (+) signs appear next to records to indicate that the records will be added. If a record does not have a plus or a minus sign, it means that the record already exists for the dimension. You can sort on the signs so that the records appear in ascending or descending order.

After you are finished tuning the dimension load and are satisfied that the data to be loaded is correct, click *Save* to save the metadata. You cannot perform a new dimension load unless the metadata has been saved. However, you can load an existing dimension load provided no changes have been made since the last time it was run. If changes are made, save the changes first, then load the dimension.

Running and Scheduling a Dimension Load

After you have designed, tuned, and saved your dimension load, you can load the data by clicking the *Load* button in the Dimension Loader. A message appears, informing you that the dimension you loaded is completed (for example, Dimension successfully loaded).

You can automatically run a saved dimension load during specified time intervals using ReportCaster.

Procedure: How to Schedule a Dimension Load

1. In the Dimension Loader, click the *Schedule* button.

   For the dimension you selected, for example, Location, the New Schedule panel opens.

   Note: The New Schedule panel generates Interval, Start Date, and Start Time values based on the values you specified for the load. The schedule is active, by default. You can edit these values as needed.

2. Optionally, enter a new Job Description and specify new Interval, Start Date, and Start Time values. You may be prompted for additional information, depending on the interval you select.
3. Click *Save* to save the new schedule.

For information on editing a saved schedule, see *General Tab - Schedules* on page 366.

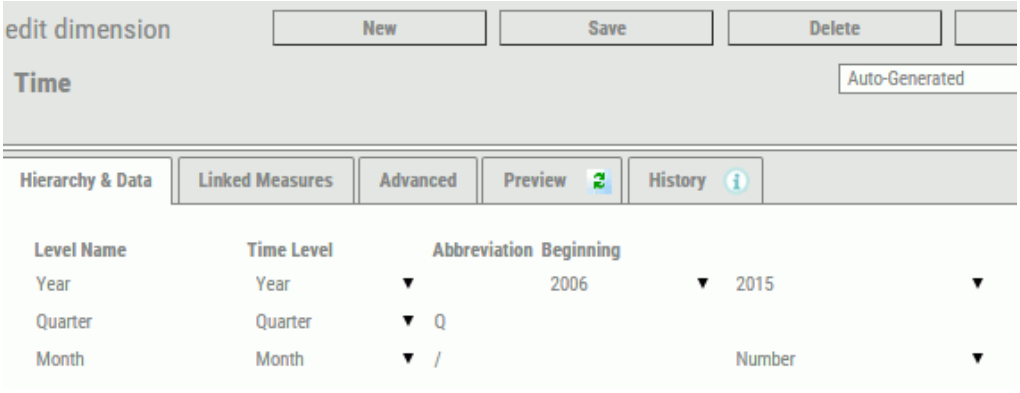
Setting Up the Month Name Display in the Time Dimension

You can control how PMF displays the values for months, text, or numeric labeling (for example, Jan… Feb, or January… February, and so on), and the order these components display (for example, 2009/December or December/2009).

Month Names to be displayed are actual data that is stored in the PMF data mart. To set up Month Name display, you can use the Dimension Loader for the Time Dimension.

Procedure: How to Set Up Month Name Display in the Time Dimension

1. On the Manage page, click the *Dimensions* panel button, and then click the *Time* Dimension. PMF displays the Edit Dimension panel for Time. The example below shows the typical configuration for Time (using Time AutoGen):



2. In the Month Display drop-down menu, select an option from the table list below:

Option	Description
Number (default)	Displays the month as (most typically) a two-digit number.
Abbreviation After Year	Displays the month as a name, using the standard three-character abbreviation for the month (for example, Jan, Feb, Mar, and so on). Position the month name after the Year (for example, 2009/Jan, 2009/Feb, 2009/Mar, and so on). **Note:** If you are using PMF configured for another language other than English, the length of the Abbreviation could vary, or be the same as the full length.

Option	Description
Abbreviation Before Year	Displays the month as a name, using the standard three-character abbreviation for the month (for example, Jan, Feb, Mar, and so on). Position the month name before the Year (for example, Jan/2009, Feb/2009, Mar/2009, and so on). **Note:** If you are using PMF configured for another language other than English, the length of the Abbreviation could vary, or be the same as the full length.
Full Name After Year	Displays the month as a name using the long version of the name of the month (for example, January, February, March, and so on). Position the month name after the Year (for example, 2009/January, 2009/February, 2009/March, and so on). **Note:** If you are using PMF configured for another language, the length of the Full Name could vary, or be the same as the Abbreviation.
Full Name Before Year	Displays the month as a name using the long version of the name of the month (for example, January, February, March, and so on). Position the month name before the Year (for example, January/2009, February/2009, March/2009, and so on). **Note:** If you are using PMF configured for another language, the length of the Full Name could vary, or be the same as the Abbreviation.

Note: The position you select does not affect how the dates sort in any PMF Views or Gadgets.

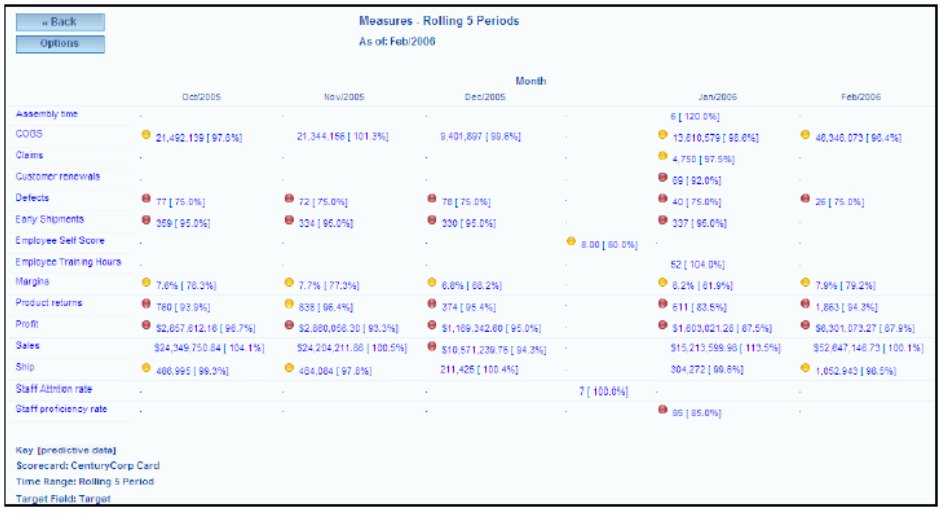
3. If you are using an alternate Time Dimension layout (for example, Years/Months/Weeks, Years/Quarters/Months/Weeks), you will see another option called Month Level. For this option, tell PMF the level in the Time Dimension that represents Months, so that PMF can determine where the name or number is to be displayed.

4. Click *Save*, and then click *Load* to reload your Time Dimension and populate it with display month values as you indicated in the Time Dimension configuration. Once you do this, you will see the Month Name option displayed on all PMF Views and Gadgets.

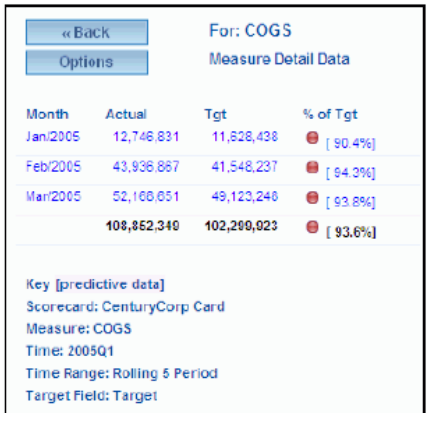
Example: Month Names in PMF Views

After you have configured Month Name display, Month Names display in your PMF Views and Gadgets the way you have configured them, as shown in the following examples. The following examples use the data from the PMF manufacturing demo data mart.

Rolling 5 Periods. The following is an image which displays View drilled to Month level, with the current date set to Feb 2006.



Measure Details. The following is an image which displays the Month Names of the Measure Details drill for 2005/Q1.



Designing a Custom Time Dimension Load

Time dimensions provide time-based views of your data. PMF has default Time dimensions that are available, or you can create custom Time dimensions. The Dimension Loader enables you to specify a custom Time dimension that supports any regular or irregular time period, which can be greater than or less than 12 months. You can specify custom start and end dates for each period, and you can choose between weekly or monthly rollups at the lowest dimension level.

As of Performance Management Framework 5.1.3, up to five levels of logical Time are supported. This provides you with the ability to create a Time Dimension that goes down to display more detail as needed.

You can specify Time in many more flexible ways. You can split Time at up to six levels. For example, you could create a calendar that specifies weeks, months, quarters, half-years, and years.

Some examples of possible configurations include:

- Year/Quarter/Month/Week
- Year/Period/Week
- Year/Semi-Year/Quarter/Month

To configure PMF to support more Time levels, follow the same directions as you would for Alternate Time Dimensions in the PMF documentation. The Time Dimension Loader will allow you to specify up to five levels. You will need to build and deploy your Calendar file to contain the specific dates that map to your Time Dimension levels.

Time dimensions must be three levels, and can represent the standard Y/Q/M (Year/Quarter/Month) time structure, or any other non-standard time structure.

You can configure any arbitrary custom calendar, regardless of regularity, where you define the three-level Time dimension and the trending time parameters. PMF automatically generates the Time dimension values and adjusts inbound dates for measures to map to the correct fiscal periods you specified. If you are setting the default Today date to use the system clock date, PMF automatically maps the current system date to the correct fiscal time period when you run views.

Examples of custom fiscal calendars include the following:

- A 12-month, 4-quarter July-June calendar in the Y/Q/M structure.
- A 12-month, 3-trimester January-December calendar in the Y/T/M structure.
- A 13-period calendar structured as 13 periods of 4 weeks each per year.

If you select a start month other than January, for example, April, then month 01 of the calendar would be April, month 02 would be May, and so forth. The fiscal year of a custom calendar is the calendar year of fiscal month 12. If April of 2006 is month 01, then April is treated as month 01 of fiscal year 2007, since month 12 is March 2007.

PMF can create almost any arbitrary three-level Time dimension provided that the data is properly defined in an accessible data source. Non-standard Time dimensions can be either regular or irregular. A regular Time dimension always has the same number of lower level entries for each and every upper level entry.

If your year is structured into 13 fiscal periods and every fiscal period always has exactly 4 fiscal weeks, then your data is regular. If you occasionally have a fiscal year with 14 fiscal periods or a fiscal period with 5 fiscal weeks (which can happen in situations where you need to adjust for extra days in the year), then your data is irregular.

PMF can work with both regular and irregular calendars. Irregular calendars require you to set up a custom data source that details how the calendar works.

Creating a Custom Time Dimension From an External Data Source

PMF can create a custom Time dimension from an external data source, provided that the external data source is accessible to the PMF environment and is properly configured. The WebFOCUS adapter must be set up to access the external data source before mapping the dimension.

The external data source can contain regular or irregular time data. PMF determines regularity or irregularity by inspecting the data. If the time data is regular, PMF computes the prior time periods automatically. PMF defines a prior time period as a time period with identical second and third-level values when the year (first level) is one year earlier. If the time data is irregular, you must add prior time period information to the time source. For example, if you have a custom calendar with 53 weeks, PMF cannot determine how to map a 53-week year onto the prior 52-week year, and you must define the prior time period information in the source data. If PMF determines that data is irregular and prior date information is missing, the system issues an error message.

All fields and data values must be the same length, in alpha format. For example, if the source data has single digit low values and double digit high values, the single digit values must have leading zeros to make the values equal in length.

The external data source must be a standard WebFOCUS Master File located in the WebFOCUS application path (APP PATH). The following fields must be defined in the WebFOCUS Master File for both regular and irregular Time dimensions.

Field Name	Description
TIME_KEY	Key field used to join to the measures source data.
TIME_LEVEL01_VALUE	Data value of the first level in the Time dimension hierarchy.
TIME_LEVEL02_VALUE	Data value of the second level in the Time dimension hierarchy.
TIME_LEVEL03_VALUE	Data value of the third-level in the Time dimension hierarchy.
START_DATE	Calendar date of the first day of the time period.
END_DATE	Calendar date of the last day of the time period.

The following fields must be defined in the WebFOCUS Master File for only irregular Time dimensions.

Field Name	Description
PRIOR_TIME_LEVEL01_VALUE	Data value of the first level of the prior period.
PRIOR_TIME_LEVEL02_VALUE	Data value of the second level of the prior period.
PRIOR_TIME_LEVEL03_VALUE	Data value of the third-level of the prior period.

Reference: Sample Files Containing External Time Data

The PMF sample data directory includes examples of external time data. The following five (.csv) sample files include Master File definitions and comma-delimited data files: time_source_reg1, time_source_reg2, time_source_irreg1, time_source_irreg2, and time_source_irreg3.

If you want to use these sample files, you must add the appropriate WebFOCUS FILEDEF statement into your WebFOCUS profile. In addition, you must use the alternate Master File definitions for the source of the measure data (centord) for the sample measures. Examples of the appropriate code to use are contained in the following source files: centord_reg1, centord _reg2, centord _irreg1, centord _irreg2, and centord _irreg3.

Procedure: How to Load a Non-Standard Time Dimension From a Custom Data Source

Once you have correctly set up a non-standard Time dimension data source, perform the following steps to load the time data into the PMF database.

1. From the Manage page, click *Dimensions*, and then select the *Time* dimension to access the standard Time dimension load panel.
2. From the first drop-down menu, select *Harvested from Data*.
3. From the second drop-down menu, select the Master File containing your custom Time dimension data.

   The panel displays the default settings for the custom Time dimension.
4. Click the *Sample Data* button to verify that your custom time data is correct.
5. From the Key Field drop-down menu, select the key field which links the Time dimension source data to your measures source data.
6. Supply a Level Name for each of the time levels. The default names are Year, Quarter, and Month.

   These names are displayed on most standard views.
7. To map each time level to a field in the source data file, confirm that *Field* is selected from the Source drop-down menu (the default), then select *TIME_LEVELnn_VALUE* from the Field/Define Code drop-down menu, where *nn* represents the level number.
8. Click the *Preview* button to display the data to be loaded. For more information, see *Interpreting the Dimension Loader Report* on page 290.
9. Click the *Save* button to save the dimension metadata in the database.
10. Click the *Load* button to load the dimension data into the database.

Displaying Custom Time Dimension Data

For standard Time dimension data in the Y/Q/M (Year/Quarter/Month) format, PMF displays quarterly data in the format *yyyy*Q*q*, where *yyyy* is the four digit year, and *q* is the actual quarter number, for example, 2006Q1. PMF displays monthly data in the format *yyyy/mm*, where *yyyy* is the four digit year, and *mm* is the actual month number (for example, 2006/01). Note that the letter Q in the quarterly data example, and the forward slash in the monthly data example, were assigned using the Abbr. column in the Dimension Loader for the Time dimension.

For non-standard Time dimension data, you can choose alternate abbreviations of up to 5 characters for each level, or you can leave them blank. For standard Y/Q/M time, when you are displaying information at the monthly level, there is no need to display the value of the quarter. Months 01-03 are quarter 1, months 04-06 are quarter 2, and so on. However, in other situations, the value of the second level might not be obvious. For example, if you are using 13 fiscal periods and 52 weeks in the year, it may not be obvious that week 45 is in fiscal period 12. In these situations, you have the option to always display the second level when viewing at the third-level, by selecting the check box in the Req. column for time level 2 in the Dimension Loader for the Time dimension.

If PMF determines that time level 3 has repetitive information and the combination of time level 1 and time level 3 is not unique, then time level 2 is automatically required for all views. In these situations, the Req. check box is activated, by default, and is not displayed in the Dimension Loader for the Time dimension.

Accessing Custom Time Dimensions in the Measure Loader

After you create a custom calendar, the Dimensions tab of the Measure Loader displays the custom time levels you entered when you specified a custom time source. In most situations, the Measure Loader determines the time values from a custom time source, and PMF automatically calculates the measure date from the Time dimension. In the Field maps tab of the Measure Loader, the Date Mapping drop-down menu displays the correct selection automatically.

Setting Up a Distinct Count Dimension

Distinct Count Aggregation for measures allows count-oriented measures to avoid the double-counting problem. This would most typically happen in cases such as:

- **Flag Type Measures.** These represent on/off states for a property, such as *how many employees have filed their expense statements?* or *how many trucks are current on inspections for this year?* They count how many occurrences are true, or in the case of percentages, display the percent of the entire population that are true. Because the same actual flag can appear multiple times across other dimensions, when rolling up on the Time Dimension, if you did not have a distinct count capability, you would unintentionally double-count the same property.
- **Event Measures.** These count events or the presence or absence of people, equipment, and so on. Because the item or person may be there one week or month, and then return, or stay at the same place for an entire period of time, when aggregating at higher levels of time, you would double-count the same property. An example is hospital stays. A single hospital stay can cross time boundaries, so when rolling up on the Time dimension you would only count each stay once for a particular patient. However, if a patient has another hospital stay within a time frame, then that is a new event that has to be counted separately from the first event.

Distinct Count measures use a special dimension that is otherwise hidden from end users. During measure loads, PMF uses the special dimension to differentiate the counted values and ensure no double-counting when summing values that match along that dimension.

Inputting User-Entered Dimensions

User-entered dimensions enable users to create and use dimensions in PMF before loadable dimension data is available. Similar to user-entered measures, once a user-entered dimension is defined values can be immediately typed directly into PMF for your dimensions.

User-entered dimensions are useful when you need to rapidly prototype new engagements with PMF. Since these values are linked to measures through internal keys, they are not suitable for production environments.

Limitations of User-Entered Dimensions

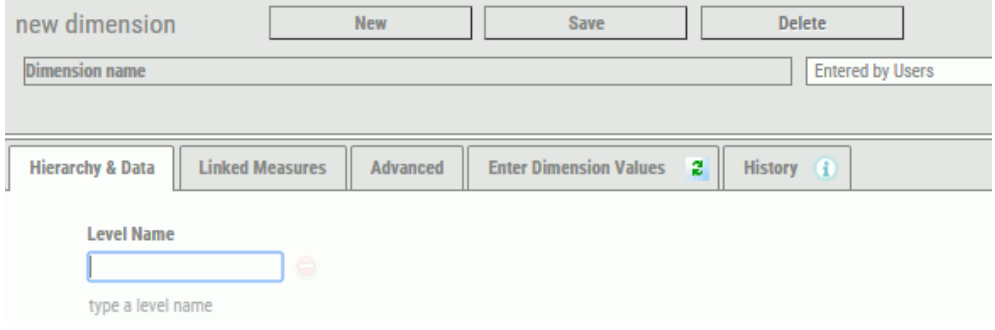
- It is not possible to link user-entered dimensions to loadable measures, but you can link them to user-entered measures with no issues.
- After loadable dimension data becomes available, you should load your dimension data and reload any linked measures, since keys will now be available to link the two.

Note: User-entered measures must be re-entered as well.

Procedure: How to Create a New User-Entered Dimension

1. In the Manage page, click the *Dimensions* panel button.
2. Click *New*.

   The New Dimension panel opens.
3. Type a name for the new dimension and select *Entered by Users* from the drop-down menu, as shown in the following image.



You can create a structure in the Hierarchy & Data tab by entering Level names in the fields provided.

Procedure: How to Edit Level Values on a User-Entered Dimension

1. In the Manage page in PMF, click the *Dimensions* panel button.
2. Select the user-entered dimension you wish to edit.

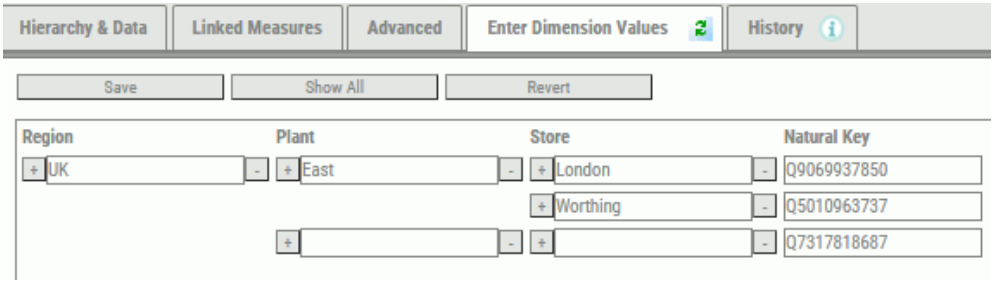
   The Edit Dimension panel opens.
3. Select *Enter Dimension Values*.

   Note that each column in the editor corresponds to a level, as defined in the dimension panel. You can type the level values in each text box, as shown in the following image.

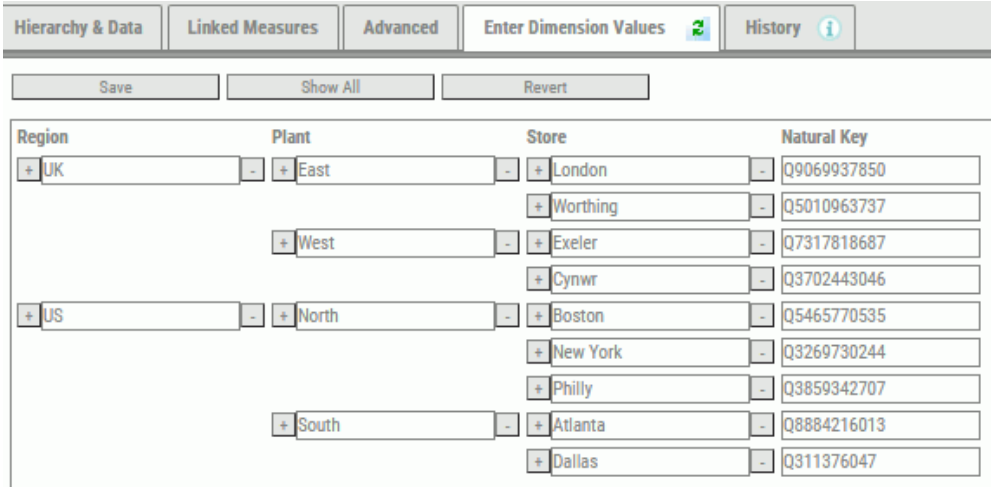
Reference: Work with Hierarchies

The Enter Dimension Values tab from the Edit Dimension editor allows you to add values to the dimension at any level.

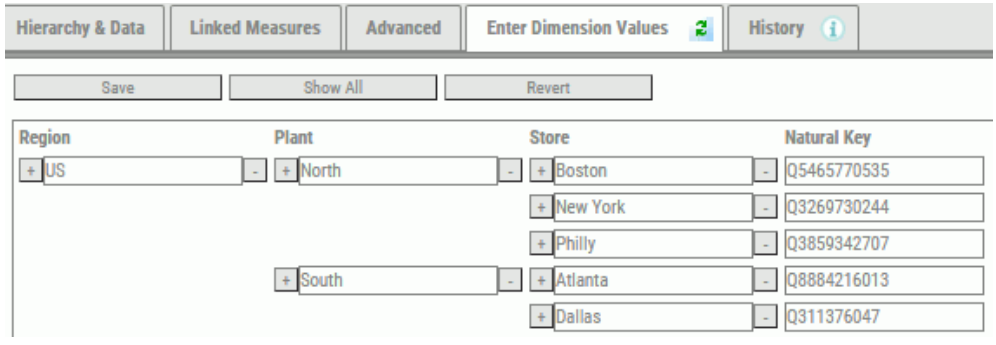
- **To add a level value at a peer level.** Click the add icon + to the left of an existing level value. The editor will create a new level value below the existing one. New peer levels were created under London and East, as shown in the following image.



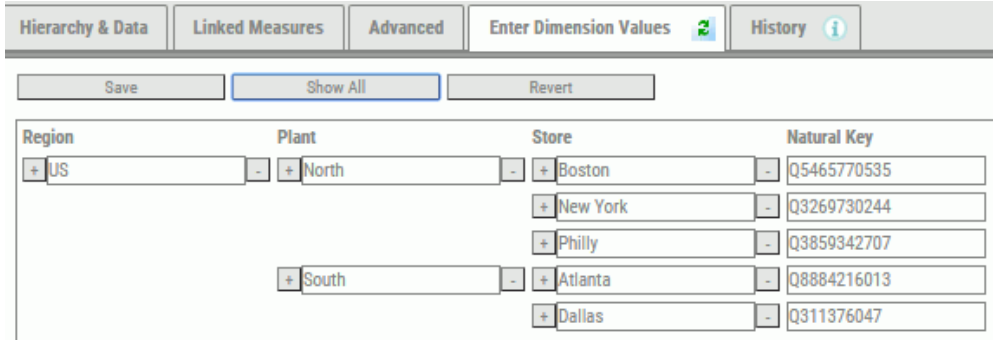
- **To remove a level value at a peer level.** Click the remove icon - to the right of an existing value. The entire hierarchy section of that value will be removed. For example, the following image shows a hierarchy in levels.



Removing the values of UK result in that entire section of hierarchy getting removed, as shown in the following image.



- **Displaying all logical values.** Click *Show All* to temporarily display all of the level values in the hierarchy, as shown in the following image.



Editing Existing Loaded Dimension Values

Existing loaded dimension values can be edited, which enables you to temporarily change the displayed values for any loaded dimension. This is designed to support demonstrations or prototypes.

Limitations:

- This feature should primarily be used when prototyping or demonstrating a PMF system. It is not recommended to be used with a live loaded dimension, since any edits made will be overwritten after a load is performed. This occurs because the source data from which the dimension was loaded will not be changed when you perform these edits.

- ❑ Levels and rows cannot be added or removed. This is due to the fact that any measure data that was previously loaded would be deleted since its physical keys get lost.

Procedure: How to Change a Loaded Dimension to be User-Entered

1. In the Manage page in PMF, click the *Dimensions* panel button.

   Select the dimension that you wish to change. The Edit Dimension panel opens.
2. Select *Collected from Users* from the drop-down menu.
3. Click *Save*.
4. Click *OK*.
5. Click the *Enter Dimension Values* tab to edit the level values of the dimensions. For more information on how to do this, see *How to Edit Level Values on a User-Entered Dimension* on page 301.

Note: Clicking *Unlock Panel* will turn the dimension into a standard user-entered dimension. Doing so will permanently break any links with existing loaded measures. The dimension will then only be able to link to user-entered measures. Also, any existing user-entered measures might need to be re-entered, depending on the changes that were made.

Planning Considerations For Loading Sources

Before creating a new measure, you need to find out:

- ❑ What are the source data tables and DBMS for the measure?
- ❑ What fields do you need from the tables to perform this load?
- ❑ What will be the unit of measure?
- ❑ What dimension linkages do you need to consider?
- ❑ What temporary fields (if any) will be created, such as sort fields for measures and joined field definitions for defined dimensions.

Critical fields for measures are:

- ❑ Target (real field or calculated from real field)
- ❑ Actual (real field or calculated from real field)
- ❑ Now date (real field or calculated from real field)
- ❑ Owner

- Dimensional links
- Scorecard links
- Time (will be linked using the Now date)

Working With Ratio and Percent Type Measures

If you have ever tried to aggregate percentages or other results of statistical methods, you may have noticed that it is not possible to accurately aggregate percent or other ratio type metrics. For example, if you have percentage results for defects per thousand for Charlotte at 20% and Toronto at 10%, you cannot simply add the percentages together to get an aggregate of 30%. To aggregate ratios or percentages correctly, PMF performs the following steps for you:

1. Separate the numerator and denominator components for each individual measure.
2. Add all numerators together.
3. Add all denominators together.
4. Apply the appropriate calculation method to the aggregated numbers.

Note: Percent and ratio type measures use separate numerator and denominator fields to let you store and correctly aggregate measures.

Working With Measures

As of PMF 5.3.2, there is a completely new way to assemble measures through a new user interface, with a new and simpler way to approach measures:

- Measures report just as they did before. The PMF Measure cube is unchanged. Your existing custom reports work the same as in earlier versions of PMF 5.
- The Actual and Target components of measures are now copied directly from datapoints, which are like database fields, but with both rows and dimensions in their structure.
- When linking datapoints, your measures automatically inherit the dimensionality of the summation of all their linked datapoints.
- Defining measures is now a quicker and easier process, because you no longer have to define dimensionality. You define dimension links when you make loadable and user-entered sources or when you create derived or generated datapoints.

The Measure Panel

The Measure panel organizes the properties of a measure by common tasks and concepts. It combines all the functions that were formerly on the legacy Measure panel (mostly found on the Info and Controls tab), and the legacy Measure Loader tabs. Everything that was previously on the Dimensions, Field Maps, Filters, and Preview tabs has been changed. The Dimensions, Field maps, and Filters tabs have been removed entirely. This is now done in sources and datapoints, which control dimensionality and how data is harvested when it is loaded, typed in by end users, or generated.

The Link/Unlink Objectives (link objectives to measure) panel was replaced by the Scorecards panel. The Objective Weighting panel is still available as a drill from the Measure panel. You can weigh your measures to objectives and risks using the Objectives panel, depending on if you work top-down or bottom-up.

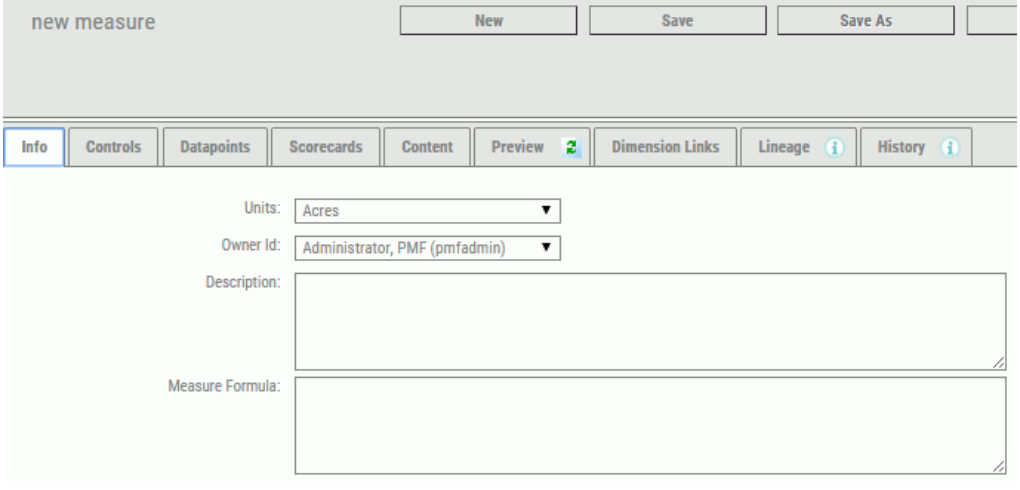
If any dimensions are configured for dimensional tolerances, you can set them up with the Dimensional Tolerances tab.

Procedure: How to Create a New Measure

To create a new measure:

1. In the Manage page, click the *Measures* panel.
2. Click *New*.

   The New Measure panel opens, as shown in the following image.



3. Name your new measure and fill in the fields in the Info tab. The following options are available:

   Units

   The unit of measure used for this measure.

   Owner Id

   The owner ID currently assigned to the measure. You can reassign the measure to a different owner by selecting it from the drop-down menu.

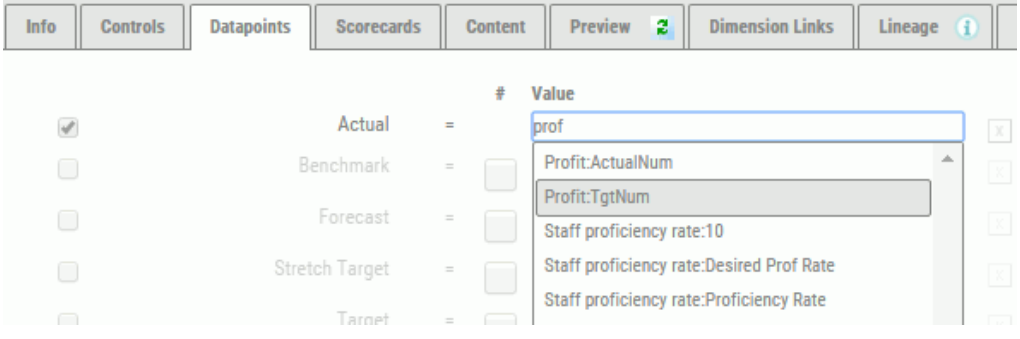
   Description

   An intuitive description of the data loaded into the measure.

   Measure Formula

   A technical description of the measure, such as its datapoints, calculation methods, or source fields.

4. Click the *Datapoints* tab to link datapoints to the measure, as shown in the following image.



Manually enter or select datapoints to bring in the datapoints that feed this measure. A datapoint can be specified for the Actual field.

For the Target field, you can:

- Choose a datapoint for any target (Target, Benchmark, Forecast, or Stretch Target).
- Define a simple universal numeric target for any target, such as Target, Benchmark, Forecast, or Stretch Target. To do this:
  1. Select the *Target* check box.
  2. Select the # check box.
  3. Enter the target, as shown in the following image.

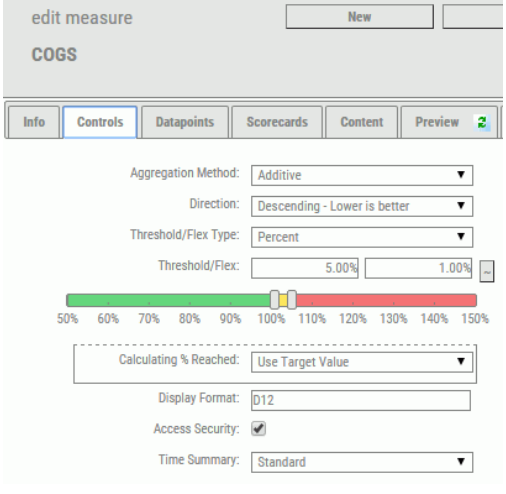
5. Click *Save*.

Procedure: How to Set Measure Controls

By default, all measures are ascending, have preset tolerances, and have a default display format. All of these settings can be changed in the Controls tab.

1. In the Manage page, click *Measures*.
2. Select the measure you want to change.

   The Edit Measure panel opens.
3. Click the *Controls* tab, as shown in the following image.



The following options are available:

Aggregation Method

A method you can use when aggregating this measure. Choose from Additive, Percentage, Change in Percentage, or Ratio.

Direction

Direction to be used to determine how thresholding is performed. The options are:

- Ascending - Higher is better
- Descending - Lower is better
- Range - Should fall within range

For more information about these options, see *Indicator Concepts* on page 181.

Threshold/Flex Type

The type of value used in the Threshold/Flex fields. The options are Percent or Units.

Threshold/Flex

The first field indicates the value used for the threshold, which determines the outer range when an indicator shows red.

The second field indicates the value used to determine the inner edge of the yellow zone. Setting a flex of 0 indicates that the measure does not allow any deviation from the target.

Threshold/FlexSlider

Displays a grid that enables you to graphically adjust the threshold and flex values.

Display Format

A WebFOCUS numeric display format valid for the unit of measure. Valid format types are:

- D (floating-point double-precision),
- F (floating-point single-precision),
- I (integer)
- P (packed decimal)

The formats are In, D*n.d,* F*n.d*, and P*n.d*, where *n* represents the maximum number of digits to display, and *.d*, an optional decimal point with the number of digits to display after it.

The maximum number you can code before and after the decimal point is 10 for I, 15 for D, 7 for F, and 31 for P. You can also add at the end, in any order:

- M or % to format the number as currency or as a percent
- C to suppress commas

Many other codes can also be used. For more information about numeric display options, see the ACTUAL value options section in the *Describing Data With WebFOCUS Language* manual.

Access Security

Enable this option to filter data using access security at the security level of the user.

Time Summary

This option varies how measured data is aggregated over time.

Select *Standard* to aggregate using standard Time rules. All of the measure data shown at higher time levels adds up to the total of all data at the lowest loaded level (for linear aggregation) and includes all percent or ratio data over the entire time period (for percent, ratio, and change in percent aggregation). This option is the default.

Select *Average* to show an average value, which calculates a mean average of all the data loaded across the lower Time levels for the duration of the higher level period.

Select *Most Recent* to show the latest values. Only the most recently loaded value of all the data loaded across the lower Time levels for the duration of the higher level period will be shown.

Note: These options will only be available if the Alternate Time Summary setting in the Summarization settings is enabled.

4. Click *Save*.

Procedure: How to Copy Measures

You can make an exact copy of any existing measure. After making the copy, you can immediately alter it as needed. To copy a measure:

1. From the Manage page, click the *Measures* panel button.
2. Select the measure you want to copy. The Edit Measure panel opens.
3. Click *Save As*. You will be prompted for a new name for the measure.
4. Click *Save*. PMF will make an exact copy of the measure. You can edit and save your changes at any time, and click *Save As* again if you want to make more copies. This measure is what will be loaded for editing.

Procedure: How to Wipe a Measure

All loaded data from any loadable source can be wiped out or deleted in a single operation. This is useful when you have loaded data that is invalid. It is a simple way to delete all the data.

1. From the Manage page, click the *Measures* panel button.
2. Select the measure that needs data to be deleted. The Edit Measures panel opens.
3. Click the *Wipe Data* button. PMF will ask you to confirm the data purge.
4. Click *OK*.

Note: It may take PMF a moment to purge all of the data.

Procedure: How to Configure External Aggregation for Each Measure

To configure external measures to be read into PMF, you must first activate the feature:

1. From the Manage page, click the *Setting*s panel button.
2. Click *Summarization*.
3. From the External Aggregation drop-down menu, select *Y*.
4. Enter the name of the master file for the external DB where you are storing the pre-aggregated data in the External Aggregation MFD box.
5. Click *Save*.
6. Configure each measure that will use External Aggregation. From the Author or Manage page, click the *Measure*s panel button.
7. Select a measure.
8. Click the *Control*s tab.
9. From the Alternate Processing drop-down menu, select *External*.
10. In the External Dimension links box, enter the letter that represents each dimension to which the external measure data links.

Tip: To get the letter that represents each dimension, click the *Dimension*s panel button and click the *Advanced* tab. The dimension letter will be shown next to Dimension Type.

Control Drill Menus for Measures

You can control the content visible from the drill for each Metric in PMF using the Content tab on the Measure panel. Any Content managed within PMF can be added to the menus.

There are two menus at the Metric level. These options control the drill menu that is activated when you click:

- ❑ The name of a Metric on any Grid or chart.
- ❑ The data values displayed for a Metric on any Grid or chart.

Procedure: How to Add a New Drill Menu for a Metric

By default, all Metrics in PMF use the same menu. You do not need to do anything to configure this menu. It is automatically configured whenever a new Metric is created in the system.

If you want to configure a menu for a particular Metric:

1. Click the *Measure*s panel button.

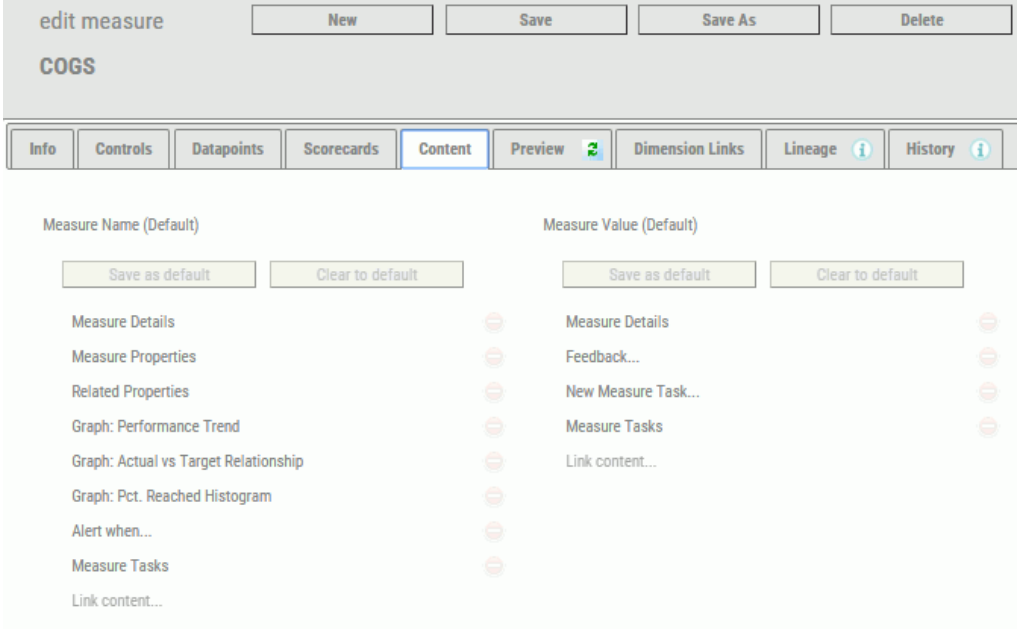
   The available measures are displayed.

2. Select the measure you want to use.

   The Edit Measure panel opens.

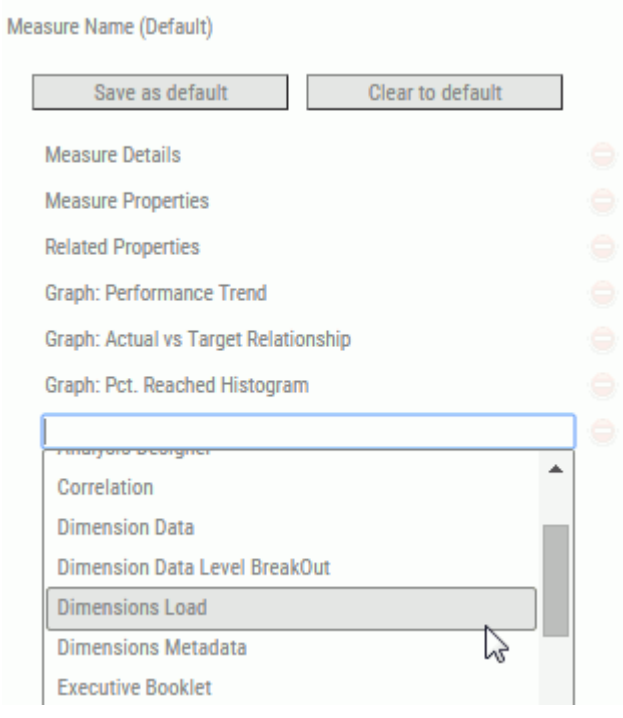
3. Click the *Content* tab.

   The Content menus configured for that metric are displayed, as shown in the following image.

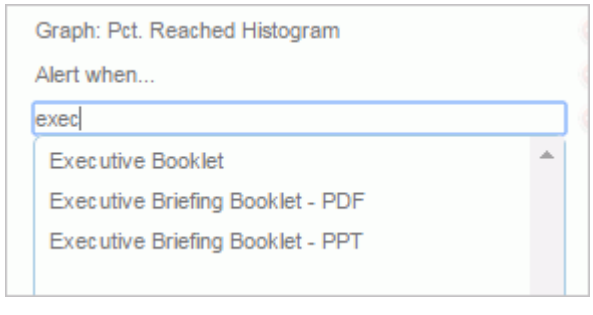


4. If you click the *Link Content* box, you can:

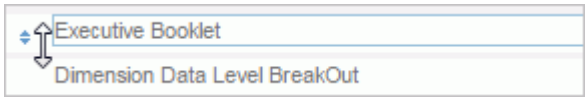
   - Add new (link) content to the Measure Name or Measure Value menu by selecting the content item you want to add from the drop-down menu, as shown in the following image.



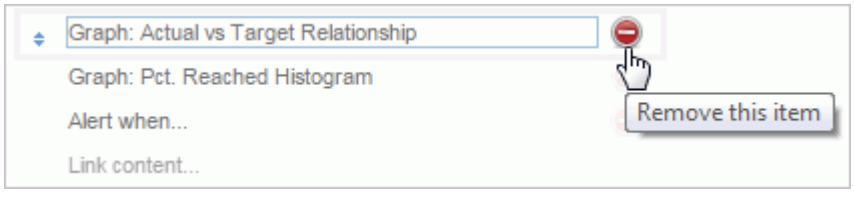
   - Add new (link) content by entering the name of the item in the box, as shown in the following image.



- Change the order of menu items by clicking the arrows on the left of the link name, and dragging the item up or down, as shown in the following image.



- Remove (unlink) any content from the Measure Name or Measure Value menu for that metric by clicking the *Remove this item* button to the right of that item, as shown in the following image.



5. Click *Save* once you are done configuring the menu. The new menu is now configured. Whenever you select the name or values for that metric, PMF will display the Content menus you configured.

Procedure: How to Make a Content Menu the System Default

You can quickly design a default menu that all Metrics will use. This gives all Metrics that do not have specific menus a fallback. Note that the system ships with a default menu configured. Performing the steps in this task will override those settings.

To change the default menu for Metric Name or Value drills:

1. Click the *Measures* panel button.

   The available measures are displayed.

2. Select the measure you want to use.

   The Edit Measure panel opens.

3. Click the *Content* tab.

   The Content menus configured for that metric are displayed.

4. Click *Save as default* for the menu you want to make the system default, as shown in the following image.

The menu you specified is now configured as the default. Whenever you click the name or values for any Metric that does not already have a specific menu configured, PMF will display the default Content menu you configured here.

Procedure: How to Clear a Specific Metric Menu to the Default

You can clear any specific menu that was previously configured for a Metric. When you do this, the Measure Name or Measure Value menu of the metric will always display the default as currently configured.

1. Click the *Measures* panel button.
2. Select the measure you want to use.

   The Edit Measure panel opens.
3. Click the *Content* tab.

   The Content menus configured for that metric are displayed,
4. Click *Clear to default* for the menu you want to clear to the system default.

Any specific menu for the Metric is deleted and the Metric will now always use the default. Whenever you click the name or value items for the metric, depending on which menus you cleared, PMF will display the default Content menu you configured here.

Measures and Dimensionality

The Dimensions tab has been removed from the Measures panel. As of PMF 5.3.2, measures get their dimensionality from the datapoints that are linked. PMF uses dimensions in the most efficient way possible, and with the most flexibility, by always choosing the lowest common level for dimensional linkages.

Prior to PMF 5.3.2, you either had a load or a user entry option for measures. For each measure, you had to separately define dimensionality. Most data marts had very similar dimensionality for all their measures that usually depended on where the data was coming from. This meant a lot of time was spent defining separate dimensional structure for every measure, when actually, most users were simply repeating steps.

As detailed in *The Core Paradigm* on page 238, as of PMF 5.3.2, you have the ability to model your measures with consistent dimensionality by figuring out the dimensionality you put into your datapoints. It then uses the most complete (lowest possible) level of aggregation for all the linked-up datapoints, to provide the most detail possible.

Reference: Recalculation and Copying Measure Lineage

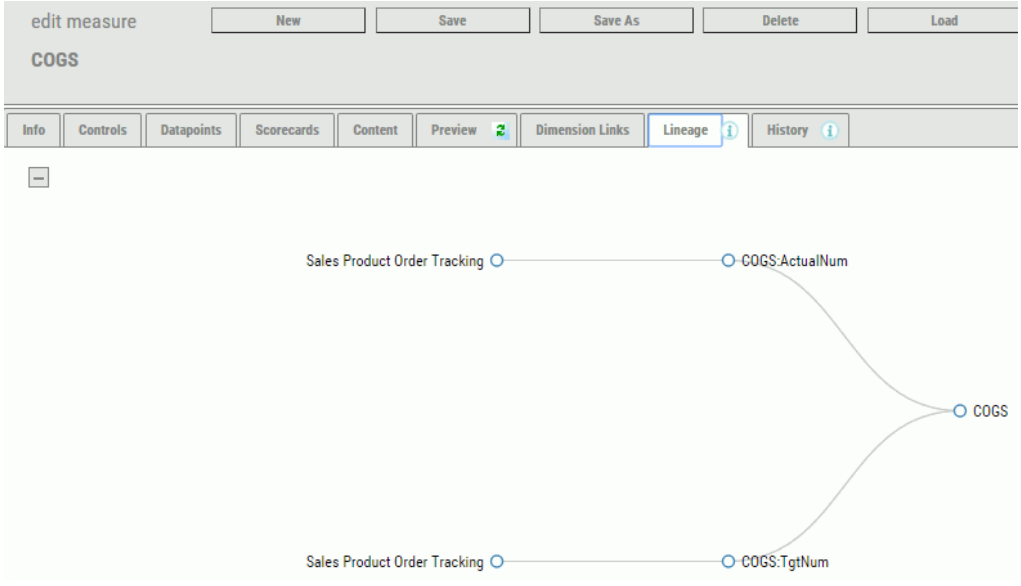
The datapoints linked to your measures can have a complex, multi-part lineage, depending on their relationship to other derived datapoints and to loadable, user-entered, or in some cases, generated, datapoints.

The PMF design allows any derivations to be calculated in the correct order. The PMF model allows it to discover the generations of data lineage and to navigate in memory backwards and forwards through this lineage. PMF always uses the correct order to calculate the components for your measures. The process of copying the final state of all data is handled automatically once the recalculation of all points in the middle are completed.

Reference: Measure Lineage Tab

You can view lineage for the datapoints of any measure. The Lineage tab shows the progress of data through PMF, from the external data harvested into datapoints, through any derived datapoints, and all terminal points in your measure.

The following image shows an example of the Lineage tab for a measure.



The lineage tab automatically displays the entire lineage. You can click the *Collapse All* button to hide the entire lineage.

Reference: Measure Load History

PMF keeps track of each load that is executed for each measure in the system, regardless of whether you loaded it manually or the load was called by the scheduler. This data is stored in a special logging section of the PMF data mart.

The History tab for a measure displays the history of all loads that have been logged.

The history of the measure shows:

- The dates that the loads ran.
- The count of rows that were retrieved, inserted, updated, and deleted.
- The count of total mismatches that occurred between the source data and the PMF metrics mart. Mismatches are source data rows that do not match to any existing keys for one or more dimensions.
- The count of gaps in data continuity, which indicate the sparsity of the data. This does not mean there are errors but, if paired with mismatches, can help you debug any unexpected data discontinuities.

- Any messages returned from the load system. If there is an error, the exact error is displayed in the information shown in this tab.

Specifying Alternate Targets

PMF enables you to specify multiple targets for comparison to your measure actuals. By default, you can use the alternate target types of Forecasts, Stretch Targets, and Benchmarks, which enable you to interface PMF with industry-standard benchmarking systems. This capability is extensible so you can define your own custom alternate target types.

With alternate target types, you can switch the compared target used on any PMF view by changing the Default Target Field on the Systems panel on the Settings menu, which you can access by clicking the *Setting*s panel button in the Manage page. You can also design analysis reports to show multiple indicators comparing multiple instances of alternate targets to your measure actuals.

Alternate targets are attached directly to your measures and can be loaded or entered by users. If you are working with a measure that is loaded from external data, the Measure Loader automatically detects the alternate targets defined in your system. The Field Maps tab in the Measure Loader automatically displays the alternate target fields so you can define how they will be loaded.

To see an example of a report created with alternate targets, see *Running the Metrics Vertical Sort View* on page 86.

Setting a Basis for Descending Measures

PMF allows you to specify how Percent Reached should be calculated for descending measures with targets set at zero, or where misleading negative Percentages Reached values are shown.

Note: In previous versions of PMF, if there was a descending measure configured and that measure had a target of zero, or if the Actual of the descending measure was very far from the Target in the wrong direction, PMF would automatically calculate Percent Reached as 0% or display a very high negative Percent Reached.

Basis controls where you would have zero Percent Reached. The basis is the point you would exceed with your descending measure greater than which your Percent Reached would start moving into the negative. Any Actuals that were greater would show a negative Percent Reached, while any that were less will show a positive Percent Reached. Setting the Basis gives you control over how Percent Reached is calculated so you can see more reasonable Percent Reached values.

Procedure: How to Configure Descending Measure Basis

To configure the Basis for a descending measure:

1. In the Manage (or Author) page, click the *Measures* panel button. Select the measure you wish to change.

   The Edit Measure panel opens.

2. Select *Use Basis Value* from the Calculating % Reached drop-down menu. The panel expands and shows the Basis Value field box, as shown in the following image.

   Tip: The Basis can be set by analyzing the extend of your Actuals. For example, if your Target is set to zero, the median of your Actual values is 12, and the extent is 30, you could choose 12, as it is the most typical, or median value. You could also do a Pareto analysis and decide that 80% of your measures should have positive Percent Reached values. Suppose a Pareto analysis indicates that 80% of your Actual value spread fell under 18. You could set the Basis to 18 so that any Actual values approaching upward to 18 were scaled down from 100% and any values exceeding it would be negative. If you never want to see a negative Percent Reached, you would set the Basis to the extent of your values. Any Actual values that are precisely at the Basis will show zero Percent Reached.

3. Click *Save* to save the changes.

Excluding a Measure Series From Access Security

Note: Excluding a measure series from access security will be deprecated in a future release.

Access security automatically applies to all measure series in the PMF system unless you exclude the series. To exclude a measure series from access security, see the following procedure.

Access security for ad hoc measure series created by the Scorecard Wizard or Measures Wizard is disabled when the series is created.

Procedure: How to Exclude a Measure Series From Access Security

1. Display the Edit Measures panel for the measure series to which security is applied.
2. Deselect the *Access Security* check box.

3. Click *Save*.

Previewing Loadable Sources and Load Measure Data

To preview a load, click the *Preview* tab. If a Preview is already displayed, click the *Refresh* button to refresh the preview, as shown in the following image.

The Preview tab is a speculative function, since a load or measure action has not yet been performed. You can use this tab to determine what would happen if one of these actions were initiated.

In the Preview tab, PMF displays data rows that will be added, updated, or deleted to either the loadable datapoints in the source or the measure. Each loadable datapoint specified in the loadable source is displayed as a column, while the dimensional intersections to be loaded are displayed as headings on the rows.

PMF splits the information for loadable data that will be new, updated, and deleted into separate sections of the Preview tab. While using the Preview tab:

- You can sort the contents of each column by clicking the column headings. The arrow next to the column heading tells you the direct of the sort.
- You can click a row or column to highlight it for closer examination.
- You can resize the columns of the Preview by dragging the column borders in the headings.

If you see unexpected results for any loadable datapoint in the source, double-check the settings you configured on the Managed Datapoints and Dimension Links tabs.

Managing Content

Content management enables you to create pointers to the following:

- PMF views.
- WebFOCUS procedures that can be used in the PMF viewing panels (Today and Analysis).

- Web-available content.

PMF has several predefined categories for administrator-distributed content, including Administration, Analysis, Audit, CPM/BPM Practice, History, Measures Detail, Objective, Perspective, Projects & Processes, Saved, and Today. You can categorize content to control where it appears on the Today page for an administrator, or on the Document List of the Action gadget for a user.

You can also create up to 10 custom categories for the content that you manage.

Parameter sets saved from the Analysis Designer are also stored as content under the Saved category. Content contains references to stored procedure names and, for Saved views, stores blocks of parameters and controls how PMF distributes and manages these views.

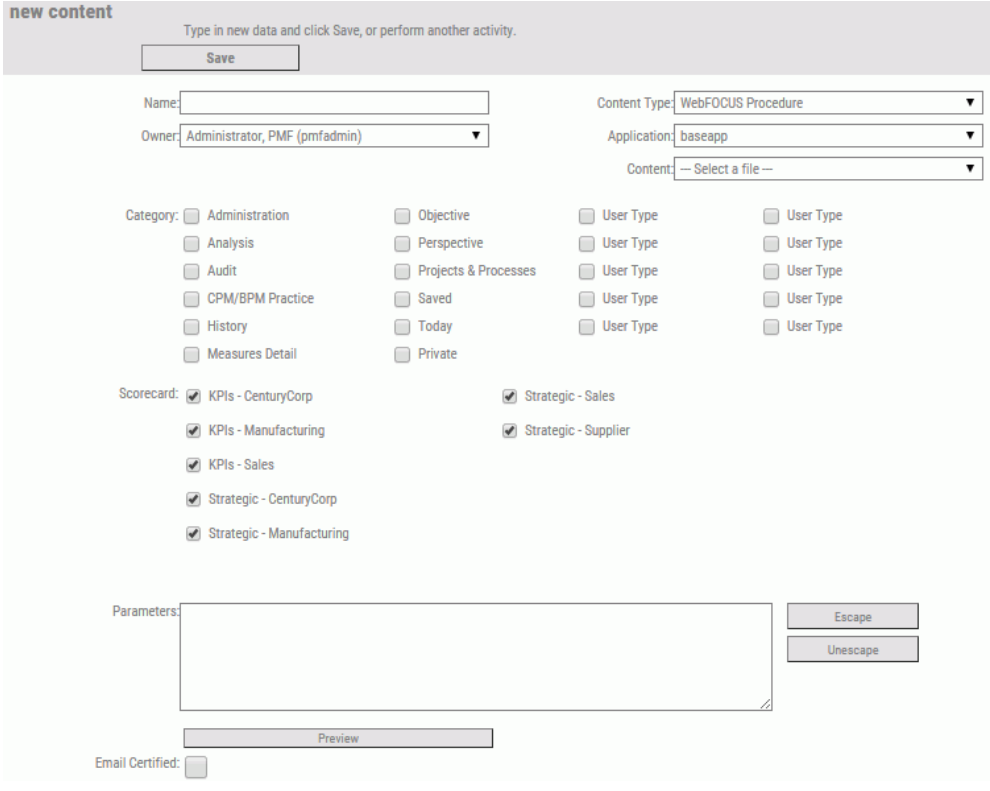
When creating access to content, make sure to click the *Preview* button. If the content pointed to is valid, PMF launches that content in a new window. This is a good way to test the content before making it available to administrators on the Today page or users in the Document List.

For details about the fields and options available in the New Content and Edit Content panels, see *General Tab - Content* on page 370.

Procedure: How to Add Content by Linking to a WebFOCUS Procedure

1. In the Manage page, click the *Content* panel button.
2. Click *New*.

The New Content panel opens, as shown in the following image.



3. In the Name field, type the name of the content you wish to create.
4. From the Content Type drop-down menu, select *WebFOCUS Procedure*.
5. From the Content drop-down menu, select the name of the WebFOCUS procedure for the view that you want to add.
6. Select the check box for each category from which the procedure can be accessed.

   An administrator will see the category listed in the side bar under the Content panel button of the Today page.

   A user accesses the content of a selected category through the Document List of the Action gadget.
7. Optionally, create one or more custom categories from which administrators and users can access the WebFOCUS procedure. To create a custom category:

   a. Click a *User Type* field, type a name for the custom category, and press Enter.

   b. Select the check box next to the new custom category to associate the content with it.

For more information and an example of a selected custom category, see *Creating a Custom Category* on page 327.

8. Make any other changes in the New Content panel, as needed.

   For more information about the fields in the New Content panel, see *General Tab - Content* on page 370.

9. Click *Save* to save the specified access to the content.

Procedure: How to Add Content by Linking to a Website

1. In the Manage page, click the *Content* panel button.
2. Click *New*.

   The New Content panel opens.

3. Select *Web Site* from the Content Type drop-down menu.
4. In the URL field, type the exact URL to the web content that you want to add.

   Note: The URL field is named Parameters before you select the Web Page check box.

5. Type a name for the web content in the Name field.
6. Select the check box for each category from which the web content can be accessed.

   On the Today page, an administrator will see the category under the Content panel button.

   A user accesses the content of a selected category through the Document List of the Action gadget.

7. Optionally, create one or more custom categories from which administrators and users can access the web content. To create a custom category:

   a. Click a *User Type* field, type a name for the custom category, and press Enter.

   b. Select the check box next to the new custom category to associate the content with it.

   For more information and an example of a selected custom category, see *Creating a Custom Category* on page 327.

8. Make any other changes in the New Content panel, as needed.

   For more information about the fields in the New Content panel, see *General Tab - Content* on page 370.

9. Click *Save* to save the specified access to the content.

Procedure: How to Add Existing Content to Analysis Categories

You can add existing content to categories on the Analysis panel button on the Today page.

1. In the Manage page, click the *Content* panel button.
2. Navigate to the Content tree, expand the desired folder, and select the content that you want to add to categories on the Analysis panel button.

   The Edit Content panel opens.
3. Select one or more of the following check boxes for the categories from which the content can be accessed.

   - ❑ *Administration*
   - ❑ *Analysis*
   - ❑ *Audit*
   - ❑ *CPM/BPM Practice*
   - ❑ *History*
   - ❑ *Measures Detail*
   - ❑ *Objective*
   - ❑ *Perspective*
   - ❑ *Projects & Processes*
   - ❑ *Saved*
   - ❑ *Today*
4. Optionally, create one or more custom categories from which administrators and users can access the content. To create a new custom category:

   a. Click a *User Type* field, type a name for the custom category, and press Enter.

   b. Select the check box next to the new custom category to associate the content with it.

   For more information and an example of a selected custom category, see *Creating a Custom Category* on page 327.
5. Click *Save* to save the specified access to the content.

To verify, navigate to the Analysis panel button on the Today page, and click one of the categories that you selected previously on the Edit Content panel. Repeat for each selected category.

Procedure: How to Add an Operational Report as Content

You can add an operational report as content and link it to any measure, objective, project, or process defined in PMF. Doing this makes the operational report available through the *Operational Report* option when you click the measure, objective, project, or process in any PMF view.

1. You must first link the desired operational report to one or more categories shown in the following list. To do this, see *How to Add Existing Content to Analysis Categories* on page 324.

   - **Measures Detail,** to link the operational report to a measure.
   - **Objective,** to link the operational report to an objective.
   - **Projects & Processes,** to link the operational report to a project or process.

2. Navigate to the Author page and click the *Measures*, *Objectives*, *Projects*, or *Processes* panel button.
3. Select the desired measure, objective, project, or process.
4. Depending on the panel that opens, select the desired operational report from the Measure Report, Objective Report, Project Report, or Process Report drop-down menu.
5. Click *Save* to save the specified access to the content.

To verify, click the desired measure, objective, project, or process in any PMF view and select the *Operational Report* option. The operational report that you specified in this procedure is displayed in a new window.

Procedure: How to Link Content to Scorecards

You can link any content, including Reports and Dashboards, to specific Scorecards. This allows the content to only be displayed when that Scorecard is selected to be displayed.

When you create new content, such as creating a Dashboard or linking a WebFOCUS report, it is automatically linked to all Scorecards. When you create a Scorecard, how content is linked to it depends on how it was created. For example:

- If you create a top-level Scorecard, with no parents, the new Scorecard is automatically linked to all Content in the system.
- If you create a child-level Scorecard, with a parent, the new Scorecard is automatically linked to the same content as its parents.

To link content to a Scorecard:

1. In the Manage page, click the *Content* panel button.

2. Navigate to the Content tree, expand the desired folder, and select the content that you want to link to a Scorecard.

   The Edit Content panel opens.

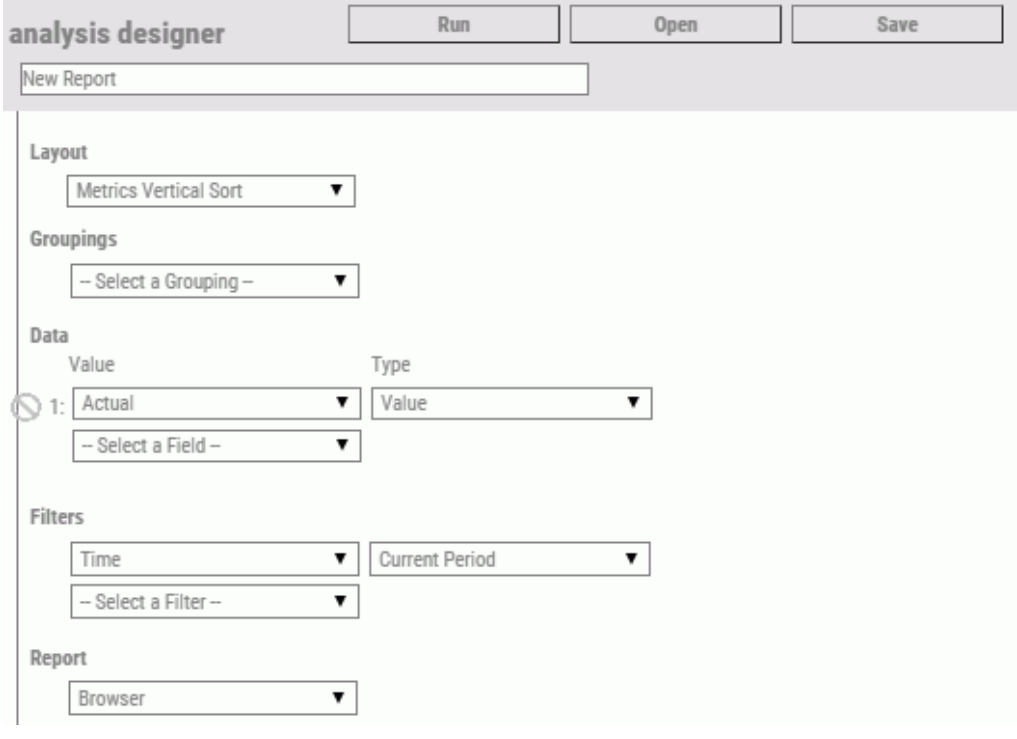
3. Select the Scorecards that you want linked to this content. Deselect any Scorecard that you do not want linked to this content.

4. Click *Save*.

Procedure: How to Convert a Saved View Into a Today Page

1. In the Today page, click the dashboard icon . Click *Content*, select *Analysis*, and then click *Analysis Designer*.

   The Analysis Designer opens, as shown in the following image.



2. Specify parameter values and optionally run the view to display the results.

3. Type a Report Name for the view and click *Save* to save the view and its specified parameter values as content.

4. Navigate to the Manage page and click the *Content* panel button.

5. Navigate to the Content tree, expand the desired folder, and select the content that you saved.

   The Edit Content panel opens.

6. Select the *Today* check box.

   Edit the other fields and options as needed. For more information about the fields in the Edit Content panel, see *General Tab - Content* on page 370.

7. Click *Save*.

The content is now available as a Today page and can be assigned to specific users.

Creating a Custom Category

You can create up to 10 custom categories for the content that you manage. Administrators can see the custom categories and their associated content in the Content panel button on the Today page. Users can see the custom categories and the content on their Dashboard in the Document List, which is accessed through the Action gadget.

Procedure: How to Create a Custom Category

In this procedure, you will create a custom category and associate content with it, using the New Content panel.

You can also create a custom category using the Edit Content panel. For instructions, see *How to Add Existing Content to Analysis Categories* on page 324.

1. In the Manage page, click the *Content* panel button.
2. Click *New*.

   The New Content panel opens. The User Type fields enable you to create custom categories for the content that you manage.

3. Click a *User Type* field, type a name for the custom category, and select the *Save* icon next to the field.
4. Click the check box next to the new custom category to associate content with it.
5. In the applicable fields, supply the information for the content that will be associated with the custom category.
6. If applicable, select the check box for each additional category from which users can access the content.
7. Make any other changes to the New Content panel, as needed.

   For more information about the fields on the New Content panel, see *General Tab - Content* on page 370.

8. Click *Save* to save the specified access to the content.

   As an administrator, you can see the custom category in the Content panel button on the Today page.

Working with Private Dashboards

From the Today page, an Owner can only view the private Dashboards that they currently own. Administrators cannot view or run a private Dashboard on the Today page that belongs to someone else. They can, however, view the private Dashboard references of another Owner by going to the Content page.

Procedure: How to Delete the Private Dashboard from a PMF Owner

To delete one or more private Dashboards from PMF Owners, use the following procedure.

1. In the Manage page, click the *Content* panel button.
2. Click the Dashboard you want to delete from the PMF Owner.
3. From the Owner drop-down menu, change the ID to your Owner ID.
4. Click *Save*.
5. Go to the Today page and click the *Refresh* icon.
6. Click the dashboard icon and click *Private*.
7. Click the Dashboard that you want to delete.

   The selected Dashboard opens.

8. Click the dashboard icon again, and click the Edit Dashboard icon .
9. Click the Delete Dashboard icon and confirm the deletion.

   The Private Dashboard is now deleted.

Procedure: How to Publish the Private Dashboard of a PMF Owner as Public

To make the private Dashboard of a PMF owner public, so that all Owners can see it, use the following procedure.

1. In the Manage page, click the *Content* panel button.
2. Click the private Dashboard you want to make public.
3. From the Owner drop-down menu, change the ID to your Owner ID.
4. Select the check box for each Category or Scorecard from which the Dashboard can be accessed by Owners.

5. Click *Save*.
6. Go to the Today page and click the *Refresh* icon.
7. Click the dashboard icon and click a category where you saved the Dashboard.
8. Click the Dashboard you want to view.

   The selected Dashboard opens.
9. Click the dashboard icon again, and click the Edit Dashboard icon .
10. Click the *Look & Properties* panel button.
11. Select the *Public* check box.
12. Click the Exit Edit icon and save your changes.

    The private Dashboard is now under your management and is publically available.

Mapping Parameters to an Operational Report

You can drill to any WebFOCUS operational report from a PMF view by mapping PMF parameters.

PMF automatically passes the following information from drill-down contexts:

Property	Parameter
Scorecard Name	&SCORECARD_NAME
Scorecard ID	&SCORECARD
Perspective Name	&PERSPECTIVE_NAME
Perspective ID	&PERSPECTIVE
Measure Name	&MEASURE_NAME
Measure ID	&MEASURE_SERIES
Dimensional values	&[dimension name]_LEVEL[level #]_VALUE

To use these parameters in your operational reports, you may need to map the parameters passed from PMF to the parameters used in your report.

For example, suppose you have an operational report that displays outage data for all regions and warehouses, and you would like to drill out to this report from a PMF view and pass the region and warehouse information to select the proper filters in the operational report. You already have WHERE clauses embedded in the operational report to filter by the REGION and WAREHOUSE fields in your operational data. The operational report is already set up to receive the &REGN parameter for the region and the &WHOUSE parameter for the warehouse.

In PMF, you already store information about your warehouse locations in a location dimension, which has Region as Level 1 and Warehouse as Level 2. You select a PMF view and drill to a particular warehouse location. Next, you click a measure and select the *Operational Report* option. You want PMF to filter the designated operational report for just the warehouse displayed in the current PMF view.

You need to edit your operational report using WebFOCUS code, Developer Studio, or a GUI, such as Power Painter. Start by adding -DEFAULT commands at the top of the report as follows:

```
-DEFAULT &LOCATION_LEVEL01_VALUE = ' ';
-DEFAULT &LOCATION_LEVEL02_VALUE = ' ';
```

Next, add a utility program and parameters to the top of the report to allow it to receive the parameter values from PMF, as follows:

```
-SET &DIM_NAME = 'LOCATION';
-SET &DIM_VALUE = &LOCATION;
-INCLUDE gadg_dim_parms
```

The first -SET command provides the dimension name for the utility program to use for outbound parameters. The second -SET passes a fully qualified internal dimension filter value to the utility program.

Finish by mapping the fields to your variables, as follows:

```
-SET &REGN = IF &LOCATION_LEVEL01_VALUE NE ' ' THEN
TRUNCATE(&LOCATION_LEVEL01_VALUE);
- SET &WHOUSE = IF &LOCATION_LEVEL02_VALUE NE ' ' THEN
TRUNCATE(&LOCATION_LEVEL02_VALUE);
```

Note: The WebFOCUS TRUNCATE function is used in the preceding code to remove the trailing spaces that are automatically added to all parameters being passed out of PMF.

The following image shows an example of an operational report that was mapped to PMF parameters, saved as content, and made available. To open this report from the Today page, click the dashboard icon . Click *Content*, select *Projects & Processes*, and then click *Order Process Outages*.

Outages in Ordering Process

Date		Region	Warehouse	Customer	Outages	Order Opps	Outage Pct	
2006	Jan	EAST	BOS	AV VideoTown	52	156	33.33%	
				Audio Expert	45	156	28.85%	
				City Video	62	84	73.81%	
				Consumer Merchandise	99	173	57.23%	
				TV City	87	140	62.14%	
				Web Sales	28	171	16.37%	
		MIDWEST	STL	AV VideoTown	57	98	58.16%	
				Audio Expert	57	106	53.77%	
				City Video	48	187	25.67%	

Note: You can use the logic described in this topic to pass parameters from the PMF gadget layer to an operational report. As a result, you can place the operational report on a PMF dashboard as a gadget. For more information, see *Turning a WebFOCUS Report Into a Gadget* on page 359.

Working with Snapshots

PMF includes a snapshot and restore feature. Taking a Snapshot serializes the entire content of the PMF data mart to a set of files in a folder located on your server file system. These files can then be restored to another data mart on any platform or RDBMS that PMF supports.

A Snapshot or Template captures an entire PMF Data Mart. This includes all Scorecards and their components, all pooled Metrics, all Content links, any saved content references (including Analysis Designer views), Gadgets, and any Dashboards you have designed.

You can use Snapshots to:

- Make a copy of your PMF data mart for use in another installed copy of PMF.
- Transfer the PMF data mart from the source RDBMS to the target when moving your RDBMS system from one to another.

- Preserve temporary or permanent work while you work on something else.

Snapshot Manager lets you more easily work with Snapshots, and automates many functions that used to require manual work. You no longer have to manually copy and move Snapshots from one location to another by accessing the various server file systems. With Snapshot Manager, you can easily move a Snapshot from one PMF environment to another.

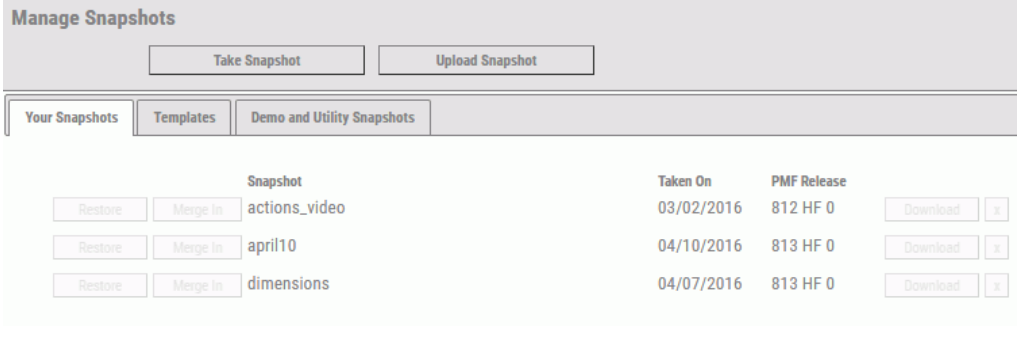
Note: If you are moving Snapshots from one environment to another, note the following:

- Both the source environment and the target environments need to have a fully-working copy of PMF installed.
- If the versions of PMF between environments do not match, newer copies of PMF can restore older Snapshots, but older ones cannot see newer-versioned Snapshots.

Common Tasks in Snapshot Manager

To access the Snapshot Manager, navigate to the Manage page, click the *Data Mart* subtab, and then click *Manage Snapshots*.

The Manage Snapshots panel opens, as shown in the following image.



From the Snapshot Manager, you can:

- **Take a Snapshot.** Copies all content from the PMF Data Mart into a portable file, which can be restored on any PMF environment.
- **Restore a Snapshot.** Replaces all content in the current PMF Data Mart with the exact state of the Snapshot when it was taken.
- **Merge in a Template.** Lets you incorporate the exact state of a distributed Solution Template from Information Builders or another vendor into your existing PMF Data Mart.
- **Upload a Snapshot.** Lets you move a Snapshot in compressed (ZIP) format stored in a file-accessible location to a new PMF environment.

- **Download a Snapshot.** Lets you obtain a Snapshot file in compressed (ZIP) format from a PMF environment and copy it to a folder on a file-accessible machine, from which it can be uploaded in the future.
- **Merge a Snapshot.** Lets you incorporate the exact state of a Snapshot into your existing PMF Data Mart, allowing you to add objects from multiple Snapshots together.

Procedure: How to Take a Snapshot

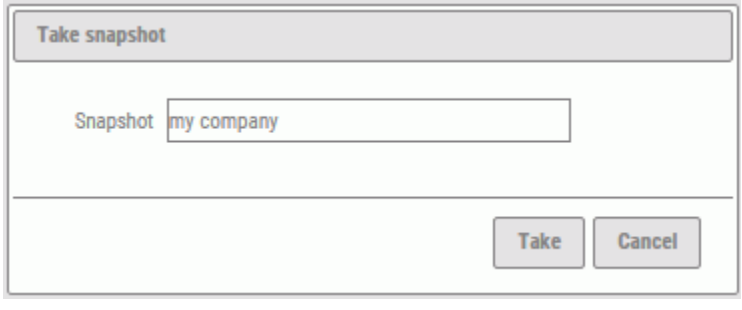
When you Take a Snapshot, all content from the PMF Data Mart is copied into a portable file, which can later be restored to any PMF environment (including the same one).

To take a snapshot:

1. From the Manage Snapshot pane, Click *Take Snapshot*.

   The Take Snapshot dialog box opens.

2. Enter a name for the Snapshot, or select the text box if you want to use and overwrite a previous Snapshot, as shown in the following image.



Tips:

- As you type, if a previous and similar name was used, the dialog box will display a list of matches, and you can click one of these matches if you want to replace it.
- Only alphanumeric characters are accepted, since this will become a folder and file name. Any spaces or special characters will be edited out.

3. Click *Take*. The Snapshot Manager creates the Snapshot. Once it is complete. it will appear in the list on the User Snapshots tab.

Procedure: How to Restore a Snapshot

When you restore a Snapshot, all content in the current PMF Data Mart is replaced with the exact state of the Snapshot you select, at the time it was taken. Restoring Snapshots lets you preserve the exact state of PMF, including all models, data, and content. Snapshots are good for:

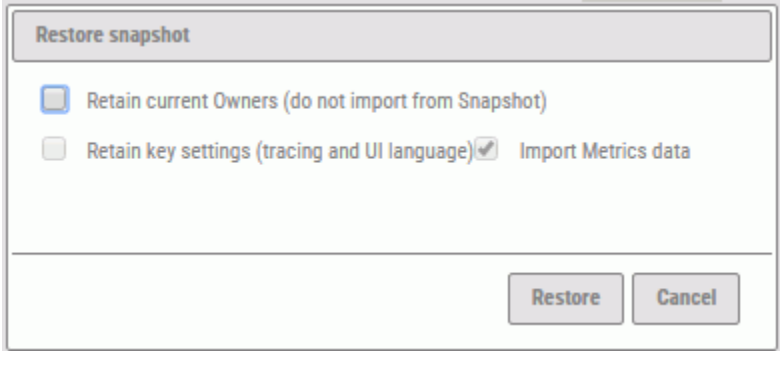
- PMF Data Mart backups.
- Situations where you want to experiment or create new models and want to be able to preserve them.
- Moving a PMF Data Mart to a new PMF environment.

The Restore button is available on the following tabs: Your Snapshots and Demo and Utility Snapshots.

To restore a snapshot:

1. From the Manage Snapshot pane, click the *Restore* button next to the snapshot you want to restore, as shown in the following image.

The Restore Snapshot dialog box opens, as shown in the following image.



2. Click *Restore*. Snapshot Manager will restore the Snapshot and notify you when the process is complete.

   Note: Depending on the size of the metrics warehouse in the Snapshot, a restore can take some time.

3. Refresh the browser once the process is complete.

Procedure: How to Download a Snapshot

You can download a Snapshot to your browser Downloads folder. This lets you upload it to another compatible PMF environment, where it can be restored at will.

To download a Snapshot:

From the Manage Snapshot pane, click the *Download* button next to the Snapshot in the Your Snapshots tab that you want to download, as shown in the following image.

Snapshot Manager compresses the Snapshot to a single ZIP file, and downloads it to your browser Downloads folder.

You can upload the Snapshot to another PMF environment, either now or at a future time.

Note: If you periodically clean up your browser Downloads folder, and accidentally delete the Snapshot ZIP file, return to the PMF environment with the Snapshot you want, and download it again.

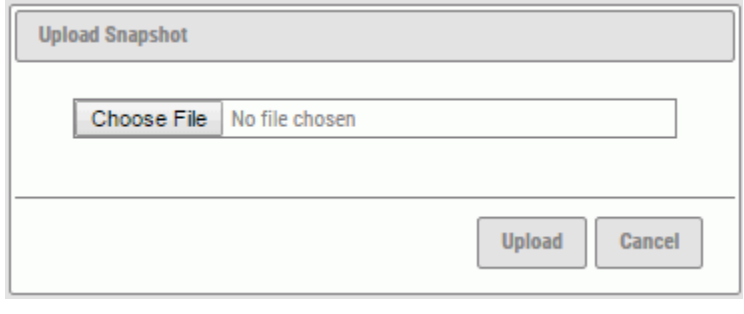
Procedure: How to Upload a Snapshot

You can upload a Snapshot from your browser Downloads folder to any compatible PMF environment. Any uploaded Snapshots are stored in the PMF environment, and can be restored at any future time.

To upload a Snapshot:

1. From the Manage Snapshot pane, click the *Upload a Snapshot* button.

   The Upload Snapshot dialog box opens, as shown in the following image.



2. Click *Choose File* to select the file to be uploaded.

   Your browser Downloads folder opens.

3. Click the compressed (ZIP) PMF Snapshot you want to upload and click *Open*.

   Note: The dialog box varies depending on your local operating system.

4. The file name is shown in the Upload Snapshot dialog box. Click *Upload*.

   Snapshot Manager uploads the file to the PMF environment. The Snapshot then appears in the Users Snapshots tab, where you can restore it at will. For more information on restoring Snapshots, see *How to Restore a Snapshot* on page 334.

Working with Templates

PMF ships with a set of predefined Templates that represent complete PMF Data Marts for various vertical and horizontal business cases, which you can merge in to your PMF environment. You can merge in these Templates at any time.

Note:

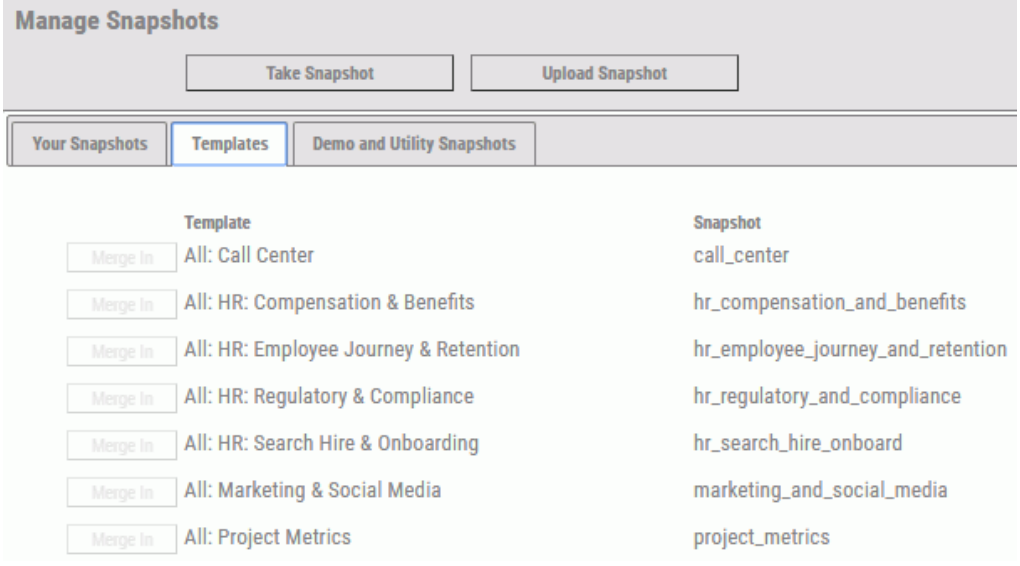
- When you merge in a Template, you will incorporate its exact state into the currently-configured PMF Data Mart. If you want to preserve anything in your PMF environment, make sure to take a Snapshot so it can be restored again.
- The list of available Templates can increase from release to release, so your list might have more items than is shown in these examples.

Procedure: How to Merge In a Template

To merge in a Template:

1. From the Manage Snapshots pane, click the *Templates* tab.

A list of available Templates is displayed, as shown in the following image.



2. Find the Template you want to restore and click the *Merge In* button next to it.

   The Merge In dialog box opens.

3. Click *Yes, merge it*. Snapshot Manager will merge in the Template and notify you when the process is complete.

   Note: Depending on the size of the metrics warehouse in the Template, a merge can take some time.

4. Refresh the browser once the process is complete.

Working with Demos

PMF ships with 10 self-standing demonstrations and other utility Templates, which you can restore to your PMF environment. These Snapshots come with Measures, Sources, Dimensions, Scorecards, and content for the common subject matter areas, such as:

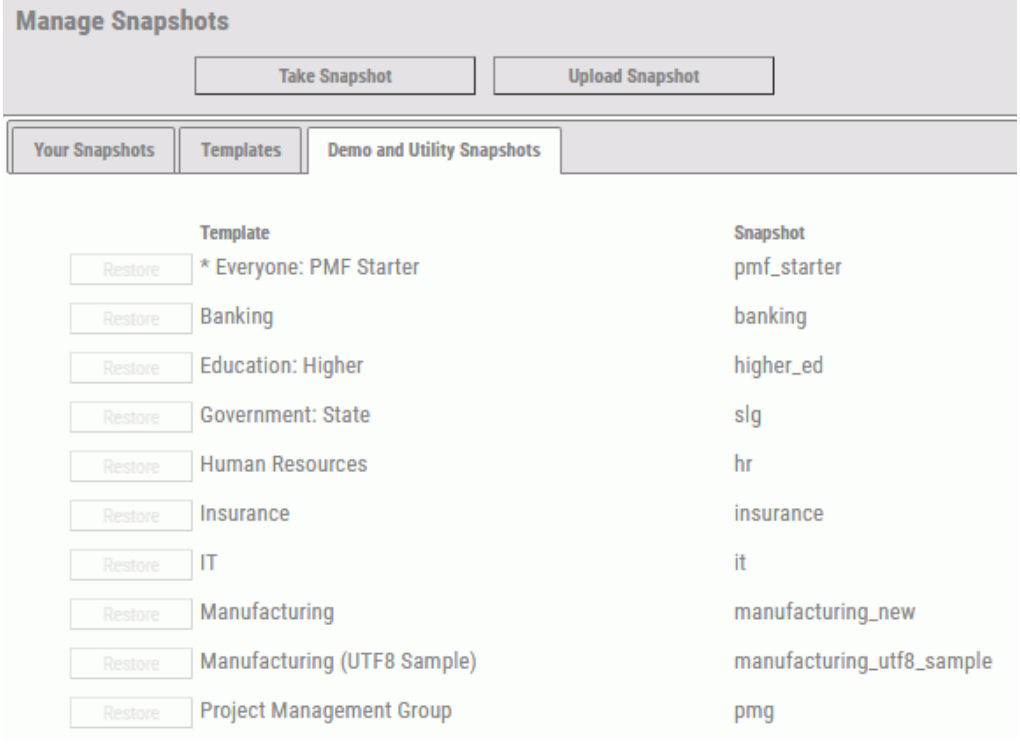
- Banking
- Education
- Insurance

Procedure: How to Restore a Demo

To restore a demo:

1. From the Manage Snapshots pane, click the *Demo and Utility Snapshots* tab.

   A list of available demos displays, as shown in the following image.



2. Find the demo you want to restore and click the *Restore* button next to it.

   The Restore Snapshot dialog box opens.

3. Click *Restore*. Snapshot Manager will restore the demo and notify you when the process is complete.

4. Refresh the browser once the process is complete.

Administration Views

The following topics describe the administration views available.

Administration views provide general documentation on the internal system capabilities of PMF. Those who maintain the PMF system can run them to query and display all components in the data mart. Administration views will help you when you perform compliance analysis of the PMF system or diagnostic functions against the data mart.

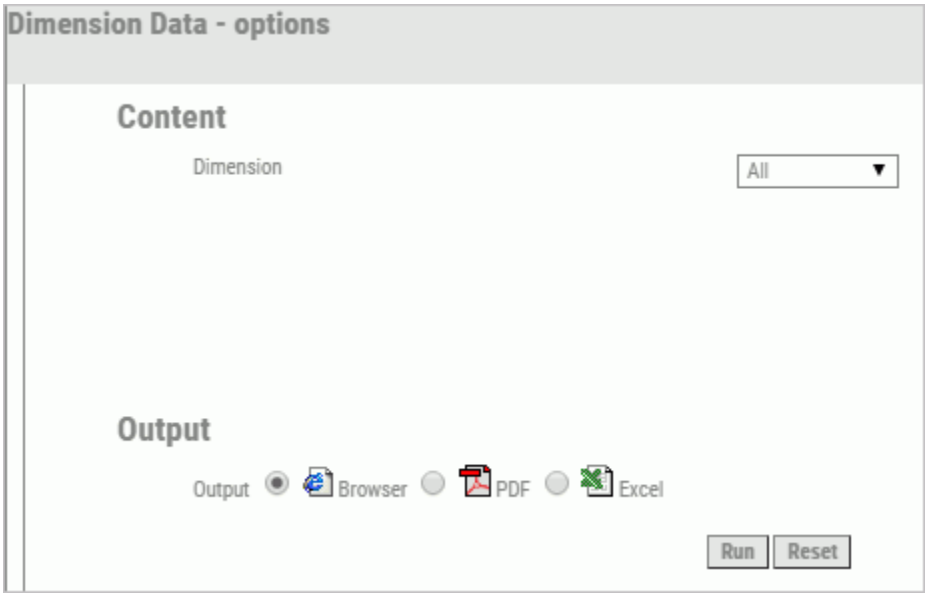
Sorting options allow you to select and arrange the content as desired. You can also save the parameters for a request for future use.

Procedure: How to Run an Administration View

To run an administration view:

1. Log on as a user or administrator.
2. In the Today page, click the dashboard icon and select *Administration*. The available views are displayed.
3. Select the desired view. and enter the content options as prompted.

   The following image shows the panel for Dimension Data.



4. Select from the following output options: *Browser*, *PDF*, or *Excel*.
5. Click *Run* to run the view with the chosen content and output options.

   Note: The Reset button returns all options to their default value.

Description of the Administration Views

This topic lists each administration view and describes its content.

Dimension Data

The Dimension Data view displays, in sorted order, actual data values for the levels in a selected dimension or all dimensions.

For example, the following CenturyCorp Card view includes data for the dimension levels in the Product dimension, as shown in the image below.

Dimension Data

Options

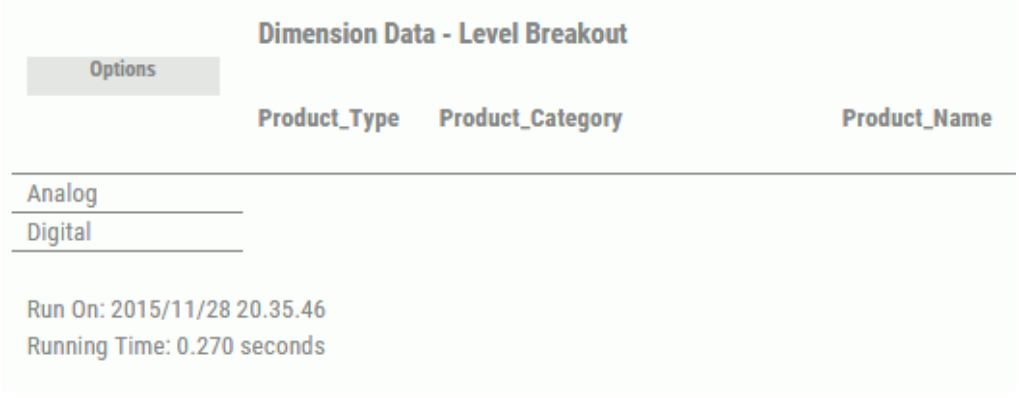
Dimension: P-Product

Product_Type	Product_Category	Product_Name	Key
Analog		605	
Analog	Camcorders	607	
Analog	Camcorders	Panasonic PV-DC352 Camcorder	1018
Analog	Camcorders	Sony DCR-TRV240 Camcorder	1020
Analog	VCRs	608	
Analog	VCRs	Samsung SV5 4-Head VCR	1004
Digital		606	
Digital	Camcorders	609	
Digital	Camcorders	Canon 40MC MiniDV Camcorder	1024

Dimension Data Level Breakout

The Dimension Data Level Breakout view displays, in sorted order, actual data values for a selected dimension or all dimensions, broken out level by level to show all linkable keys in the system.

For example, you can run a CenturyCorp Card view that includes data for the three dimension levels in the Product dimension. The following images show the data broken out for each dimension level on three pages.

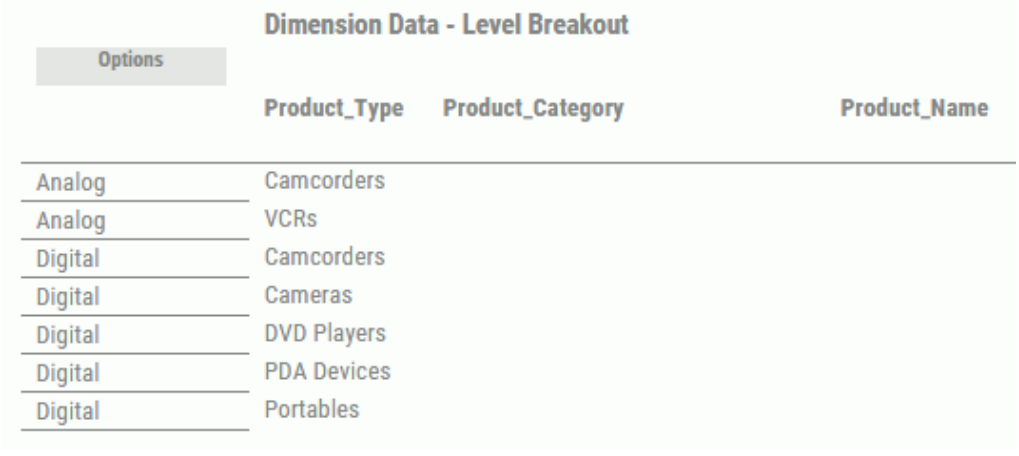


Dimension Data - Level Breakout

Options

Product_Type	Product_Category	Product_Name
Analog		
Digital		

Run On: 2015/11/28 20.35.46
Running Time: 0.270 seconds



Dimension Data - Level Breakout

Options

Product_Type	Product_Category	Product_Name
Analog	Camcorders	
Analog	VCRs	
Digital	Camcorders	
Digital	Cameras	
Digital	DVD Players	
Digital	PDA Devices	
Digital	Portables	

Options

Dimension Data - Level Breakout

Product_Type	Product_Category	Product_Name
Analog	Camcorders	Panasonic PV-DC352 Camcorder
Analog	Camcorders	Sony DCR-TRV240 Camcorder
Analog	VCRs	Samsung SV5 4-Head VCR
Digital	Camcorders	Canon 40MC MiniDV Camcorder
Digital	Camcorders	Canon XL1S MiniDV Camcorder

Dimensions Load

The Dimensions Load view displays data that controls how a dimension is loaded, as stored in the PMF data mart. You can select a single dimension or all dimensions.

It includes information, such as the name, type, and key of the dimension source table and the server on which it resides. It also includes the dimension source prefix code, the dimension levels, and their names and type, and if applicable, the DEFINE source code for a dimension level.

The following image shows a sample Dimensions Load view for the Product dimension. It applies to the CenturyCorp Card.

Options

Dimensions Load

Dimension: P - Product

Description :

Table Type Description :	Separate table	**Dimension Key :**	PRODUCT.PRODUCT_K
Dimension Source Table :	pmf_manufacturing_product_dim_data	**Delete If Not New :**	Yes
Dimension Source Table Type :	FOC	**Dimension Source Prefix Code :**	
Dimension Source Table Server :		**Dimension Define Procedure :**	

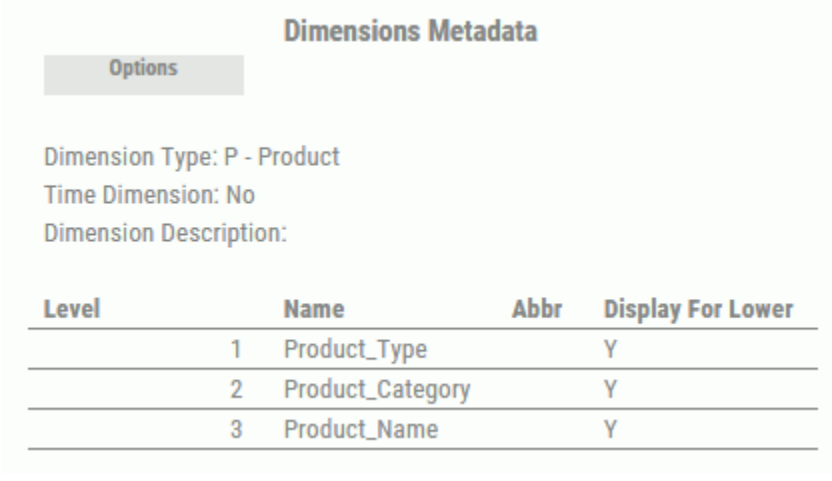
Dim Level	Dim Level Name	Field Type	Dim Source Field	Dim Source Define Code
1	Product_Type	Field	PRODUCT.PRODUCT_LEVEL01	
2	Product_Category	Field	PRODUCT.PRODUCT_LEVEL02	
3	Product_Name	Field	PRODUCT.PRODUCT_LEVEL03	

Dimensions Metadata

The Dimensions Metadata view displays control information in the PMF data mart for a selected dimension or all dimensions.

It includes information, such as the setting of the Time dimension flag (Yes or No), the levels in the dimension, and the abbreviation of a dimension level name if applicable. The Y or N value in the Display For Lower column determines which levels of the Time dimension are displayed.

The following image shows a sample Dimensions Metadata view for the Location dimension. It applies to the CenturyCorp Card.



Dimensions Metadata

Options

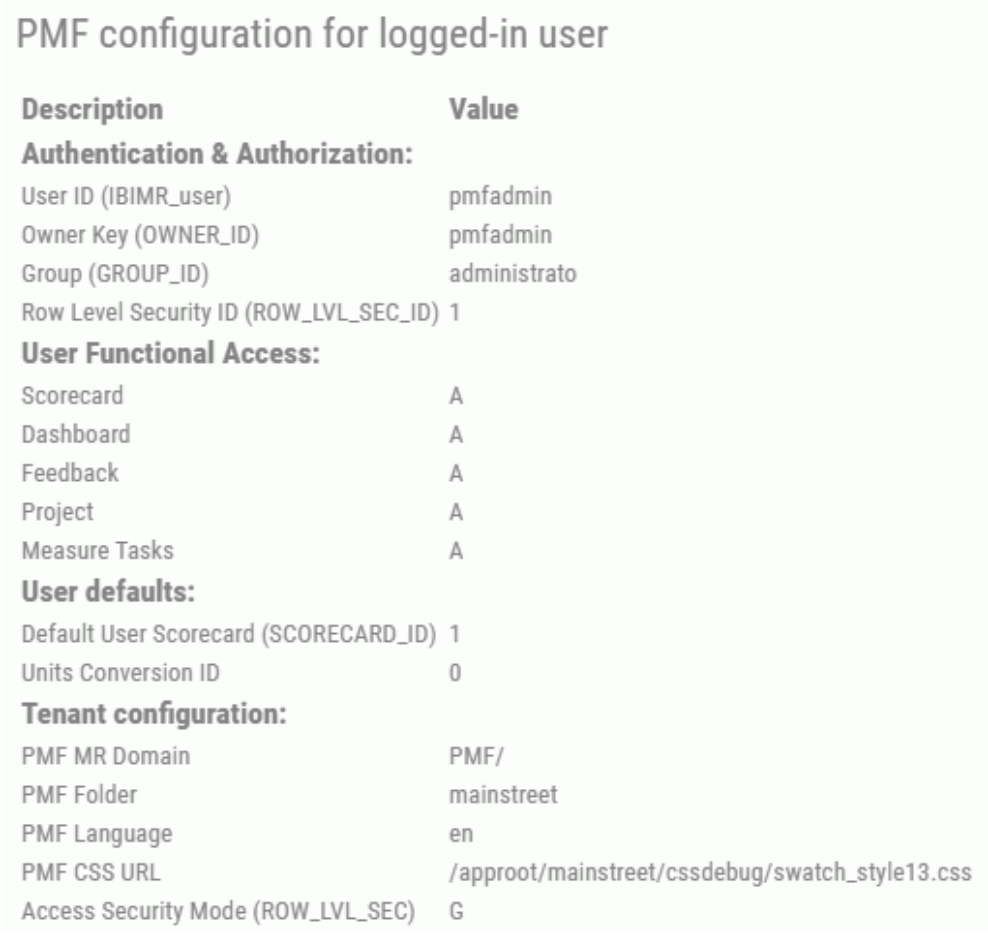
Dimension Type: P - Product
Time Dimension: No
Dimension Description:

Level	Name	Abbr	Display For Lower
1	Product_Type		Y
2	Product_Category		Y
3	Product_Name		Y

Display Logged-In User Configuration

The Display Logged-In User Configuration view displays configuration details for the current user. It includes information, such as User ID, functional access level, and the tenant configuration.

The following image shows a sample Display Logged-In User Configuration view.



PMF configuration for logged-in user

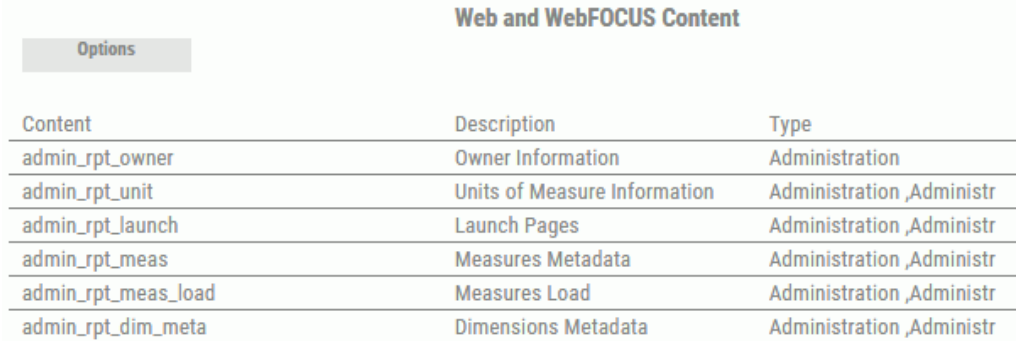
Description	Value
Authentication & Authorization:	
User ID (IBIMR_user)	pmfadmin
Owner Key (OWNER_ID)	pmfadmin
Group (GROUP_ID)	administrato
Row Level Security ID (ROW_LVL_SEC_ID)	1
User Functional Access:	
Scorecard	A
Dashboard	A
Feedback	A
Project	A
Measure Tasks	A
User defaults:	
Default User Scorecard (SCORECARD_ID)	1
Units Conversion ID	0
Tenant configuration:	
PMF MR Domain	PMF/
PMF Folder	mainstreet
PMF Language	en
PMF CSS URL	/approot/mainstreet/cssdebug/swatch_style13.css
Access Security Mode (ROW_LVL_SEC)	G

Launch Pages

The Launch Pages view is a view of WebFOCUS reports, other reports, and websites linked from PMF. It displays information about a selected type of view in PMF, or about all types. Examples of types include Today, saved, analysis, perspective, objective, measure, audit, and administration.

It includes information, such as the name of the launch page associated with each available view, and the parameters that are passed if applicable.

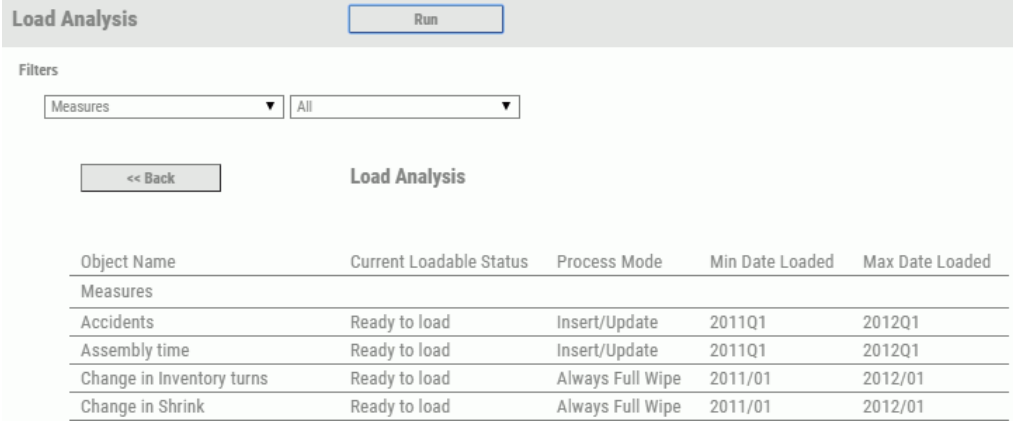
The following image shows sample output on the administration views for the CenturyCorp Card.



Load Analysis

Load Analysis shows the current data path capability, for example, can it be loaded, recalculated or copied, of sources, generated and derived datapoints, and measures.

The following example shows the Load Analysis report for all measures.



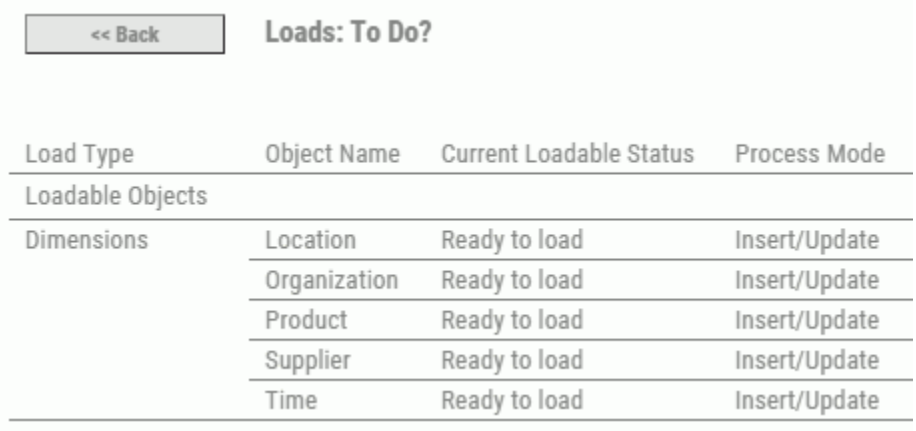
Load History

The Load History view shows a detailed log, sorted by date, of all data done in PMF. It also shows a log status for each item.

Loads: To Do?

The Loads: To Do view shows which dimensions, sources, generated and derived datapoints, and measures have been loaded to date, and which have not. This is useful as a checklist of data processing that needs to be done.

The following example shows the Loads: To Do report for all dimensions.



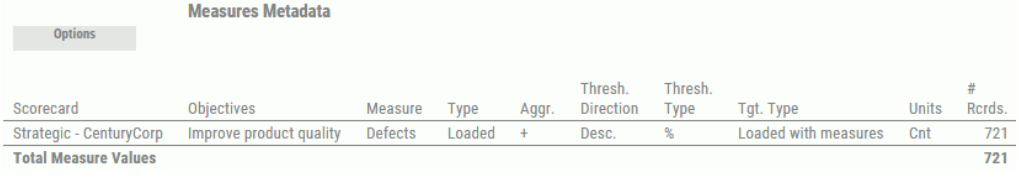
Load Type	Object Name	Current Loadable Status	Process Mode
Loadable Objects			
Dimensions	Location	Ready to load	Insert/Update
	Organization	Ready to load	Insert/Update
	Product	Ready to load	Insert/Update
	Supplier	Ready to load	Insert/Update
	Time	Ready to load	Insert/Update

Measures Metadata

The Measures Metadata view displays control information in the PMF data mart for a selected measure or all measures.

It includes information, such as the measure aggregation type (linear, percent, ratio, or change of percent), the setting for the fix target flag, and the threshold flex direction and type.

The following image shows a sample Measures Metadata view for the Defects measure, the Improve Product Quality objective, and the Internal Process perspective. It applies to the Strategic - CenturyCorp Card.

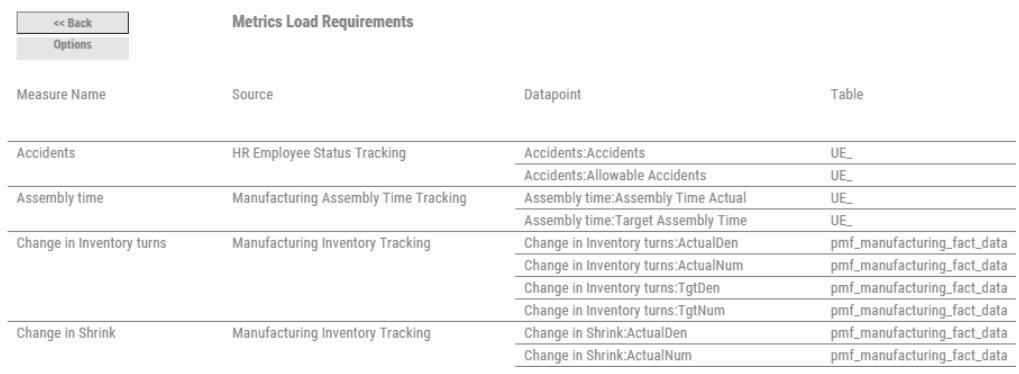


Scorecard	Objectives	Measure	Type	Aggr.	Thresh. Direction	Thresh. Type	Tgt. Type	Units	# Rcrds.
Strategic - CenturyCorp	Improve product quality	Defects	Loaded	+	Desc.	%	Loaded with measures	Cnt	721
Total Measure Values									**721**

Metrics Load Requirements

The Metrics Load Requirements view displays load requirements for the selected metric, including table name, source, and datapoint.

The following example shows the Metrics Load Requirement for four measures.



<< Back

Options

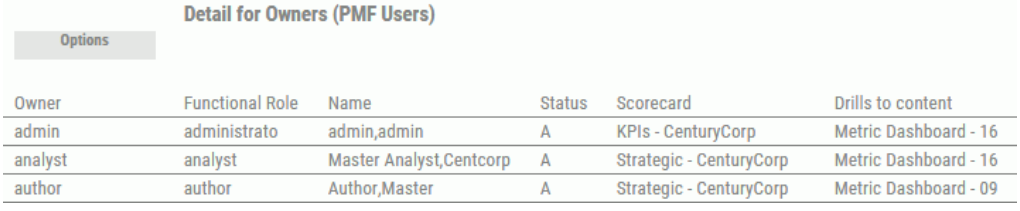
Metrics Load Requirements

Measure Name	Source	Datapoint	Table
Accidents	HR Employee Status Tracking	Accidents:Accidents	UE_
		Accidents:Allowable Accidents	UE_
Assembly time	Manufacturing Assembly Time Tracking	Assembly time:Assembly Time Actual	UE_
		Assembly time:Target Assembly Time	UE_
Change in Inventory turns	Manufacturing Inventory Tracking	Change in Inventory turns:ActualDen	pmf_manufacturing_fact_data
		Change in Inventory turns:ActualNum	pmf_manufacturing_fact_data
		Change in Inventory turns:TgtDen	pmf_manufacturing_fact_data
		Change in Inventory turns:TgtNum	pmf_manufacturing_fact_data
Change in Shrink	Manufacturing Inventory Tracking	Change in Shrink:ActualDen	pmf_manufacturing_fact_data
		Change in Shrink:ActualNum	pmf_manufacturing_fact_data

Owner Information

The Owner Information view displays information about PMF owners and their user preferences. Owners are sorted by Owner ID, Group Name, Name, Scorecard, or Owner Status. Information that might compromise security is not shown.

The following image shows the first page of a sample Owner Information view for the CenturyCorp Card, sorted by Owner ID.



Options

Detail for Owners (PMF Users)

Owner	Functional Role	Name	Status	Scorecard	Drills to content
admin	administrato	admin,admin	A	KPIs - CenturyCorp	Metric Dashboard - 16
analyst	analyst	Master Analyst,Centcorp	A	Strategic - CenturyCorp	Metric Dashboard - 16
author	author	Author,Master	A	Strategic - CenturyCorp	Metric Dashboard - 09

An owner information view includes the following columns:

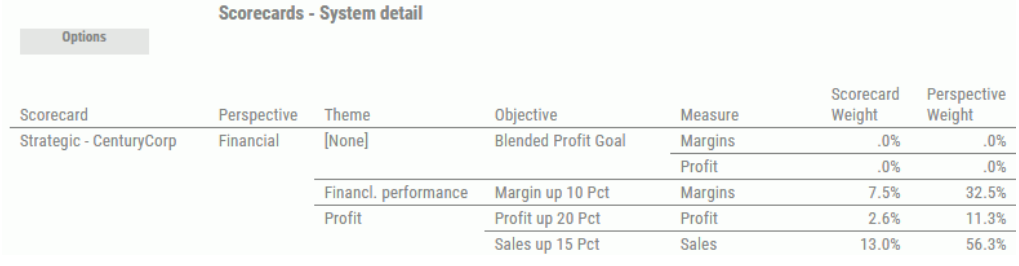
- **Owner ID.** The ID of the owner.
- **Group.** The name of the group with which the owner is associated.
- **Name.** The name of the owner.
- **Status.** The letter A means the owner is active.
- **Scorecard.** The name of the scorecard.
- **Launch Page.** The name of the view shown on the Today page by default.
- **Email.** The email address of the owner.

- **Flags.** Managed Reporting access flags.

Scorecard

The Scorecard view is a summary of the scorecard information in the PMF data mart, showing perspectives and objectives, with drill downs. It includes information about a selected perspective, or all perspectives, optionally sorted by objective weight or perspective weight. It applies to a selected scorecard or to all scorecards.

The following image shows a sample Scorecard view for the Financial perspective, sorted by objective weight. It applies to the CenturyCorp Card.



Scorecards - System detail

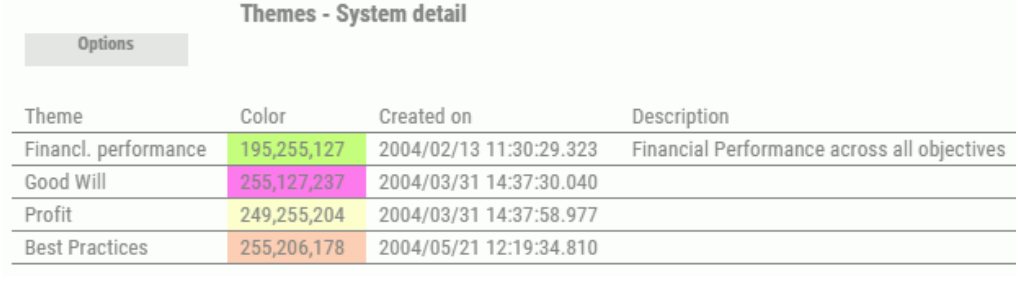
Options

Scorecard	Perspective	Theme	Objective	Measure	Scorecard Weight	Perspective Weight
Strategic - CenturyCorp	Financial	[None]	Blended Profit Goal	Margins	.0%	.0%
				Profit	.0%	.0%
		Financl. performance	Margin up 10 Pct	Margins	7.5%	32.5%
		Profit	Profit up 20 Pct	Profit	2.6%	11.3%
			Sales up 15 Pct	Sales	13.0%	56.3%

Theme Information

Theme Information lists the themes in your strategies and displays the color key, the creation date and time, and the description.

The following image shows a sample of Theme Information.



Themes - System detail

Options

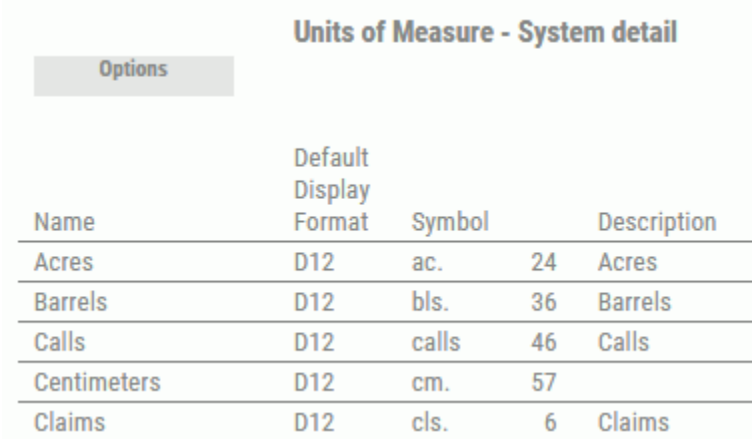
Theme	Color	Created on	Description
Financl. performance	195,255,127	2004/02/13 11:30:29.323	Financial Performance across all objectives
Good Will	255,127,237	2004/03/31 14:37:30.040	
Profit	249,255,204	2004/03/31 14:37:58.977	
Best Practices	255,206,178	2004/05/21 12:19:34.810	

Units of Measure Information

Units of Measure Information is a catalog of the units of measure defined in the PMF data mart. It displays information about the units of measure set up by the administrator for use in PMF. A unit of measure controls the format of the data displayed.

The view includes information, such as the name of the unit of measure, the default display format, the symbol, the unit ID, and a description.

You can sort units of measure information by Unit Name or Unit Symbol. The following image shows a partial view is sorted by Unit Name.


Units of Measure - System detail

Options

Name	Default Display Format	Symbol		Description
Acres	D12	ac.	24	Acres
Barrels	D12	bls.	36	Barrels
Calls	D12	calls	46	Calls
Centimeters	D12	cm.	57	
Claims	D12	cls.	6	Claims

Designing Gadgets

Gadgets are mini-graphs and data grids that display multiple metrics and can be placed together to create complex dashboard pages. Each gadget is designed to perform a specific type of business analysis, such as zoom or compare analysis. You can configure a gadget to display specific data for specific users, and PMF stores user preferences and applies them to each page. Users can select and save various parameters, determined by the gadget author, to personalize the gadgets on their pages at runtime.

To utilize gadgets in your PMF dashboard pages, you can select from the gadgets already available in PMF or create your own gadgets. When you create a new gadget, you also have to create a gadget. Overviews of all aspects of gadget design and implementation are provided in the sections that follow. For information about the forms used to design gadgets in PMF, see *General Tab - Gadgets* on page 368.

Designing a Gadget Procedure

To design a new gadget, you must first create a gadget procedure, which is usually a WebFOCUS reporting or graph procedure that reports on data from the PMF data mart (gadgets can also be designed to extract and report on data from other sources). All gadget procedures must have a name that begins with a *gadget_* prefix.

When using a new or existing WebFOCUS report or graph procedure for a gadget, you can utilize standard WebFOCUS parameter names. There are three types of parameters gadgets can process: display fields, groupings, and filters.

Reference: Gadget Display Fields

Display fields, similar to PRINT or SUM fields in a WebFOCUS request, determine the data fields displayed in the gadget using parameters that indicate whether to display or hide these fields, or to use these fields as data feeds for a graph.

Each display field has the following three possible settings:

- **Not used.** The field is not available to be displayed in the gadget.
- **Optional.** The field, or the result of the field, can be displayed in the gadget if the user chooses to display it.
- **Required.** The field, or the result of the field, must be displayed in the gadget.

The display fields you can choose to include in a gadget are listed and described in the following table:

Display Field	What it Displays
Actual	Actual measure value (raw data).
Target	Target measure value (raw data).
Pct_Reached	Percent reached for actual/target measures.
Pct_Used	Cumulative percent spent for project budget measures. or Cumulative percent completed for project schedule measures.

Display Field	What it Displays
Indicator	Dashboard symbol that indicates the status of a measure, objective, or perspective. For: ❏ **Measures.** Shows the Pct_Reached to be within or outside set tolerances. ❏ **Objectives.** Shows the cumulative, weighted Pct_Reached for all linked measures to be within or outside set tolerances. ❏ **Perspectives.** Shows the cumulative, weighted Pct_Reached for all linked measures and objectives to be within or outside set tolerances.
Indicator + Actual	Combines the actual value with the indicator.
Indicator + Target	Combines the target value with the indicator.
Indicator + Pct_Reached	Combines the percent reached value with the indicator.
Indicator + Pct_Used	Combines the actual measure value with the indicator.
Indicator + Actual + Pct_Reached	Combines the actual and percent reached values with the indicator.
Indicator + Target + Pct_Reached	Combines the target and percent reached values with the indicator.
High-Mid-Low: raw count totals	Shows a raw count of the total number of measures in High (Green), Mid (Yellow), and Low (Red) status for the selected grouping and filtering.
High-Mid-Low: percentages of totals	Shows a percentage of the total number of measures in High (Green), Mid (Yellow), and Low (Red) status for the selected grouping and filtering.

Reference: Gadget Grouping

Grouping involves both sorting and aggregating data values. Selected detail values are sorted using the classifications built into the group, then aggregated at the level implied by the sort.

Many sort groupings are affected by other groupings selected above them. For example, if you select to group by perspective first, and then by objective, the resulting gadget shows measure level details, the measure results are grouped first by perspective and then by objectives within each perspective, and the aggregations occur at the objective level. For each gadget, you can select up to three groupings.

Each grouping has the following two possible settings:

- **Optional.** The gadget can use the grouping, and the gadget instance can include a default value for the grouping.
- **Required.** The gadget must use the grouping, and a value must be specified for the grouping. Note that the default setting from the gadget instance is used, and users can optionally change the default.

The groupings you can choose to include in a gadget are listed and described in the following table:

Grouping Method	What it Does
Perspectives	Sorts results alphabetically by perspective name and aggregates field values at that level.
Objectives	Sorts results alphabetically by objective name and aggregates field values at that level.
Measures	Sorts results alphabetically by measure name and aggregates field values at that level.
User Specified Dimension	Sorts results alphabetically by level values within the dimension specified by the user and aggregates field values at that level. User specified dimension drill downs are continuous by level, using a second drill-down on an individual value within a dimension to show data at the next dimension level.

Grouping Method	What it Does
Time	Sorts results alphabetically by level values within the time dimension and aggregates field values at that level. Time dimension drill downs are continuous by level, using a second drill-down on an individual value within a time dimension to show data at the next time level, down to the lowest level.

Reference: Gadget Filtering

Gadget filters limit the displayed results to the values a user selects. For example, if a user specified the financial perspective as a filter, the results displayed would be limited to only the details linked to the financial perspective. For each gadget, you can specify up to five different filtering methods.

Each filter has the following two possible settings:

- **Optional.** The gadget can use the filter, and the gadget instance can include a default value for the filter.
- **Required.** The gadget must use the filter, and a value must be specified for the filter. Note that the default setting from the gadget instance is used, and users can optionally change the default.

The filters you can choose to include in a gadget are listed and described in the following table:

Filter	Limits the Output to ...
Scorecard	The default scorecard for the gadget. Enables users to select a default scorecard to display in the gadget. If not selected, the default selection is the default scorecard of the user.
Perspective	The default perspective for the gadget. Enables users to select a default perspective to display in the gadget. If not selected, the default selection is the PMF default perspective. **Note:** Requires selection of the Scorecard filter.

Filter	Limits the Output to ...
Objective	The default objective for the gadget. Enables users to select a default objective to display in the gadget. **Note:** Requires selection of the Scorecard filter.
Measure Series	The default measure series for the gadget. Enables users to select a default measure series to display in the gadget.
User Specified Dimension	The default level value for the gadget, for a selected dimension. Enables users to select a default dimension to display in the gadget.
Time	The default point in the time dimension for the gadget. Enables users to select a default time dimension value to display in the gadget.
Red and Yellow Indicators only	Only retrieve and display measure values, objectives, or perspectives, where the result is a very low or moderately low (red or yellow) condition. This filter blocks out any measure values with a high (green) condition.
Red indicators only	Only retrieve and display measure values, objectives, or perspectives, where the result is a very low (red) condition. This filter blocks out any measure values with a high (green) or moderately low (yellow) condition.

Creating a Gadget

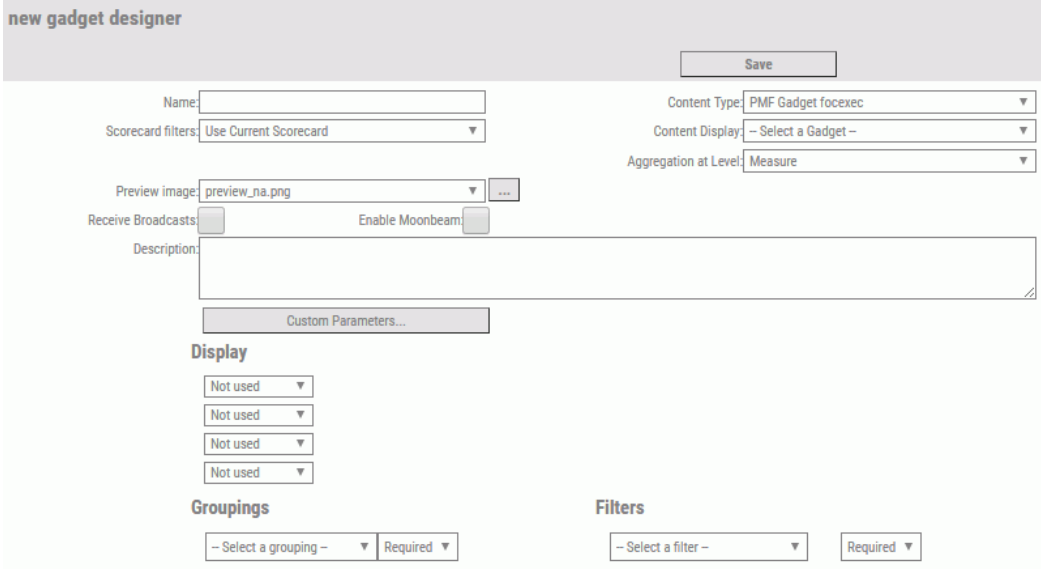
For PMF to call a procedure and store parameters locally for a gadget, you must first create a gadget. The gadget enables PMF to manage the gadget. A gadget defines the input parameters for the gadget and controls how the parameters are saved for each user. The class also controls the parameters that each instance of the gadget can store and recall.

Procedure: How to Create a Gadget

Before creating a gadget, add all new gadget procedures to the WebFOCUS pmfgadgets application folder.

1. In the Manage page in PMF, click the *Gadgets* panel button.
2. Click *New Gadget*.

PMF displays the New Gadget Designer panel. The following image shows the panel, with sample values in the fields.



3. In the Name field, enter a descriptive name for the new gadget.
4. From the Content Type drop-down menu, click the option that applies to the gadget. For details on the choices, see *Adding Various Content Types as Gadgets* on page 356.
5. From the Content Display drop-down menu, click the option that applies to the gadget.

   For example, if the Content Type is PMF gadget focexec, the Content Display drop-down menu contains the names of all FOCEXECs that begin with gadget_ and are in the WebFOCUS pmfgadgets application folder.
6. From the Scorecard filters drop-down menu, click one of the following options.

   - *Use Current Scorecard*, to apply the scorecard that is currently associated with this gadget.
   - *Scorecard not used*, to suppress the use of any scorecard with this gadget.
7. From the Preview image drop-down menu, click the name of the .png file that supplies the preview image for the gadget.

   The preview image appears on the Catalog chevron in Dashboard Designer. If you do not supply a preview image of your own, you can use the default preview image, preview_na.png.
8. Select the *Receive Broadcasts* or *Enable Moonbeam* check boxes to enable these features for the new gadget.

9. In the Description field, optionally type a brief description of the gadget.
10. From the available Display, Groupings, and Filters fields, select the applicable options for the new gadget.
11. Click *Save* when you have finished creating the gadget.

    PMF displays a message saying the new gadget has been added. The Gadget Definitions navigation tree on the left is refreshed to display the new gadget.

Creating Gadgets With WebFOCUS InfoAssist

WebFOCUS InfoAssist can be used to develop new operational gadgets that display information from your operational data sources. A new property defines your custom-developed content as a PMF gadget, and allows you to optionally prompt to filter your content using PMF dimensions. For more information on how to use this, see the *WebFOCUS InfoAssist User's Manual*.

Note: InfoAssist integration for setting up parameter receipt requires WebFOCUS 7.7.01 or higher. If you have an earlier version of WebFOCUS, you can still handle parameters in the report code. For more information, see *Mapping Parameters to an Operational Report* on page 329.

Adding Various Content Types as Gadgets

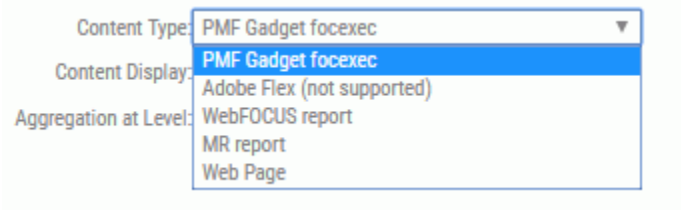
PMF allows you to directly drag content from the WebFOCUS Repository on to any Dashboard you create or edit.

The PMF Dashboard capability allows you to directly add several types of content as gadgets. These types include:

- Web applications (for example, Google, Wiki, or other web widgets)
- Adobe® Flex® SWF objects

  Note: These are deprecated.
- General WebFOCUS FOCEXEC content

When creating a gadget, or editing a gadget, you can select the content type from a drop-down menu on the New Gadget Designer panel or the Edit Gadget Designer panel, as shown in the following image.



Content Type	Description
PMF Gadget focexec	Default. Allows you to select from any FOCEXEC in your environment with gadget_ as the starting characters in the name. Typically, these are PMF gadgets. Since most of the shipped FOCEXEC gadgets are already registered in PMF, you would typically need to use this option only if you have created a custom gadget and want to register it with the system.
Adobe Flex control	This content type is no longer supported.
WebFOCUS report	Allows you to select from any FOCEXEC in your environment. Typically, you would select this option to gadgetize any existing WebFOCUS report. This allows you to pass standard PMF parameters to the report. For more information on how to receive and use those parameters, see *Mapping Parameters to an Operational Report* on page 329.
MR report	Allows you to integrate Managed Reporting content into PMF. Typically, you would select this option to gadgetize an existing WebFOCUS Managed Reporting report. This capability allows you to pass standard PMF parameters to the report. For more information on how to receive and use those parameters, see *Mapping Parameters to an Operational Report* on page 329. **Note:** This content type is deprecated.
Web Page	Allows you to specify any external web application that you want to include as a gadget. You can type the entire URL for the application, including any parameters, in the URL field.

Once you have specified the type of gadget that you are registering, you can configure the passing of parameters, as appropriate to the gadget, as detailed in *Designing Gadgets* on page 349.

Custom Parameters for Gadgets

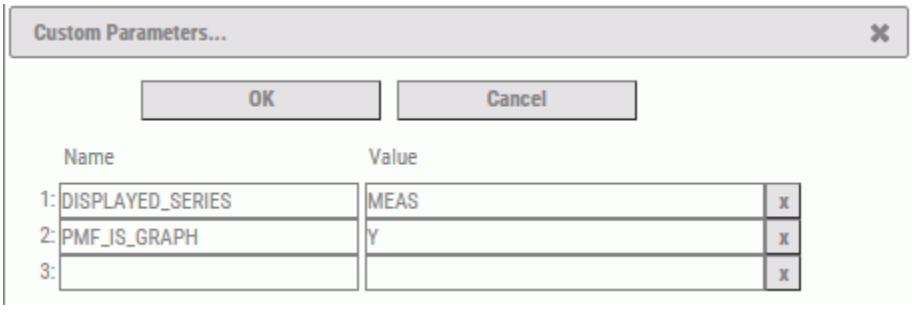
WebFOCUS parameters can be passed to your Gadgets, allowing you to configure components for inclusion from any external system without needing to code a procedure. This essentially causes PMF to pass the WebFOCUS amper variables to any Gadget, every time that Gadget is added to a Dashboard.

Procedure: How to Set Up a Custom Parameter for a Gadget

1. In the Manage page, click the *Gadgets* panel button.
2. Expand the *Gadget Definitions* folder.
3. To set the custom parameters, choose the Gadget from the list.

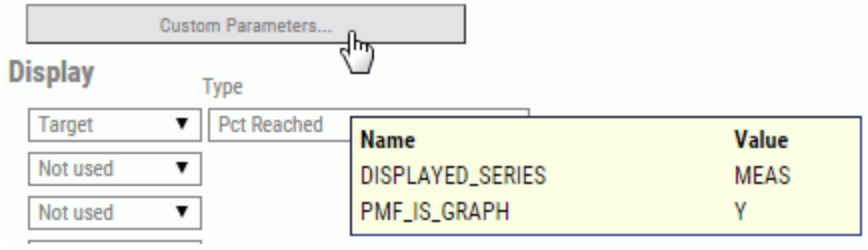
   The Edit Gadget Designer panel opens.
4. Click the *Custom Parameters* button.

   The Custom Parameter panel opens, as shown in the following image.



5. Enter a parameter name in the Name column, and its value in the Value column. Each time you add a new entry, the panel adds another row for another entry. You can enter as many parameters as you need.
6. Click *OK* to save the parameters.

Tip: To see the parameters that have been set for a Gadget, hover over the Custom Parameters button, as shown in the following image.



Turning a WebFOCUS Report Into a Gadget

You can turn any WebFOCUS report into a gadget. Once you do that, you can place the content of the report on a dashboard that you design.

You can also configure metric and dimensional parameters (preferences) in order to pass them from a PMF dashboard to a WebFOCUS report. You can then use those parameters in sorting, filtering, and other content display activities. When you turn a WebFOCUS report into a gadget, you must identify which parameters need to be passed from the dashboard to the report.

You must also make sure that the report can detect, receive, and process those parameters. For more information on how to modify a report to handle parameters, see *Mapping Parameters to an Operational Report* on page 329.

Procedure: How to Turn a WebFOCUS Report Into a Gadget

1. In the Manage page in PMF, click the *Gadgets* panel button.
2. Click *New Gadget*.

   The New Gadget Designer panel opens.
3. In the Name field, type a name for your new gadget.

   Tip: You might want to use the default title of the WebFOCUS report.
4. From the Content Type drop-down menu, click *WebFOCUS report*.
5. From the Content Display drop-down menu, click the name of the WebFOCUS report (the FOCEXEC) that you want to turn into a gadget.
6. From the Groupings and Filters drop-down menus, supply values for the parameters that you would like PMF to pass to the WebFOCUS report.
7. Click *Save* to save the WebFOCUS report as a gadget.

Once you have created a gadget from a WebFOCUS report, you can drop the gadget onto any dashboard. From the dashboard, you can set default preferences for the new gadget for use in the selection and display of data.

The new gadget can also participate in Broadcast, as any other gadget can. For an example that shows how to create a gadget from a WebFOCUS report and work with it on a dashboard, see the following example.

Example: Turning the WebFOCUS Outages Report Into a Gadget

This example uses a WebFOCUS report named process_orders_outages. The report requires one parameter, a value for the Location dimension.

The report is supplied with your product software.

This example has four parts.

- ❏ Create the gadget.
- ❏ Add the gadget to a dashboard and set preferences. You will use Dashboard Designer for this task. For full information on Dashboard Designer, see *Designing a Dashboard* on page 362.
- ❏ Configure the gadget for Broadcast. For full information on Broadcast, see *What is Broadcast?* on page 135 and *Setting Up Broadcast on a Dashboard* on page 136.
- ❏ Preview the live dashboard.

Create the Gadget

1. In the Manage page, click the *Gadgets* panel button.
2. Click *New Gadget*.

   The New Gadget Designer panel opens.
3. In the Name field, type *Outages in Ordering Process*.

   Outages in Ordering Process is the default title of the WebFOCUS report.
4. From the Content Type drop-down menu, click *WebFOCUS report*.
5. From the Content Display drop-down menu, click *process_orders_outages*. That is the name of the WebFOCUS report (the FOCEXEC) that you want to turn into a gadget.
6. From the Filters drop-down menu, select *User Specified Dimension*. Keep the associated default value, Required, for this filter.
7. Click *Save* to save the WebFOCUS report as a gadget.

Add the Gadget to a Dashboard and Set Preferences

In this procedure, you will add the new gadget to a dashboard and set preferences for it. To implement Broadcast using the new gadget, you will enable the listening filter.

1. In the Today page in PMF, click the dashboard icon .
2. Click the *Add Dashboard* icon or the *Edit Dashboard* icon .

   The Dashboard Designer opens.
3. Click the title bar. In the Rename Dashboard panel, type *WebFOCUS Outages* as the name of the new dashboard.
4. In the Gadgets list, use the scroll bar to locate your new gadget, *Outages in Ordering Process*.

   Tip: In the Catalog, a default preview is used if you do not provide a preview of your own. For instructions on providing your own preview, see the *Performance Management Framework Developer Guide*.
5. Drag and drop the *Outages in Ordering Process* gadget to the desired position on the design canvas.
6. Hover over the gadget and click the *Gadget Preferences* icon in the title bar to confirm the default preferences for the gadget.
7. In the Filters list, confirm that *Location* is selected (highlighted).
8. Confirm that *EAST* is selected (highlighted).
9. Click the *Save Dashboard* icon .

Configure the Gadget for Broadcast

Broadcast is always on and the gadgets placed on your dashboard will automatically listen to any filters that are set. To disable Broadcast for a specific gadget, click the *Listens to filters* icon on the gadget toolbar. This will change the filter status to Ignore and that gadget will not receive any broadcast information.

Preview the Live Dashboard

The PMF Today page is responsive and will instantly propagate any changes made to your dashboard.

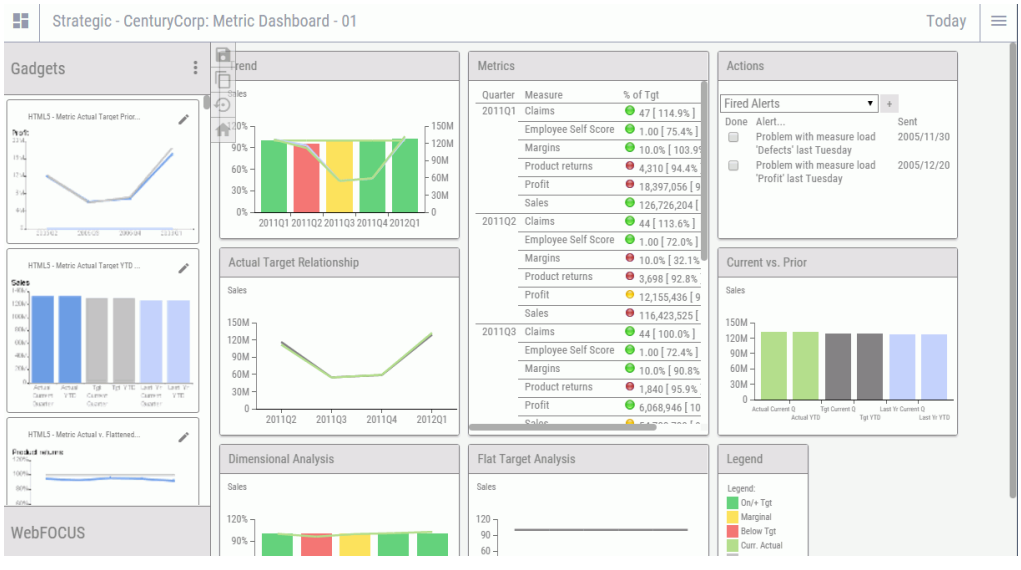
Designing a Dashboard

A dashboard combines one or more gadgets placed together on a single interface that users can access as a PMF dashboard page.

The PMF design-time dashboard interface is called Dashboard Designer. Dashboard Designer enables you to add gadgets to a design canvas and preview them in run-time mode, to create a presentation-ready page for your users. For more information on how to use the Dashboard Designer, see *Dashboard Designer* on page 118.

If you enable Broadcast for a dashboard, run-time changes that a user makes to one gadget on the dashboard are applied to multiple gadgets on the dashboard. As an administrator, you can add a gadget to, or remove a gadget from, a Broadcast group with a few clicks of your mouse. For more information on Broadcast, see *What is Broadcast?* on page 135.

The following image shows a sample dashboard in Dashboard Designer.



For information on Private Dashboards, see *Working with Private Dashboards* on page 328.

Designing a Dashboard for Mobile Content

PMF automatically adapts any content designed for a PC-based browser system to work on any iOS device. No extra steps need to be taken when designing a dashboard.

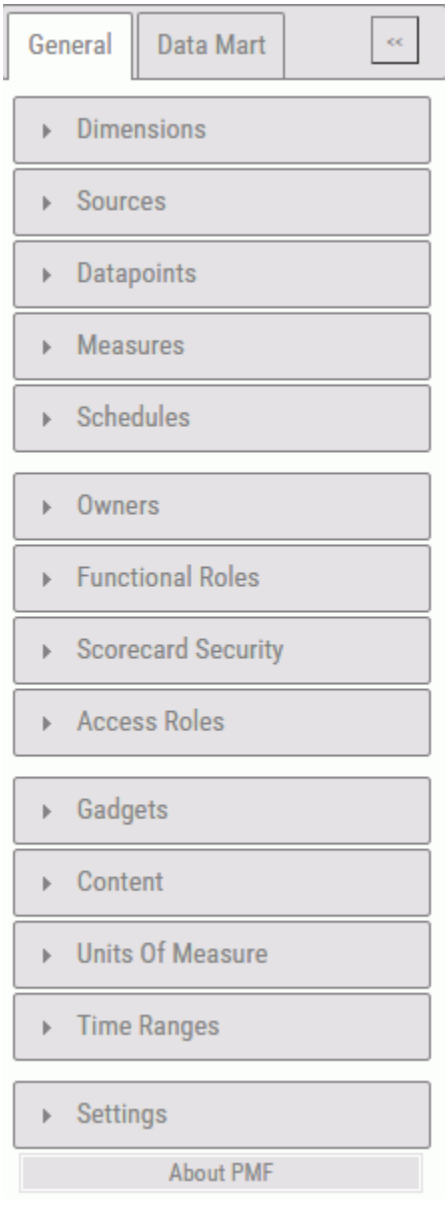
Manage Page - Quick Reference

The Manage page gives you the ability to administer the PMF application.

Manage Page Components

The Manage page provides components that Administrators can access to manage dimensions, sources, fields, measures, schedules, owners, functional roles, scorecard security, access roles, dashboards (gadgets), content, units of measure, time ranges, and system settings.

The following image shows the Manage page.



On the Manage page, you (the administrator) can manage metadata for the following components:

- **Dimensions.** Enables you to create new dimensions and access the Dimension Loader to load dimensions.

- **Measures.** Enables you to create and modify measures metadata, which controls the measure series. Each measure series is a distinct measure that you can link to an objective in a PMF scorecard. You can also load measures with the measure loader.
- **Schedules.** Enables you to schedule load-related activity.
- **Owners.** Enables you to add new system users, make existing users active or inactive, and modify the Today page for each user.
- **Functional Roles.** Enables you to create and modify functional roles to control the level of access to all of the systems in PMF for all users assigned to a functional role. The default roles in PMF are Admin w Access Security, Administrator, Analyst, Author, Consumer, and Planner.
- **Scorecard Security.** Enables you to control scorecard user access. You can control which scorecards each user can access, and also determine which users have access to a specific scorecard. Access levels include no access, viewer, editor, and administrator.
- **Access Roles.** Enables you to create and modify access roles to control the level of access to measures and dimensions for all users assigned to an access role.
- **Gadgets.** Enables you to design types of gadgets (classes) and create and modify individual gadgets. A gadget is usually a small graph or data grid.
- **Content.** Enables you to select the specific content to be displayed on the Today page for each user. A variety of content can be available in the application. This component also enables you to create up to 10 custom categories for the content that you manage.
- **Units of Measure.** Enables you to create and modify units of measure, which determine the types of actual quantities being measured in PMF. Each measure is linked to a unit of measure.
- **Time Ranges.** Enables you to create and modify time ranges, which can be used wherever trending data appears in views throughout PMF.
- **Settings.** Enables you to set system and default settings, such as organization name, corporate logo, style sheet, indicator set, Today date, and more.
- **About PMF.** Displays the version and release dates.

Reference: General Tab - Dimensions

The Dimensions panel button provides access to the dimensions and measures loaders. These tools are fully integrated into your Administration view. Unlike most systems, in which the creation of the underlying data used for analysis is performed using a separate tool, the loaders enable you to perform data loads right in the context of the framework. After a load is complete, you can immediately switch to a data-bearing view and test the new measures you have loaded right in the system.

For details on the Dimension Loader, see *Designing a Simple Dimension Load* on page 284.

Reference: General Tab - Measures

The Measures panel button provides access to all aspects of working with measures. You can access the Edit Measures panel. The Edit Measures panel controls the measure and its connected rows of values, which you can optionally link to an objective. For details on the fields and buttons in the Edit Measures panel, see *Working With Measures* on page 305.

You can also access the Measure Loader panel. The Measure Loader panel enables you to load data for a selected measure by specifying the dimension key values, field maps, and filters.

Reference: General Tab - Schedules

The Edit Schedule panel enables you to edit or delete a saved schedule for a dimension or measure load. Schedules are created during the load process. For details on creating a schedule for a dimension load, see *Running and Scheduling a Dimension Load* on page 290.

To access the Edit Schedule panel, click the *Schedules* panel button and select a dimension or measure load schedule in the navigation tree.

You can change the job description and interval at which to run the load. You are prompted for information that applies to the selected interval. For example, you are prompted for the days of the month if you select a monthly interval.

Enter the value for time in 24-hour notation. For example, to schedule a load at 8:00 a.m., enter 0800.

Reference: General Tab - Owners

The Edit Owner panel enables you to edit the properties assigned to an owner. Owners are constituents who use PMF. They are known as owners because they own the responsibilities for measure records, projects, processes, objectives, and scorecards.

Note that each owner ID tends to exactly match a sign-in ID used in the system. You cannot have an owner ID without a matching sign-in ID because that user ID could never be validated for basic access to the PMF system.

The Owners record contains an optional password field. This field is designed to allow the Owners table to double as a basic authentication table in cases where the customer does not have an external security system. For example, the standard PMF demo uses the Owners table for this purpose.

To edit the properties assigned to an owner, click *Owners* in the Manage page and expand the tree structure. Click the desired owner name to open the Edit Owner panel.

The same fields used to create an owner in the New Owner panel are used to edit owner properties in the Edit Owner panel. The only exception is the Owner ID field, which cannot be updated when editing the rest of the fields in the panel. For details on the fields in the New Owner and Edit Owner forms, see *Fields in the Owner Panels* on page 221.

Reference: General Tab - Functional Roles

The Edit Functional Role panel enables you to control the system-level functions each type of user is allowed to perform. As administrator, you can change the access allowed for the default roles that ship with PMF. You can also add and personalize as many roles as necessary for system maintenance.

For more information on setting access levels for functional roles, see *Access Levels for Functional Roles* on page 229. For details on creating a new functional role, see *How to Create a New Functional Role* on page 225.

Reference: General Tab - Scorecard Security

Provides access to the Edit Scorecard User Access forms, which enable you to control scorecard user access. You can control which scorecards each user can access, and also determine which users have access to a specific scorecard. Access levels include no access, viewer, editor, and administrator.

Reference: General Tab - Access Roles

The Edit Owner Access panel provides a way to control measure access for a group of owners linked to an access role by enabling you to set the level of dimension values that each owner can access.

From the drop-down menus for each dimension, select the level of access for the selected access role. The owners linked to this access role will only be able to see measures at or below the dimension level you set.

For details on setting measure access for access roles, see *How to Set Measure Access by Access Role* on page 273.

Reference: General Tab - Gadgets

There are two types of panels used to design and implement gadgets in your views and pages.

The Gadget Designer panel enables you to create a class of gadgets, which is required before you can create a gadget within that class. A class points to a WebFOCUS gadget procedure and lets you define its properties. The Gadget Designer panel is also used to edit existing gadgets.

The following tables lists and describes the fields used in the Edit Gadget Designer panel:

Field	Description
Name	The name of the gadget.
Scorecard filters	Specify whether the current scorecard filters should be used.
Width	Set the number of pixels in width for this gadget.
Height	Set the number of pixels in height for this gadget.
Preview image	The preview image of the gadget.
Receive Broadcasts	Select to enable the broadcast feature for the gadget.
Enable Moonbeam	Select to enable the moonbeam feature.
Content Type	Select which type of content will be added as the gadget.
Content Display	Select which type of content will be displayed.
Aggregation at Level	Select the appropriate level of the dimension at which data will be aggregated.
Reset Dashboard defaults	Select to reset Dashboard default values.

Field	Description
Description	A description of the gadget.
Custom Parameters	Allows you to pass WebFOCUS parameters to your gadget.
Display	Select from the following Display elements to include in the gadget being created. ❑ Actual ❑ Benchmark ❑ Forecast ❑ Stretch Target ❑ Target
Groupings	Select up to three Groupings elements to include in the gadget being created. (Use the drop-down menu next to each element to select Required or Optional.) The following options are available: ❑ Perspective ❑ Theme ❑ Objective ❑ Measure ❑ Project ❑ User Specified Dimension ❑ Time

Field	Description
Filters	Select up to three Filters elements to include in the gadget being created. (Use the drop-down menu next to each element to select Required or Optional.) The following options are available: ❏ Perspective ❏ Theme ❏ Objective ❏ Measures ❏ Projects ❏ User Specified Dimension ❏ Time ❏ Scorecard ❏ Red and Yellow indicators only ❏ Red indicators only

Reference: General Tab - Content

The New Content and Edit Content panels enable you to create content and edit existing content. Content is a default reference to any WebFOCUS procedure that displays automatically when users log on to PMF. PMF content management lets you link PMF measures, objectives, projects, and processes to WebFOCUS operational reports and webpages. PMF ships with default content. You can configure additional content by clicking the *Content* panel button in the Manage page.

The New Content and Edit Content panels also enable you to create up to 10 custom categories for the content that you manage.

To create content, click the *Content* panel button and then click *New*. To edit existing content, click the *Content* panel button, expand all the folders in the tree structure, and select the desired content that you want to edit. The Edit Content panel opens. For more information on creating and editing content, see *Managing Content* on page 320.

To create a custom category on the Edit Content panel, select a *User Type* field, and rename it to reflect the nature of the new category. For more information on creating a custom category, see *Creating a Custom Category* on page 327.

The following table lists and describes the fields in both the Edit Content and New Content panels.

Field	Description
Name	Contains the name of the WebFOCUS procedure that runs as content. The content must be placed in the Managed Report default repository used by PMF in order to run it. The maximum number of characters is 12. **Note:** If the optional Web Page check box is selected, this field becomes unavailable and displays URL.
Content Type	Select the content type that will be created. When you select *Web Site*, enter a website URL in the field which is labeled URL (normally labeled Parameters).
Application	Select the application that this content will use. This option is only available when WebFOCUS Procedure is the Content Type.
Content	Select the WebFOCUS procedure for the view that you want to add. This option is only available when WebFOCUS Procedure is the Content Type.
User Type (check boxes)	Enables you to create up to 10 custom categories for the content that you manage. Left-click a *User Type* field and supply a category name of your choice.
Owner	The user who has responsibility for this content.
Parameters (or URL)	Optional. When you select the *Web Page* check box, enter a URL in this field, which is renamed URL.
Scorecards	Enables you to select what Scorecards will show the selected content.
Escape (button)	When using the optional Parameters field, use this to convert parameters so they can be submitted in machine code format as part of a URL.

Field	Description
Unescape (button)	When using the optional Parameters field, use this to submit the parameters in readable text.
Preview	Opens the content in a new window where you can preview it.
Email Certified (check box)	If you select the *Email Certified* check box, the content will be embedded in the body of an email (rather than included as an attachment) when you schedule the view.

Reference: General Tab - Units of Measure

The Edit Unit of Measure panel enables you to control the format of data displayed in PMF. There are many default measures included in PMF. You can customize the standard display format of any unit of measure to modify how that measure is displayed in the detail views in which it appears.

To edit units of measure, click *Units of Measure* in the left pane, and expand the tree structure. Click a unit of measure and the Edit Unit of Measure panel opens.

The same fields in the Edit Unit of Measure panel are required for input as for updating. The following table lists and describes fields in the Edit Unit of Measure panel.

Field	Description
Unit name	Type a name for the unit of measure. The maximum number of characters is 20.

Field	Description
Default format	A WebFOCUS numeric display format valid for the unit of measure. Valid format types are D (floating-point double-precision), F (floating-point single-precision), I (integer), and P (packed decimal). The formats are I*n*, D*n.o*, F*n.o*, and P*n.d*, where *n* represents the maximum number of digits to display, and *.o*, which is optional, and *.d*, which is required, represent the decimal point and the number of digits to display after the decimal point. The maximum number you can code before and after the decimal point is 10 for I, 15 for D, 7 for F, and 31 for P. For more information about numeric display options, see the *Describing Data With WebFOCUS Language* manual.
Common symbol	Type characters for the symbol used to represent the unit of measure. The maximum number of characters is 6.
Place symbol	The location of the symbol. Select one of the following: ❏ Place at end of value. ❏ Place at front of value.
Description	Type a description or rationale for the unit of measure. The maximum number of characters is 100.

Reference: General Tab - Time Ranges

The Edit Time Range panel enables you to create new custom time ranges or edit existing time ranges. After you edit or create a time range, it can be used as a trending value throughout all PMF views, wherever measures or objectives are trended.

The following table lists and describes the fields in both the New Time Range and Edit Time Range forms.

Field	Description
Name	The long, descriptive name of the time range, for example, Last 13 months. The maximum number of characters is 50.

Field	Description
Abbreviation	The short, abbreviated name of the time range, for example, 13M. The maximum number of characters is 10.
Start and End are:	Select between the following two values using the drop-down menu: ❑ **Time segment endpoints.** All time values between the Start and End of the Range. ❑ **Two discrete points.** Two discrete values (for example, Prior and Current).
Start Type	For the following start types, select: ❑ *No Start Range* if there is no start date for this time range. ❑ *Relative* if the time range starts on a date relative to the current time period, as specified on the Edit System Settings panel. Use the Start Value field to enter a positive or negative number to start the time range that number of units in the future or past, depending on the unit of time specified as the Start Level (Month, Quarter, or Year). For example, if you enter -10 in the Start Value field, and select Month for the Start Level, the time range starts 10 months prior to the current time period. If you use the default of 0, the time range is the current time period. ❑ *Previous* if the time range starts on a date relative to the previous month, quarter, or year, which you set with the Start Level field. ❑ *Prior* if the time range starts on a date relative to the prior month, quarter, or year, which you set with the Start Level field. Note that prior time values are in the previous calendar year. For example, if the current month is July 2006, the prior month is July 2005. ❑ *Fixed* if the trend starts on a specific time period (for example, 2006Q1).

Field	Description
End Type	For the following end types, select: ❑ *No End Range* if there is no end date for this time range. ❑ *Relative* if the time range ends on a date relative to the current time period, as specified on the Edit System Settings panel. Use the End Value field to enter a positive or negative number to end the time range that number of units in the future or past, depending on the unit of time specified as the End Level (Month, Quarter, or Year). For example, if you enter -10 in the End Value field, and select Month for the End Level, the time range ends 10 months from the current time period. If you use the default of 0, the time range is the current time period. ❑ *Previous* if the time range ends on a date relative to the previous month, quarter, or year, which you set with the End Level field. ❑ *Prior* if the time range ends on a date relative to the prior month, quarter, or year, which you set with the End Level field. **Note:** Prior time values are in the previous calendar year. For example, if the current quarter is Q3 2006, the prior quarter is Q2 2005. ❑ *Fixed* if the trend ends on a specific time period.
Start Time Level	Select *Current Level*, *Year*, *Quarter*, or *Month* from the drop-down menu. This level specifies the start of the time range. If you select *Current Level*, the time range will use the Current Time Level value from the Edit System Settings panel.
End Time Level	Select *Current Level*, *Year*, *Quarter*, or *Month* from the drop-down menu. This level specifies the end of the time range. If you select *Current Level*, the time range will use the Current Time Level value from the Edit System Settings panel.
Start Value	If you selected *Relative* in the Start Type field, enter a positive or negative number to start the time range that number of units in the future or past depending on the unit of time specified in the Start Level field. If you selected *Fixed* in the Start Type field, select the desired time period to start the time range using the Start Value drop-down menu.

Field	Description
End Value	If you selected *Relative* in the End Type field, enter a positive or negative number to end the time range that number of units in the future or past depending on the unit of time specified in the End Level field. If you selected *Fixed* in the End Type field, select the desired time period to end the time range using the End Value drop-down menu.
Show this Time Range	If selected, the time range will be shown and available for use wherever trending data appears in views throughout PMF. Hidden time ranges are shown in the Time Ranges (hidden) tree.

Important: If you have a custom Time dimension, you may need to make adjustments to the following time periods, which are standard in PMF, to conform to the structure of your custom Time dimension: Last 13 months or weeks, Last 25 months or weeks, Last 5 periods, and Last 9 periods.

The adjustments may involve altering these time ranges or deleting them and creating new time ranges.

Otherwise, the default time ranges in PMF, which are based on the standard 12-month, 4-quarter Gregorian calendar, will not produce realistic results after your new Time dimension is loaded.

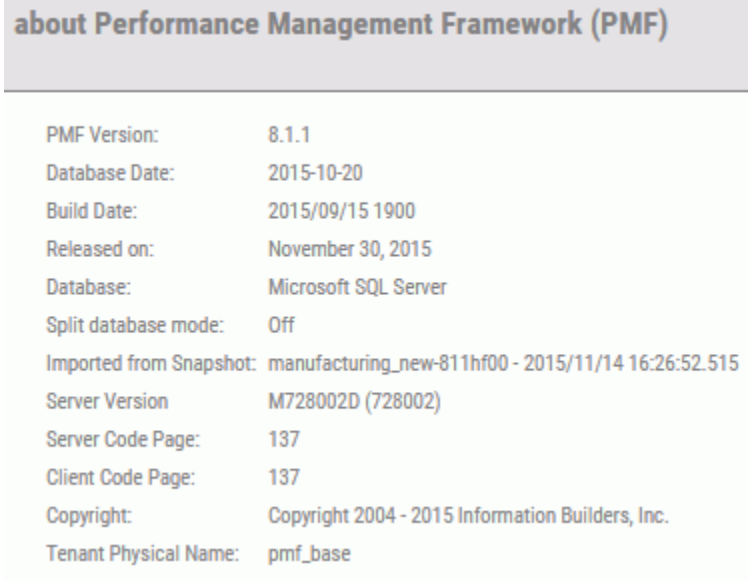
For more information on custom Time dimensions, see *Designing a Custom Time Dimension Load* on page 295.

Reference: General Tab - Settings

The *Settings* panel button enables you to view and edit any of the default PMF settings. The settings are categorized into Debugging, Integration, Look, Security, Summarization, System, Tolerances, and UI. For more information, see *Viewing and Editing Default Settings* on page 378.

Reference: General Tab - About PMF

The About Performance Management Framework (PMF) panel, shown in the following image, displays the product version number, database date, build date, release date, and copyright.



Reference: Data Mart Tab - Load Now

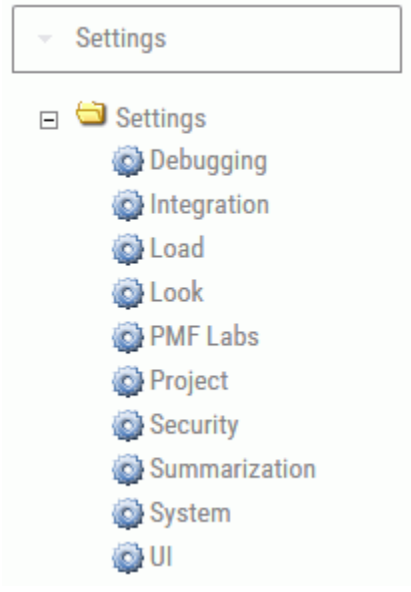
The Load Now panel lets you automatically refresh the entire PMF cube from Source data. For more information, see *Load Now Panel* on page 262.

Reference: Data Mart Tab - Manage Snapshot

The Manage Snapshot panel allows you to work with PMF snapshots. For more information, see *Working with Snapshots* on page 331.

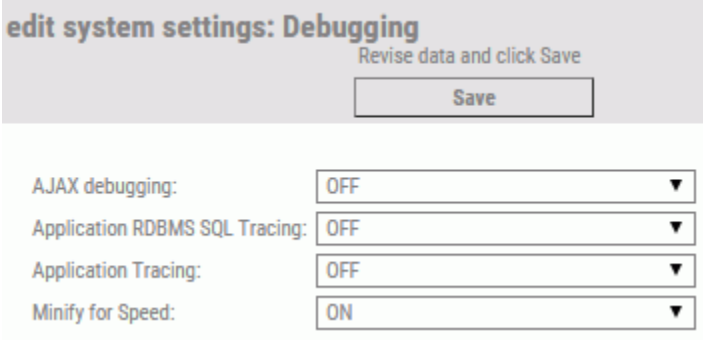
Viewing and Editing Default Settings

You can view and edit all default settings in PMF by clicking *Settings* in the Manage page to open the Settings menu, as shown in the following image.



Debugging Settings

The Debugging panel is shown in the following image. After you make changes on the panel, click *Save* to save your changes.

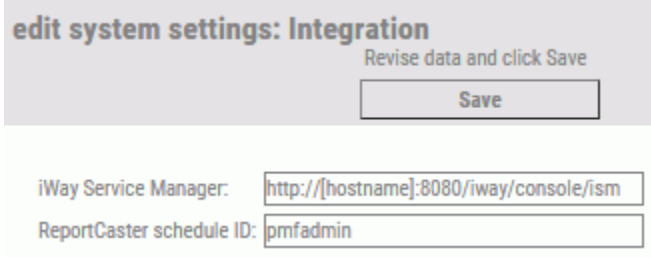


The following table lists and describes the default PMF settings you can view and change on the Debugging panel.

Setting	What To Set It To
AJAX debugging	Indicates whether the system should display the AJAX execution code before submitting the request. The following options are available: ❑ **OFF.** Hides the trace window and shuts off debugging. ❑ **ON.** Shows fatal errors and standard AJAX and JavaScript flows. ❑ **ALL.** Shows detailed AJAX and JavaScript program flows. The default value is OFF.
Application RDBMS SQL Tracing	Select *OFF* or *ON* to indicate whether WebFOCUS SQL Tracing should be active. The default is OFF.
Application Tracing	Select *ON* or *ALL* to debug PMF by turning WebFOCUS ECHOing on. ON displays FOCUS code for the last processing step. ALL displays FOCUS code for all processing and is not recommended. The default is OFF.
Minify for Speed	Enable this feature to run compacted components for faster network performance.

Integration Settings

The Integration panel is shown in the following image. After you make changes on the panel, click *Save* to save your changes.

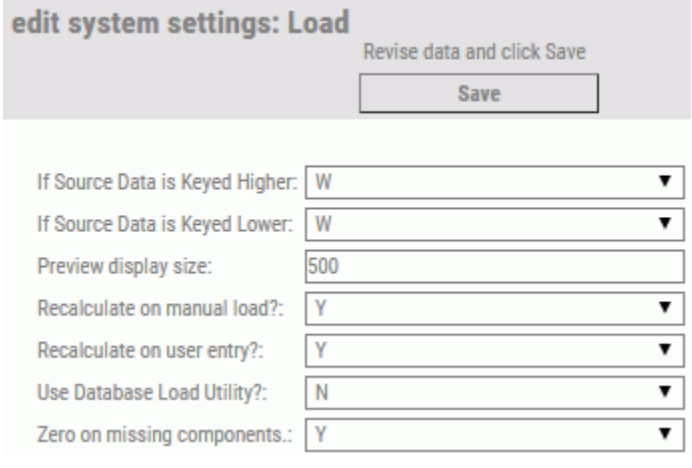


The following table lists and describes the default PMF setting you can view and change on the Integration panel.

Setting	What To Set It To
iWay Service Manager	Provide the URL for the iWay Service Manager Console.
ReportCaster schedule ID	Provide the WebFOCUS Server user ID that is passed to ReportCaster for scheduled runs.

Load Settings

The Load panel is shown in the following image. After you make changes on the panel, click *Save* to save your changes.



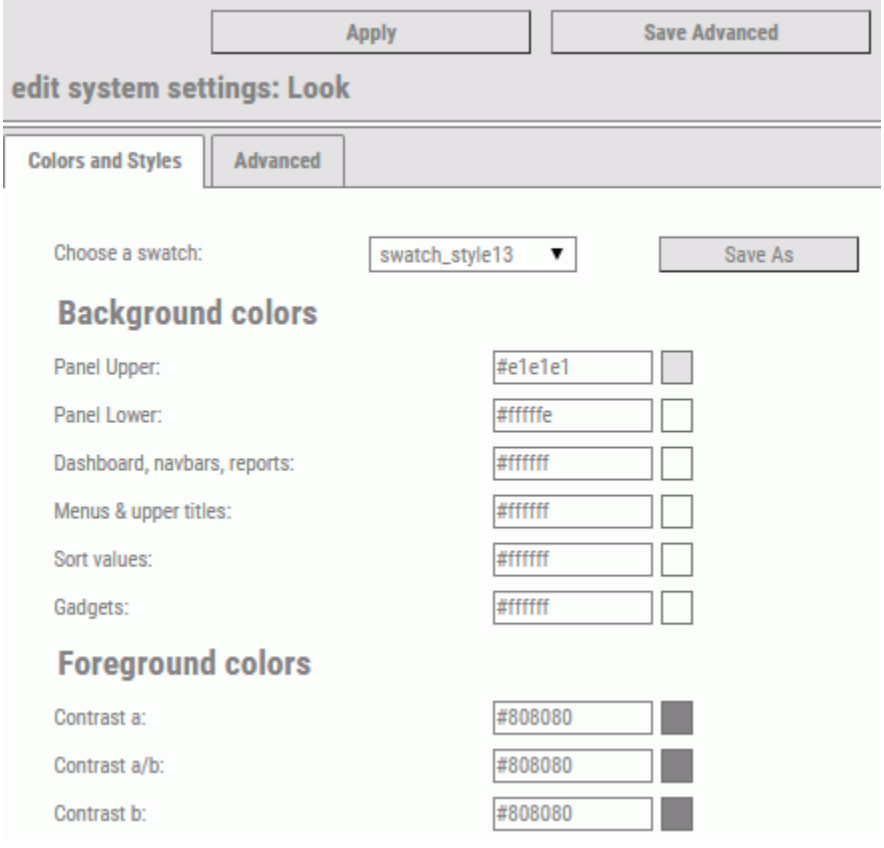
The following table lists and describes the default PMF settings you can view and change on the Load panel.

Setting	What To Set It To
If Source Data is Keyed Higher	Controls how PMF handles lower dimension level source data on load. Select *E* to display an error and stop the source load, or *W* to complete the load and ignore the lower level data. The default value is *E*.

Setting	What To Set It To
If Source Data is Keyed Lower	Controls how PMF handles higher dimension level source data on load. Select *E* to display an error and stop the source load or *W* to complete the load and ignore the higher level data. The default value is *E*.
Preview display size	The maximum number of lines to show in the Preview tab for Sources, Datapoints, Dimensions, and Measures.
Recalculate on manual load?	Controls if PMF should, by default, set all datapoints and measures to be recalculated when you click Load (or Generate) on a source, datapoint, dimension, or measure during a session. This sets up the default when you create new objects. This setting can be overridden on many objects.
Recalculate on user entry?	Controls if PMF should, by default, set all datapoints and measures to be recalculated when a user enters data into a user-entered source. This sets up the default when you create new objects. This setting can be overridden on individual user-entered sources.
Use Database Load Utility?	Enables bulk loading.
Zero on missing components	Select *Y* to set values to zero for measure components missing at an intersection. This setting is the default. Select *N* to reject rows with missing components and allow them to be null. For example, if the actual of a measure is connected to a datapoint for which there is data, but its target data is missing, 0 will be inserted instead of not loading that intersection for the measure. If this is set to N, any missing components at an intersection cause *all* components to not be loaded.

Look Settings

The Look panel is shown in the following image. After you make changes on the panel, click *Save* to save your changes.



The Colors and Styles tab allows you to generate a color swatch for PMF, WebFOCUS content, and the WebFOCUS BI Portal, to give a consistent style to match the official style of your organization, or your group preferences.

The following table lists and describes the default PMF swatch settings you can view and change in the Colors and Styles tab on the Look panel.

Setting	What To Set It To
Choose a swatch	Select one of the following default swatches for all PMF views. ❏ *Set 01*. Uses 10 point Sans-Serif font to provide good readability and compatibility with the ISO shapes, ISO signs, 3-D, and Few indicator sets. ❏ *Set 02*. Uses 8 point Sans-Serif font to provide much denser information on-screen (with slightly less readability) and is compatible with the Glass indicator set. ❏ *Set 03*. White, silver, black. Uses Set 01 specifications. ❏ *Set 04*. Black (Hitech). Uses Set 02 specifications. ❏ *Set 05*. Blue (Hitech). Uses Set 02 specifications. ❏ *Set 06*. Orange (Hitech). Uses Set 02 specifications. ❏ *Set 07*. Corporate blue. Uses Set 02 specifications. ❏ *Set 08*. Sporty 3D Blue. The default is Set 08. ❏ *Set 09*. Sporty Red & Black. ❏ *Set 10*. Rainbow Hip. ❏ *Set 11*. Rainbow Floral. ❏ *Set 12*. Cool Ranch. ❏ *Set 13*. Clarity.
Background colors	Refers to the HTML backgrounds in PMF, such as those for panels, grids, and dashboards.
Foreground colors	Refers to the colors of text and borders in PMF.

The following table lists and describes the default PMF settings you can view and change in the Advanced tab on the Look panel.

Setting	What To Set It To
Chart Palette	Select one of the following default color palettes for charts and indicators. ❑ *ANGULAR* to use a cooler toned color scheme to describe performance on charts and indicators in all grids. This is the default setting. ❑ *BLUES_GREYS* to use gradations of blues to describe performance on charts and indicators in all grids. ❑ *EURO_GLASS* to use darker and bolder colors to describe performance on charts and indicators in all grids. ❑ *GREEN_N_TAN* to use gradations of greens to describe performance on charts and indicators in all grids. ❑ *RYG_PASTELS* to use a red-yellow-green pastel color scheme to describe performance on charts and indicators in all grids. ❑ *TANS_BROWNS* to use gradations of tans to describe performance on charts and indicators in all grids. ❑ *WARM* to use a warmer toned color scheme to describe performance on charts and indicators in all grids.
Data Font	Type the name of the default font style you want used in all views and grids. The default is ARIAL. If you specify a font and want to ensure the font is used for WebFOCUS PDF output, the font must be defined on the WebFOCUS Server in the PDF.FMP file.
Heading Font	Type the name of the default font style for headings in all reports. The default is ARIAL.
Line Chart Rounding effect	Select *Y* to make lines on line charts rounded.
Line Chart Thickness	Select the thickness of on line charts. The available options are *1* (thin), *2* (medium), and *3* (thick).

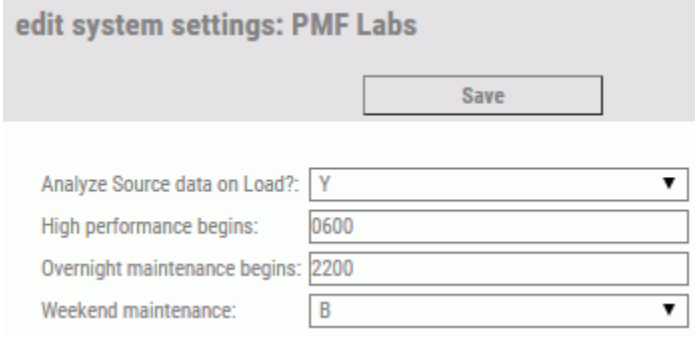
Setting	What To Set It To
Organization Logo File	Provide a file with your organization logo to use to display on reports.
Organization Name	Provide the name of your company, organization, or enterprise (for display on some reports).
Use Chart Gradients	Select *Y* to use gradient colors on chart objects. Select *N* to flatten chart objects and not use gradients.
Indicator Set	Select one of the following indicator sets to display in views and grids in PMF: ❑ Set one (ISO shape): ❑ Set two (ISO signs): ❑ Set three (boxes): ❑ Set four (Boxes - no Green): ❑ Set five (Dots - no Green): ❑ Set six (Dots): ❑ Set seven (Checks and Lines): ❑ Set eight (Brightness): ❑ Set nine (Faces): ❑ Set ten (Thumbs):

Using the same number elements will give you all of the essential designs, but you can also mix and match them to get a number of combinations.

PMF Labs Settings

The PMF Labs panel is shown in the following image. After you make changes on the panel, click *Save* to save your changes.

Note: This option is only seen if you enable the PMF Labs feature in System settings.



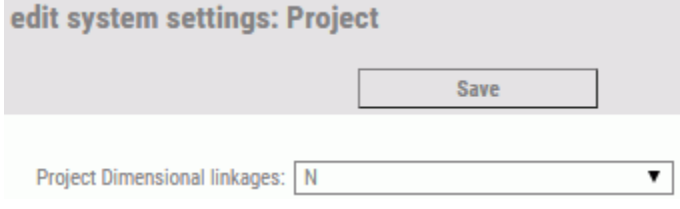
The following table lists and describes the default PMF settings you can view and change on the PMF Labs panel.

Setting	What To Set It To
Analyze Source data on Load?	Specify if an analysis of the source data will be run during source load.
High performance begins	Set the time for scheduled or batch jobs to stop running when online entry and reporting starts.
Overnight maintenance begins	The time for when scheduled loads can begin.

Setting	What To Set It To
Weekend maintenance	Set if weekend maintenance should occur. Options are: ❑ S - Saturdays only ❑ U - Sundays only ❑ B - Both Saturdays and Sundays ❑ O - Off

Project Settings

The Project panel is shown in the following image. After you make changes on the panel, click *Save* to save your changes.

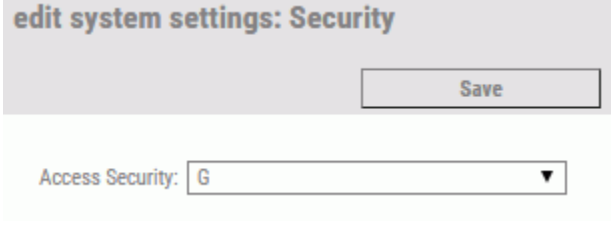


The following table lists and describes the default PMF setting you can view and change on the Project panel.

Setting	What To Set It To
Project Dimensional linkages	Select whether to enable the ability to link Projects to up to two dimensions. Choose one of the following: ❑ *Y* (Yes) ❑ *N* (No). The default is N (No). If you select *Y*, the following options are available: ❑ *Project Dimension 1*. Choose a specific Dimension for the first Project Dimension. Available Dimensions are listed, excluding Time and Project). ❑ *Project Dimension Level 1*. Choose a Dimension level for the first Project Dimension. ❑ *Project Dimension 2*. Choose a specific Dimension for the second Project Dimension. Available Dimensions are listed, excluding Time and Project). ❑ *Project Dimension Level 2*. Choose a Dimension level for the second Project Dimension.

Security Settings

The Security panel is shown in the following image. After you make changes on the panel, click *Save* to save your changes.

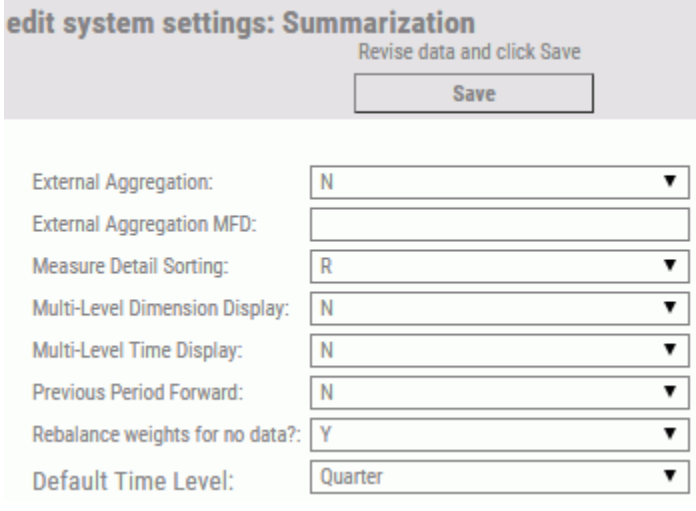


The following table lists and describes the default PMF settings you can view and change on the Security panel.

Setting	What To Set It To
Access Security	Select the level of security. Choose one of the following: ❑ *O* (Off) ❑ *G* (Global). This is the default value. ❑ *S* (Scorecard)

Summarization Settings

The Summarization panel is shown in the following image. After you make changes on the panel, click *Save* to save your changes.



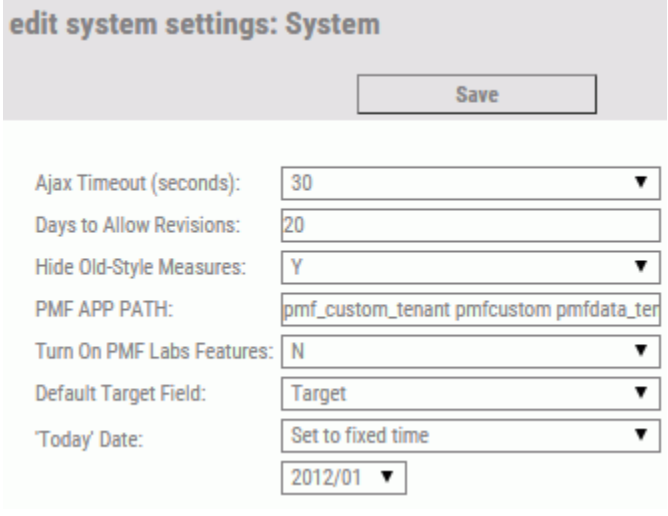
The following table lists and describes the default PMF settings you can view and change on the Summarization panel.

Setting	What To Set It To
External Aggregation	Select whether to allow aggregate measure values using external tables with pre-populated rollup values. Choose one of the following: ❑ *Y* (Yes) ❑ *N* (No). The default is N (No).
External Aggregation MFD	Type the name of the Master File to use for external aggregation.
Measure Detail Sorting	Select whether to sort measure detail from the report context or the measure dimension order. Choose one of the following: ❑ *R* to pick up sorting from the report context. The default is R. ❑ *M* to enforce the measure dimension order for sorting.
Multi-Level Dimension Display	Select whether to display data at lower levels of non-Time Dimensions than what is measured. Choose one of the following: ❑ *Y* (Yes). The default is Y. ❑ *N* (No).
Multi-Level Time Display	Select whether to display data at lower levels of Time than what is measured. Choose one of the following: ❑ *Y* (Yes). The default is Y. ❑ *N* (No).

Setting	What To Set It To
Previous Period Forward	Select whether previous measure data should be carried over into the current period until actual data becomes available. PMF marks carried over data to distinguish from actual data. Choose one of the following: ❑ *Y* (Yes) ❑ *N* (No). The default is N (No).
Rebalance weights for no data?	Select *Y* to rebalance weights to compensate for measure series with no data. The default is Y.
Default Time Level	Select one of the following default time levels for displaying data when the time level is not specified. ❑ *Year* ❑ *Quarter*. The default is Quarter. ❑ *Month*

System Settings

The System panel is shown in the following image. After you make changes on the panel, click *Save* to save your changes.



The following table lists and describes the default PMF settings you can view and change on the System panel.

Setting	What To Set It To
Ajax Timeout (seconds)	The amount of time (in seconds) PMF should wait for http server requests.
Days to Allow Revisions	The amount of days PMF will allow newer Feedback and Project information to be updated. The default value is 20 days.
Hide Old-Style Measures	Hides legacy measures from appearing in the Measure trees on the Author and Manage pages.
PMF APP PATH	Enter the WebFOCUS Application Path used by PMF. This path controls which server apps are used in the Loaders and in Content.
Turn On PMF Labs Features	Displays new and unsupported features from the PMF laboratory. **Note:** Enabling this feature is not recommended for production environments.

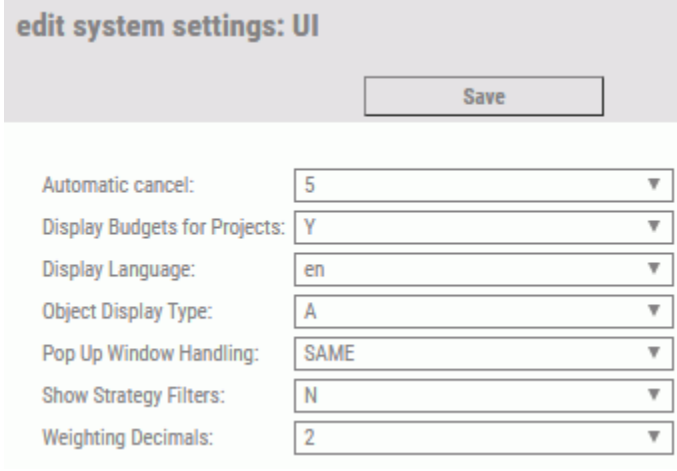
Setting	What To Set It To
Default Target Field	Select the default target field to be displayed in views. Choose one of the following: ❑ *Benchmark*. A comparative average or median value for a business sector for displaying measures in reports. ❑ *Forecast*. A predictive alternate target or an estimate of future performance for displaying measures in reports. ❑ *Stretch Target*. An alternate target field for displaying measures in reports. ❑ *Target*. The default target field for displaying measures in reports. The default is Target. **Note:** You might see additional target fields, or different ones, depending on how your administrator has configured PMF at your site.

Setting	What To Set It To

Today Date	Select the now date shown for all PMF views. Choose one of the following options from the drop-down menu:
	❑ *Use system clock date*. PMF uses the clock time and date on the server where your PMF application is running.
	❑ *Set to fixed time*. PMF overrides the now date with the date you select from the drop-down menu below. This setting freezes PMF in time and does not allow PMF to slide as time elapses. This capability is best used for demonstrations of PMF when working with historical data and is not recommended for use in any other situation.
	❑ *Use custom procedure*. You can modify a supplied procedure that calculates a custom date if the system clock date and fixed time options are not suited to your needs. Edit the procedure pmf_set_date.fex, which is located in your apps\mainstreet directory. Create three WebFOCUS Dialogue Manager variables: &TLVL01_CUR, &TLVL02_CUR, and &TLVL03_CUR.
	For example, the following code sets the current default time period to the previous calendar month:
	`-SET &CURRENT_DATE_INTERNAL_FORMAT =`
	`-  DATECVT(&YYMD, 'I8YYMD', 'YYMD');`
	`-SET &PREV_MONTH_INTERNAL_FORMAT =`
	`-  DATEADD(&CURRENT_DATE_INTERNAL_FORMAT, 'M', -1);`
	`-SET &PREV_MONTH_DATE =`
	`-  DATECVT(&PREV_MONTH_INTERNAL_FORMAT, 'YYMD',`
	`'A8YYMD');`
	`-SET &TLVL01_CUR = EDIT(&PREV_MONTH_DATE, '9999');`
	`-SET &TLVL03_CUR = EDIT(&PREV_MONTH_DATE, '$$$$99');`
	`-SET &TLVL02_CUR = DECODE &TLVL03_CUR ('01' '1' '02'`
	`'1'`
	`-  '03' '1' '04' '2' '05' '2' '06' '2' '07' '3' '08'`
	`'3'`
	`-  '09' '3' ELSE '4');`

UI Settings

The UI panel is shown in the following image. After you make changes on the panel, click *Save*.



The following table lists and describes the default PMF settings you can view and change on the UI panel.

Setting	What To Set It To
Automatic cancel	Specify how many seconds PMF should wait before auto-cancelling actions, such as a click on the dashboard, and drills. The default value is 5 seconds.
Display Budgets for Projects	Select *Y* to track project expenditures.

Setting	What To Set It To
Display Language	Select the default language for panels and reports. Choose one of the following: ❑ *ar* (Arabic - unsupported) ❑ *br* (Brazilian Portuguese) ❑ *ca* (Catalan - unsupported) ❑ *de* (German) ❑ *en* (English) ❑ *es* (Spanish) ❑ *fr* (French) ❑ *he* (Hebrew - unsupported) ❑ *it* (Italian) ❑ *ja* (Japanese) ❑ *ko* (Korean) ❑ *nl* (Dutch - unsupported) ❑ *zh* (Chinese) **Note:** ❑ Japanese, Chinese, and Korean all require UTF-8. ❑ Non-Latin languages require codepage 65001.
Object Display Type	Select to display all objects or only the objects owned by the user who is viewing the Author page. Choose one of the following: ❑ *A* (All objects). The default is A (All objects). ❑ *U* (Only user-owned objects)
Pop Up Window Handling	This setting is no longer supported.

Setting	What To Set It To
Show Strategy Filters	Select *Y* to show the Perspective and Objective filters on the Dashboard filters button. Select *N* to hide them. The default value is N.
Weighting Decimals	Select the number of significant decimal places to use for weighting. Choose *0*, *1*, or *2* decimal places. The default is 1.

Changing Language Display

PMF has the ability to support English, Brazilian Portuguese, Chinese, French, German, Italian, Japanese, Korean, Chinese, and Spanish for its user interface. You can switch PMF to display the user interface (panels, trees) and all report column titles and headings in any of these languages. There can be only one primary language configured for PMF at this time.

Note:

- Japanese, Chinese, and Korean all require UTF-8.
- Non-Latin languages require codepage 65001.

If you change the user interface to display a language other than English, PMF runs a process to automatically change some internal data depending on the selected language. This data includes shipped versions of units of measure, content, dashboards, gadgets, time ranges, system settings, and functional roles.

The internal information that is not automatically translated when the primary language is changed includes scorecard data, dimension data, user-entered data, and static components, such as Business Intelligence Portal (BIP) tab titles and shipped documentation. You should select your desired language at installation time, otherwise you have to manually change BIP tab titles when you change the PMF language. For documentation, you have to download and install non-English documentation for PMF.

The primary language is stored as a setting in the PMF primary data mart. It is possible to connect the application to a data mart and have PMF automatically adopt the language configured there after an automatic metadata resync is performed (as long as the language configured is one PMF supports).

If you want user interfaces and data display to be appropriate for the language you select, you should change the primary language of your WebFOCUS environment. The WebFOCUS primary language controls BIP menus, WebFOCUS tools available from BIP menus, and right-click menus in the PMF trees. For more information about changing the primary language for WebFOCUS, see the *WebFOCUS Security and Administration* manual, and the *WebFOCUS and ReportCaster Installation and Configuration* manual for your platform.

Before changing the Display Language setting on the UI Settings panel, do the following:

- Change the WebFOCUS server code page to display the correct character set for the target language.
- Verify that you have installed the appropriate language pack and that your user logons are configured to display the WebFOCUS user interface in the desired target language.
- You may have to change some server defaults (for example, CDN) to make the display of currency correct for the target language.

Procedure: How to Change Language Display

To change the PMF language display, perform the following steps:

1. Sign in to PMF as an Administrator.
2. Click the page icon .
3. Click the *Manage* page.
4. Click the *Settings* panel button.

   The Settings menu displays.
5. On the UI panel, select one of the following two-character language codes from the Display Language drop-down menu. Some of these languages are currently unsupported. If you need support for a language, contact your IB representative.

   - en - English
   - ar - Arabic (unsupported)
   - br - Brazilian Portuguese
   - ca - Catalan (unsupported)
   - de - German
   - es - Spanish

- fr - French
- he - Hebrew (unsupported)
- it - Italian
- ja - Japanese (requires UTF-8)
- ko - Korean (requires UTF-8)
- nl - Dutch (unsupported)
- zh - Chinese (requires UTF-8)

6. Click *Save* to save the changes.

   PMF automatically changes the internal language code and display items. You must sign out of PMF and then sign in again to see the changes.

Appendix A

Tips for Administrators and Authors

This appendix contains topics that provide tips and troubleshooting techniques for PMF Administrators and Authors. Topics specially designed for only Administrators or Authors are marked as such.

In this appendix:

- Administrators: Hiding Content From Users
- Administrators: Automated Upgrades
- Administrators: Styling the Look and Feel of PMF
- Authors: Creating a Scorecard
- Troubleshooting Measure Data Issues
- Troubleshooting and Debugging Aids
- Designing a PMF Quick Reporting Mart

Administrators: Hiding Content From Users

There are times when you need to hide specific content from all users. For example:

- You may want to hide a particular dashboard, scorecard, or the Analysis Designer, if it displays sensitive information.
- You may be in the middle of designing a new dashboard and do not want anyone to see it while it is a work-in-progress.

The Edit Content Access panel enables you to restrict all users from accessing specific views and dashboards. For a selected content (launch) page, deselect all view categories to hide the content from all users. For more information about using the Edit Content Access panel, see *How to Add Existing Content to Analysis Categories* on page 324.

Content Panel Button

You can easily limit the views your users see and hide content so that they are not presented to your users at will.

The Content Panel button on the Today page displays a list of categories for PMF views and linked Content (for example, web or operational reports). If a category is empty (for example, there are no Content items for that category, probably because items have been removed from that category), PMF will not display the category.

Administrators: Automated Upgrades

PMF enables you to implement automated upgrades if an existing PMF installation is found. When you run the PMF installer and enter the license code, the installer determines if upgrading is an option. If the upgrade options is selected, the PMF installer:

- Upgrades the PMF application seamlessly.
- Does not alter any existing Business Intelligence Dashboard group views, or any MRE users or groups.
- Creates the pmf_install.csv file in the pmfdata application folder. This file contains the release number for the current application version of PMF.
- Creates migration scripts, which can be run automatically to upgrade the PMF data mart.

Note: After the installer completes, the data mart is still set to the previous release.

Procedure: How to Upgrade the Data Mart Automatically

1. Start PMF after upgrading.

   The PMF internal synchronization code (pmf_internal_check_and_rpt) compares the release number in the a_defaults.fex and pmf_install.csv files.

   If the release numbers are the same, processing continues. However, if the release numbers are not the same, there is a problem with the installation and processing stops with an error condition.

2. PMF checks the internal SYSTEM_SETTINGS table in the PMF data mart.

   If the data mart has the same release level as the PMF application, processing continues. However, if the data mart has a higher release level, there is a problem with the installation and processing stops with an error condition.

3. If the data mart is at a lower release level than PMF, you are prompted to upgrade the data mart.

   Note: A warning message displays, recommending that you back up your database before upgrading.

4. Click *Resynch*.

The PMF automatic synchronizer runs all DDLs needed to upgrade from the previous release to the new release. This process works between point releases or major releases.

Note: After you manually upgrade the data mart to the Release 5 level or higher, PMF will be able to process all future data mart upgrades (migrations) automatically.

Administrators: Styling the Look and Feel of PMF

PMF supports a central style sheet model for all aspects of views, reports, and the application User Interface. Using the Look panel, you can use global settings to allow all views, gadgets, and charts to be formatted as you desire. The global settings allow you to select:

- A consistent color scheme across all charts and chart gadgets. This allows for user-created chart coloration.
- A global style sheet default that formats views and grid gadgets. This allows for easier user-created styling.
- An override font for all reports.

PMF includes chart and graph styles that allow you to automatically select a look for every chart and graph in the system (all content that maps to a WebFOCUS graph from PMF content). All charts in the system are written to allow template styling. You can also define custom charting color schemes using the Look panel.

A section of the Look settings control the look and style of the user interface through different indicators, HTML style sheets, graph palettes, and WebFOCUS StyleSheet settings. An example of this is shown in the following image.

You can create new skins to follow any corporate standards without adversely affecting the operation of PMF.

Note: For more information on the default settings you can view and change on the Look panel, see *Look Settings* on page 382.

PMF Swatching System

The PMF style swatching system allows you to generate a color swatch for PMF, WebFOCUS content, and the WebFOCUS BI Portal, that give a consistent style to match the official style of your organization or your group preferences.

The swatch file can come from using the WebFOCUS Branding portal, or you can design your own styling in a few moments with the PMF dynamic styling panel. Once you have a style designed, you can apply it across an entire PMF tenant in seconds. PMF picks up the new style and applies it across the entire system.

Note:

- If you are in a multi-tenant or cloud version of PMF, the color look for PMF is tenant-specific. You can easily move the styling from tenant to tenant, since it is controlled by a compact text file.

- The PMF legacy look management system that uses manually-configured CSS files and FOCUS style sheets is deprecated. In PMF Release 8, all 11 standard style sheets that shipped with PMF have equivalent swatches that you can use.

Procedure: How to Use the Swatching System to Change the PMF Look

To change the look of PMF, using the swatching system:

1. In the Manage page, click the *Settings* panel button.
2. Click the *Look* panel button.

   The Look settings panel opens.
3. You can either set the new colors directly in the Background and Foreground colors fields, or select a swatch (LESS) file from the *Choose a swatch* drop-down menu.

   The Look settings panel has the following options:

   - **Choose a swatch drop-down menu:**
     - **Template swatches.** Swatches that ship with PMF. You can click *Save As* and rename the swatch, but you cannot override their settings without changing the file name.
     - **Tenant swatches.** Swatches that you or another user with administrator privileges created for use in PMF. Clicking Save or Save As will save the swatch file to the local area for your tenant.
   - **Background colors.** Refer to HTML backgrounds, such as those for panels, grids, and dashboards.
   - **Foreground colors.** Refer to text and borders.
4. Click *Preview* once you have finished making your selections.

   A confirmation box opens.

   You can save the current state of the swatch as you are editing it by clicking *Save*. You can save the current settings under a new name by clicking *Save As*.
5. Click *Apply* to apply the swatch and reformat the PMF colors. If you want to cancel the operation, click *Revert*.

   Note:

   - After applying a new swatch to PMF, you should refresh the portal pages to remove the old style sheets and display the new colors.

- If you created a tenant swatch, its LESS file is automatically included in any snapshots.

For more information on the swatching system, see *Look Settings* on page 382.

Procedure: How to Disable or Enable Chart Gradients

You can control whether PMF applies a color gradient to charts. Disabling the gradients allows you to apply a flat look to charts.

To disable or enable chart gradients:

1. In the Manage page, click the *Settings* panel button.
2. Click the *Look* panel button.

   The Look settings panel opens.
3. Click the *Advanced* tab.
4. From the drop-down menu, select:

   - **Y.** Enable gradients on charts.
   - **N.** Disable gradients on charts.
5. Click *Save Advanced*.

Changing the PMF User Interface and Content Font

The PMF User Interface and content fonts can be customized to more closely match the visual style of your organization.

Before you start, you will need:

- Read/write disc access to PMF files on the WebFOCUS Client (and for a two-tier installation, on the WebFOCUS Reporting Server).
- Ability to restart the Web server and application container.

Procedure: How to Configure Fonts for CSS or UI Use

1. Load the distributed file *mainstreet/cssdebug/pmf_jquery.less* into a text editor and find the section that begins with *html **. The section will look similar to the following example:

```
html *
{
  font-family: Arial, Helvetica, sans-serif !important;
}
```

2. Edit the text and add the name of the new default font first. For example:

```
html *
{
  font-family: Neo Sans Std, Arial, Helvetica, sans-serif !
important;
}
```

3. Save the file.
4. Load the distributed file *mainstreet/strategy_map.svg* into a text editor and find the class *.baseFont*. The section will look similar to the following example:

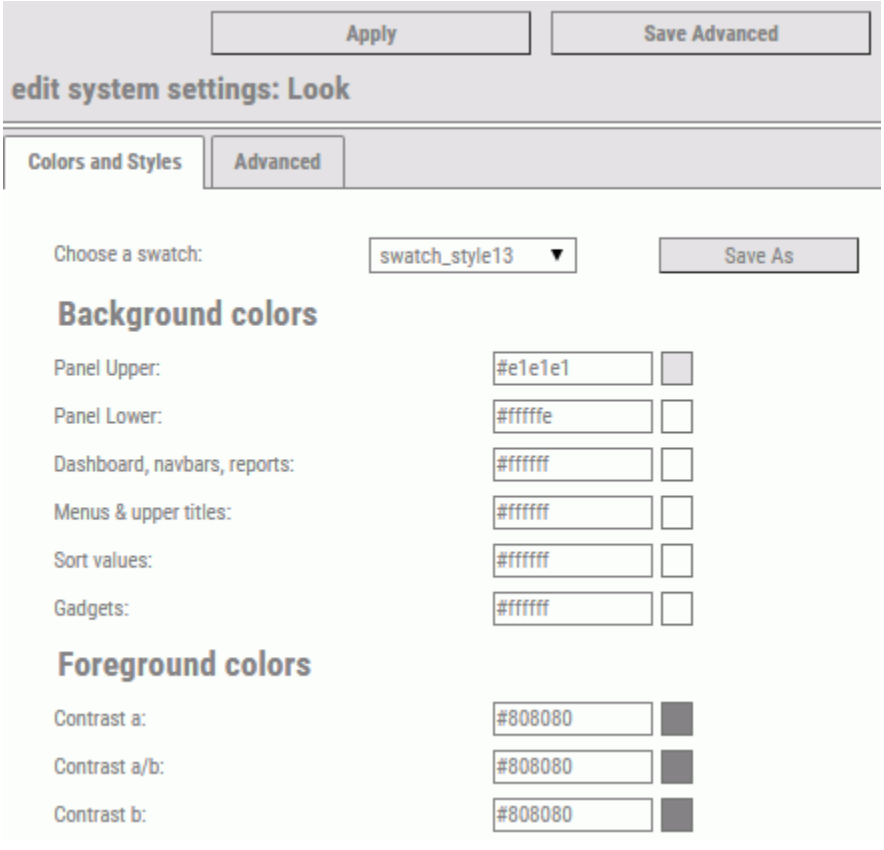
```
.baseFont
{
   font-family: Arial, Helvetica, sans-serif !important;
   font-size: 10pt;
}
```

5. Edit the text and add the name of the new default font first. For example:

```
.baseFont
{
   font-family: Neo Sans Std, Arial, Helvetica, sans-serif !
important;
   font-size: 10pt;
}
```

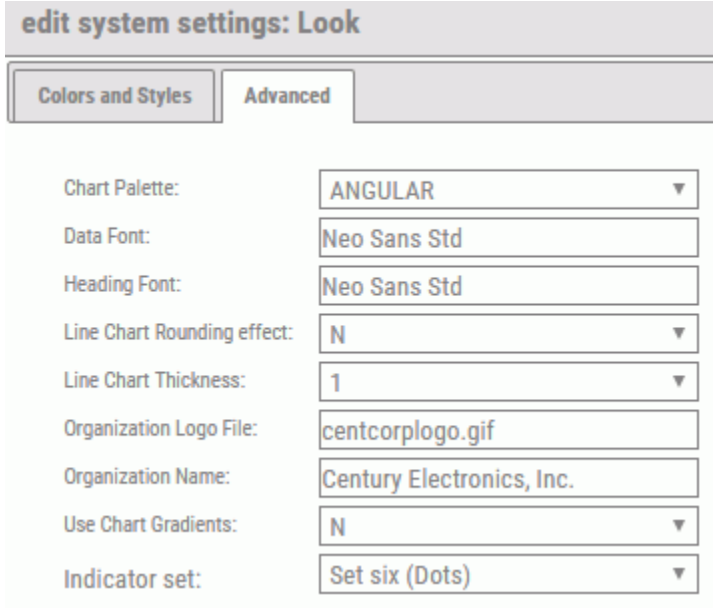
6. Save the file.
7. In PMF, click the *Manage* page.
8. Click the *Settings* panel button and select *Look*.

The Look panel opens, as shown in the following image.



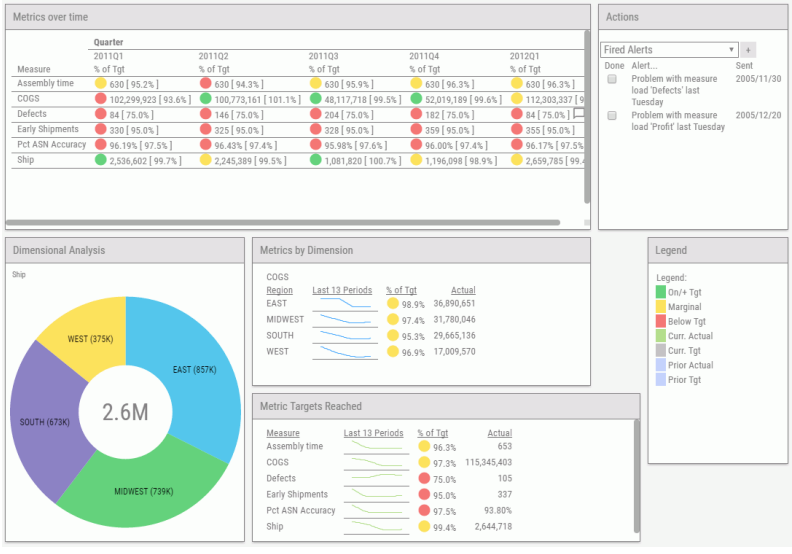
9. Confirm that you are using the desired swatch file and click *Apply*.
10. In the Look panel, click the *Advanced* tab.

11. Type the name of your font in the Data Font and Heading Font boxes, as shown in the following image.



12. Click *Save Advanced*.

The PMF UI and all online content, except for server delivered PDF, Excel, and PowerPoint content, should now display using your desired font, as shown in the following image.



Authors: Creating a Scorecard

There are several ways to create Scorecards in PMF. Choose one of the following methods depending on your needs:

- **Create a new scorecard.** If you are starting from scratch and want to create a prototype of a new scorecard quickly, you can use the PMF Scorecard Wizard to create a new scorecard in minutes. The Scorecard Wizard takes you through all of the steps required to create a scorecard, from selecting the strategic objectives and perspectives, to creating commonly-selected metrics including entry formulas for each strategic objective. After you complete creating a scorecard with the Scorecard Wizard, you only need to draw the Strategy Map and type some sample values for the metrics. PMF does the rest.

  To open the New Scorecard Wizard, click *Scorecards* in the left pane of the Author page and select the *Wizard* button.

- **Copy an existing scorecard.** If you are trying to copy an existing scorecard, the PMF cascade function enables you to do this quickly and easily. When you save the scorecard, PMF copies all aspects of the scorecard including the Strategy Map and metric linkages. The Strategy Map includes cause and effect linkages, project and process links, and themes. The metric linkages includes all corresponding weights.

To open the New Scorecard panel and access the cascade function, click *Scorecards* in the left pane of the Author page, and select the *New* button. Provide the new scorecard with a name, select the scorecard you want to copy from the Parent Scorecard drop-down list, select the *Cascade Scorecard* check box, and click *Save* to complete the cascading operation.

After the scorecard cascading is complete, you can change the parent child relationship of the scorecard you created, which effectively removes the cascade and disconnects the parent and child scorecards from each other. You can also change other aspects of the scorecard including the objectives, perspectives, metrics, projects, processes, and cause and effect linkages.

Troubleshooting Measure Data Issues

If you run a PMF view or gadget, and do not see the expected data, the following is a list of potential issues to investigate in order to confirm that you have taken all of the steps necessary to publish your measure data:

- Is the measure linked to any objectives on the scorecard you are displaying?

  Click the *Measure* panel in the Manage or Author pages and click the *Link/Unlink to Objectives* button to make sure the measure has been linked to the Scorecard.

- Have you weighted the measure so its data contributes to the objective?

  Click the *Measure* panel in the Manage or Author pages and click the *Link/Unlink to Objectives* button to make sure the measure has a positive weight assigned to it for the objective on the scorecard.

- Have you loaded data for the measure?

  Check the Measure Loader Preview screen to confirm that there is data loaded.

- Was the data loaded to include data for the currently set Time period from which you are reporting?

  Check the Time period on the view. If your view does not display a Time breakout, check the attribute history in the footing to see what period is being used. If you still cannot determine the issue, check the PMF current time setting in the Settings panel on the Manage page.

Troubleshooting and Debugging Aids

Because all software applications occasionally have issues, PMF includes built-in utilities that allow you or your administrator to troubleshoot and resolve potential issues.

Procedure: How to Use Application Tracing

If you receive an error that you do not understand, you can enable Application Tracing, then re-run the request that generated the error. If you are proficient in WebFOCUS, you can examine the trace yourself to determine the cause of the issue. If you are not proficient in WebFOCUS, you can forward the trace to either your local support representative or your Information Builders support specialist.

To activate Application Tracing:

1. In the Manage page, click the *Settings* panel button.

   The Settings menu opens.

2. On the Debugging panel, select one of the following values from the Application Tracing drop-down list.

   - **OFF.** Disables tracing, which is the default value.
   - **ON.** Trace WebFOCUS code without showing a full trace of the Dialogue Manager pre-processing code. This is the most typical setting for tracing.
   - **ALL.** Trace WebFOCUS code and show all steps in the Dialogue Manager pre-processing code. This generates the most detailed trace

3. Click *Save*.

   If you selected ON or ALL, tracing is now active. You can re-run any process that has an error message, and select *Source* from the View menu in your Browser to display the underlying HTML source code containing the error trace. Traces are present at the bottom of the HTML file, after the closing </HTML> tag.

Note: Turning on tracing can slightly lower PMF performance speed because more HTML is downloaded to the browser. It is recommended that you turn off tracing after you resolve the issue you are investigating.

Designing a PMF Quick Reporting Mart

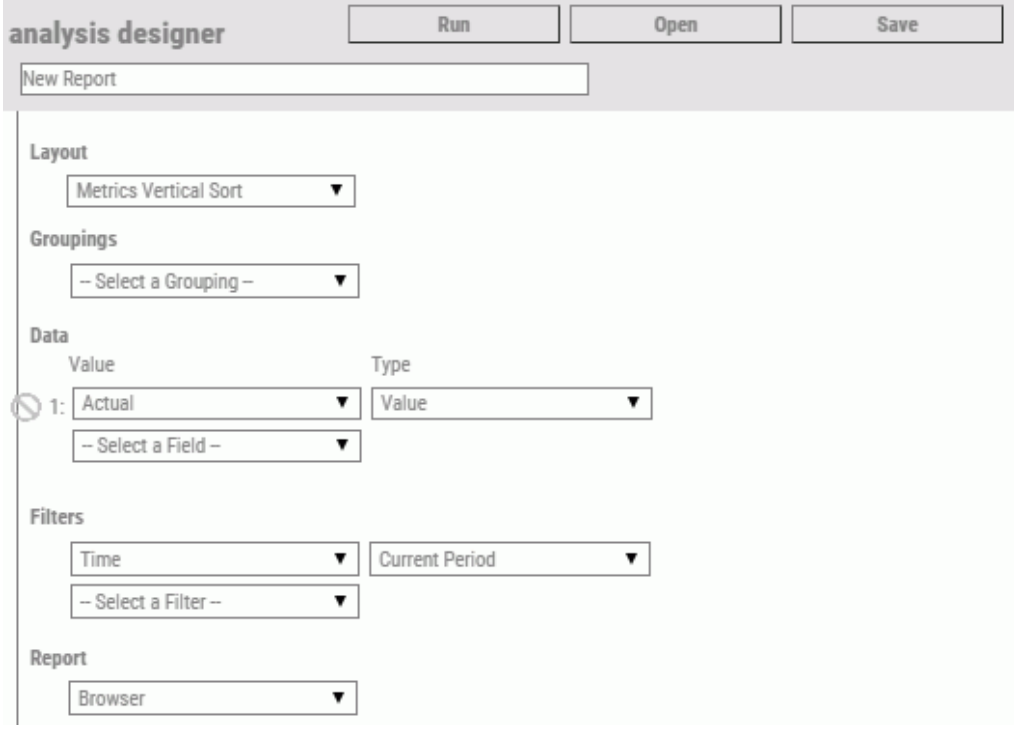
PMF Quick Reporting Marts are a source of structured performance data. Creating a PMF Quick Reporting Mart can be done quickly using the Analysis Designer. Once created, you can preview the PMF Quick Reporting Mart until you like it, and then save it easily. You can use a PMF Quick Reporting Mart as source data in any WebFOCUS tool.

Procedure: How to Design a PMF Quick Reporting Mart

To design a PMF Quick Reporting Mart:

1. In PMF, on the Today page, click the dashboard icon and click *Content*.
2. Click *Analysis* and then select *Analysis Designer*.

   The Analysis Designer opens, as shown in the following image.



3. In the Report Title box, give your PMF Reporting Mart a name that describes its purpose. Avoid using special characters such as ampersands, commas, and semicolons in the name, since this will become a file name for use in WebFOCUS.
4. In the Layout drop-down menu, select one of the following crosstab formats in order for the PMF Reporting Mart layout to have the measure names and data types as column types:

   - Select *Metrics Crosstab* to create a PMF Reporting Mart for Metrics data.
   - Select *Objectives Crosstab* to create a PMF Reporting Mart for Objectives data.

5. In the Groupings drop-down menu, select the groupings needed. Up to two Groupings can be selected.

Tip: A grouping is typically selected by Time. You can also group by another factor, such as Dimension, Objectives, Perspectives, or Themes.

6. In the Data section, select the data to be included. Up to four data items can be selected.

   Tip:

   - Data is typically selected by *Value* data type. If you want pre-calculated indicators in your Reporting Mart, choose *Indicator*.

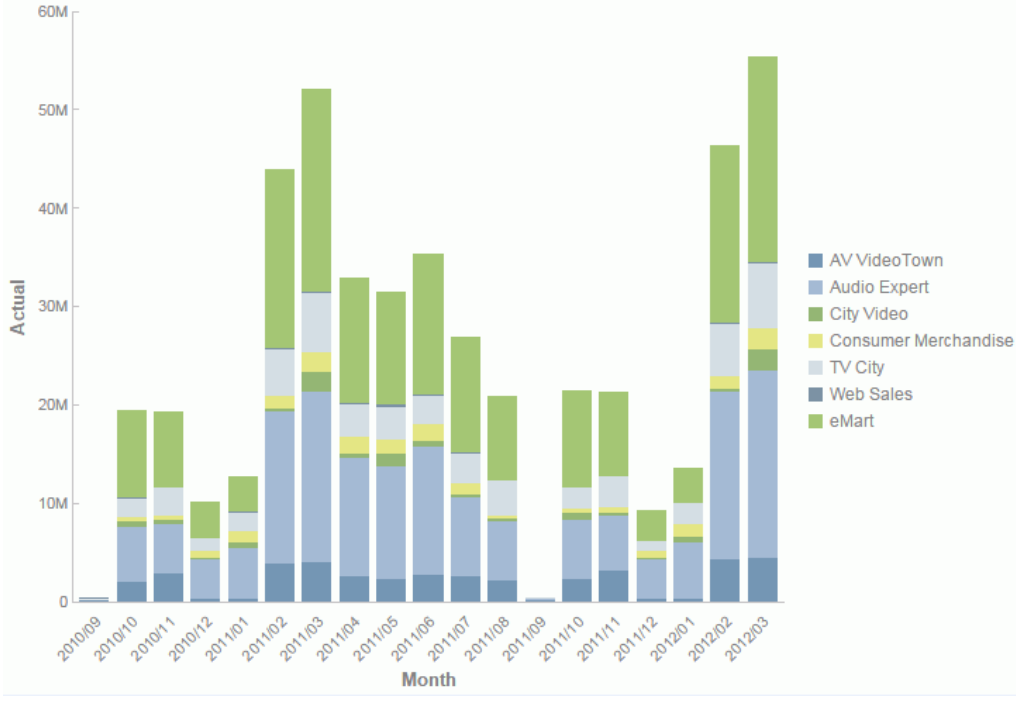
7. If you want any data to be omitted, select one or more filters from the Filters section.
8. In the Report drop-down menu, select *Quick Reporting Mart*.
9. Click *Run*. PMF creates and updates the PMF Quick Reporting Mart.

   Note: The data file and metadata for the PMF Quick Reporting Mart will be placed into the *pmf_data_tenants* folder. The Report Title you entered will be used for its name, with all spaces and other non-standard file characters deleted.

   The following image shows an example of a report created using the Quick Reporting Mart.

		Measure					
		Margins		Profit		Sales	
Month	Store	Actual	Tgt	Actual	Tgt	Actual	Tgt
2012/01	AV VideoTown	5.59	10.00	38,665.22	51,909.11	385,417.66	640,825.90
	Audio Expert	4.86	10.00	597,720.37	743,399.95	6,358,451.33	5,179,825.89
	City Video	5.66	10.00	60,566.75	74,967.77	600,128.75	735,336.08
	Consumer Merchandise	3.65	10.00	110,230.68	133,021.96	1,320,774.52	1,556,979.90
	TV City	12.17	10.00	389,057.62	410,974.91	2,542,265.62	1,865,848.94
	Web Sales	42.64	10.00	26,707.18	26,374.70	79,959.72	80,863.17
	eMart	5.18	10.00	380,073.46	391,731.00	3,926,602.38	3,345,324.45
2012/02	AV VideoTown	7.34	10.00	560,881.45	606,605.70	4,879,769.39	4,279,596.01
	Audio Expert	6.89	10.00	2,127,221.03	2,437,273.67	19,119,757.53	19,679,346.16
	City Video	18.51	10.00	69,683.03	92,172.43	351,272.03	359,639.83
	Consumer Merchandise	17.39	10.00	335,017.65	399,747.89	1,756,181.19	1,089,480.33
	TV City	5.27	10.00	565,389.36	652,270.79	5,793,145.36	5,621,913.63
	Web Sales	42.50	10.00	42,914.21	42,274.70	128,739.25	137,419.67
	eMart	8.71	10.00	2,599,966.54	2,941,114.67	20,618,281.98	21,417,276.39
2012/03	AV VideoTown	11.29	10.00	768,304.73	661,814.89	5,249,816.93	4,640,530.47
	Audio Expert	10.47	10.00	3,100,953.57	3,382,469.57	22,141,161.99	20,477,878.99
	City Video	9.52	10.00	321,150.97	293,426.91	2,422,527.97	2,804,733.40
	Consumer Merchandise	11.37	10.00	389,203.68	399,904.14	2,647,301.44	2,762,272.96
	TV City	13.20	10.00	1,252,318.48	1,290,686.00	7,789,759.00	7,864,864.40
	Web Sales	42.31	10.00	88,682.36	85,401.91	266,749.14	270,517.19
	eMart	9.01	10.00	3,065,769.61	3,201,446.21	23,857,817.75	24,222,375.66
TOTAL		**293.54**	**210.00**	**16,890,477.95**	**18,318,988.88**	**132,235,880.93**	**129,032,849.42**

The following image shows an example of content built with tools that were exported from the Quick Reporting Mart.



You can now use this PMF Quick Reporting Mart as source data for your WebFOCUS tools.

Note:

- For security, PMF Quick Reporting Marts are set up to be private, by default, so that each customer gets their own set of PMF Quick Reporting Marts.
- You can re-run any PMF Quick Reporting Mart with a click to refresh its data.
- You can schedule any PMF Quick Reporting Mart to be updated regularly using ReportCaster.

Appendix B

Catalog of Available Gadgets

In this appendix:

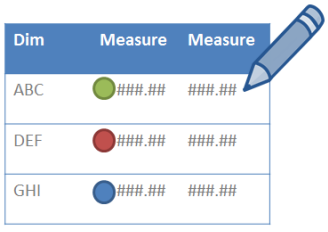
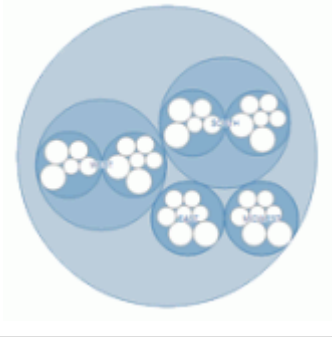
- Gadget Catalog

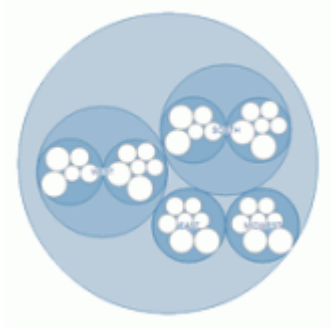
Gadget Catalog

The following table lists and describes the Gadgets that are available in the current release of PMF.

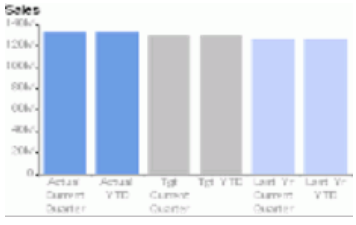
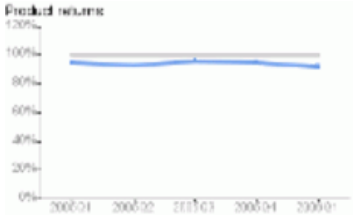
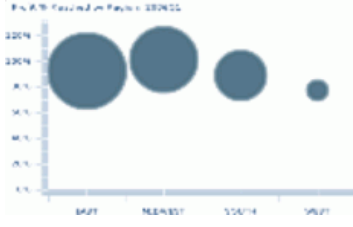
Note:

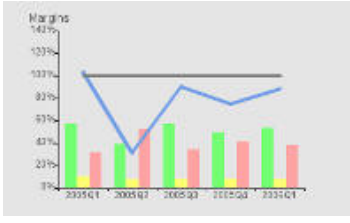
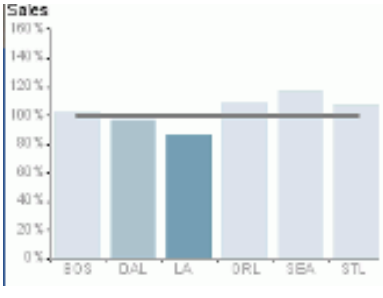
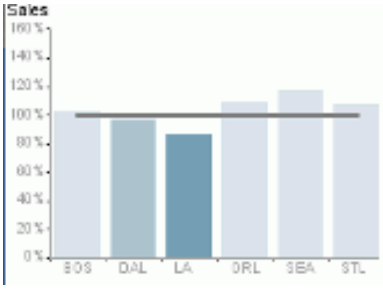
- As of Release 8.1.1, Utility Tree Gadgets are no longer supported.
- As of Release 5.3.2, Flex Gadgets have been deprecated. If you migrate an existing data mart to Release 8, any Flex Gadgets and dashboards you are using for defaults will still be in the system, and unused ones will be removed. More Gadgets will be made available in subsequent releases.

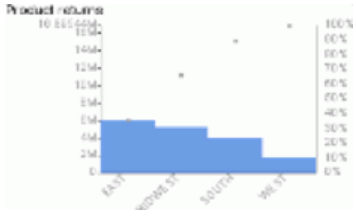
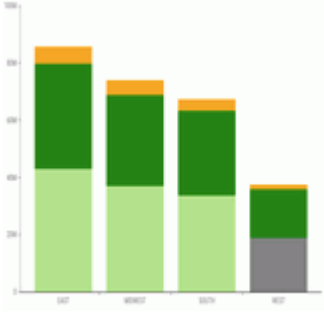
Gadget	Example	Description and Filters
Analysis Grid (Designer)		Lets you run an interactive grid based on the Analysis Designer templates, which offer nine combinations. Available layouts are grid types: ❑ Vertical by dim ❑ Horizontal by dim ❑ Crosstab by dim Available categories are: ❑ Measure ❑ Objective ❑ Theme You can choose groupings (such as by Dimension, Perspective, or Objective), components to display (such as Actual value or Target percent reached with indicator) and filters (such as on Measure, Objective, or Time Range). This allows for tens of thousands of possible grid designs for your dashboard.
D3 Gadgets		
D3 - Metric Dimension Actual Circle Packing		An animated visualization that shows proportionally-formatted Measure Actual data for any Dimensions you select, and broadcasts your selections to the entire Dashboard. ❑ Measures (Required) ❑ Time (Required)

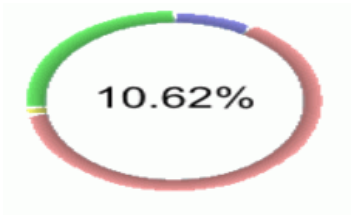
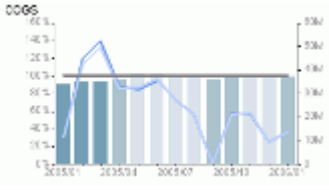
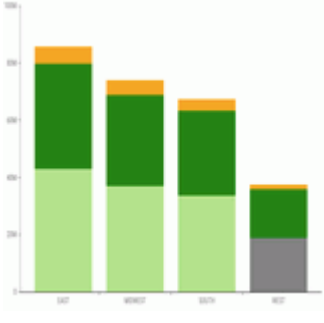
Gadget	Example	Description and Filters
D3 - Metric Dimension Pct Circle Packing		A smoothly animated visualization that shows proportionally-formatted Measure Percent Reached data for any Dimensions you select, and broadcasts your selections to the entire Dashboard. ❑ Measures (Required) ❑ Time (Required)
D3 - Metric Dimensional Circular Indicator Heatmap		Displays Indicator status, with a callout hover that shows Actual value, Target value, and Percent Reached for every Measure. The Measure indicators are displayed in concentric circles, with each concentric circle representing indicators for a particular Measure (as labeled). The radius lines divide the indicators by a User selected Dimension. Filters: ❑ Measures (Required) ❑ Time (Required) ❑ User Specified Dimension (Optional)
D3 - Metric Dimensional Heatmap Rectangular		Displays measure indicator status, with Measures shown as rows, and Dimensions shown as columns. Filters: ❑ Time (Required) ❑ Measures (Required)

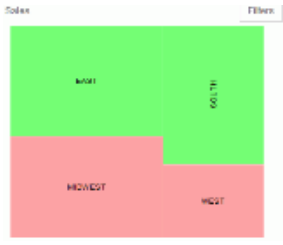
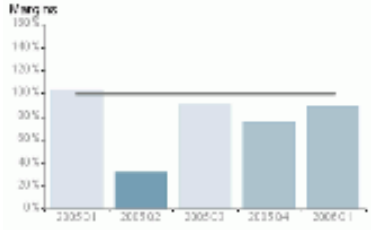
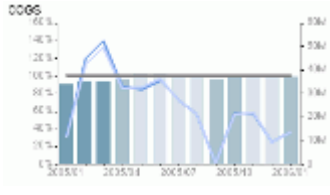
Gadget	Example	Description and Filters
D3 - Metric Perspective Heatmap Rectangular		Displays measure indicator status, with Measures shown as columns, and Dimensions shown as rows. Measures are grouped by perspectives as a column group heading. Filters: ❑ Time (Required) ❑ Measures (Required)
D3 - Metric Time Series Circular Indicator Heatmap		Displays Indicator status, with a callout hover that shows Actual value, Target value, and Percent Reached for every Measure. The Measure indicators are displayed in concentric circles, with each concentric circle representing indicators for a particular Measure (as labeled). The radius lines divide the indicators by Time. Filters: ❑ Measures (Required) ❑ Time (Required) ❑ User Specified Dimension (Optional)
HTML5 Gadgets		
HTML5 - Metric Actual Target Prior Lines		Displays a line graph showing the variance of actual values against the variance of target values, along with prior actual values for year-over-year comparison. Filters: Measures (Required)

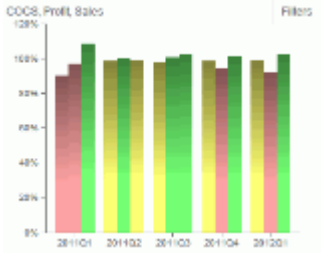
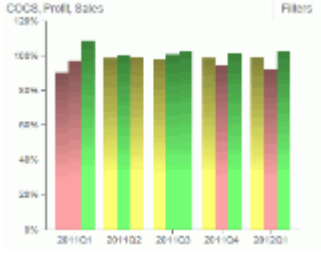
Gadget	Example	Description and Filters
HTML5 - Metric Actual Target YTD & Prior Bars		Provides a visual analysis using bar charts to display Year-To-Date and current period performance for actual, target, and prior year values. Filters: Measures (Required)
HTML5 - Metric Actual v. Flattened Target Lines		Displays a line graph showing the variance of actual over target values, which is flattened to emphasize variances. Filters: ❑ Measures (Required) ❑ Time Range (Optional)
HTML5 - Metric Bubble Chart		Displays a placed distribution of performance values where the midpoint of each value falls along a horizontal dimensional axis and Performance on the vertical axis. Size of the bubble indicates the actual value. Filters: ❑ Time Range (Required) ❑ Measures (Required)
HTML5 - Metric Bubble Value Chart		Displays a placed distribution of Measure Actual values where the midpoint of each value falls along a horizontal dimensional axis and Performance on the vertical axis. Size of the bubble indicates the actual value. Filters: ❑ Time Range (Required) ❑ Measures (Required)

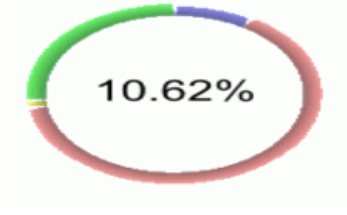
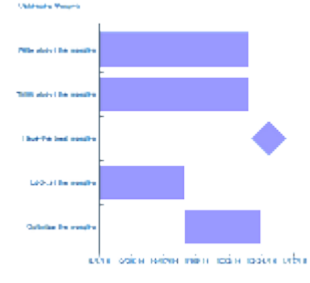
Gadget	Example	Description and Filters
HTML5 - Metric Counts of Actual RYG Bars		Displays the total Hi-Mid-Low (H-M-L) counts of a metric range. Also shows the H-M-L share of the total count of metric values in the metric range of each indicator. Filters: ❑ Measures (Required) ❑ Time Range (Required)
HTML5 - Metric Dim. Breakout Value Bars		Displays actual value distribution for any Dimension and level. Displays a series of bars across a selected Dimension using indicator colors for the current time period. Filters: ❑ Measures (Required) ❑ Time Range (Required)
HTML5 - Metric Dim. Breakout Donut		Displays a donut chart showing metric quantities distributed across a selected Dimension and level value. Filters: ❑ Measures (Required) ❑ Time Range (Required)
HTML5 - Metric Dim. Breakout Perf. Bars		Displays performance distribution for any Dimension and level. Displays a series of bars across a selected Dimension using indicator colors for the current time period. Filters: ❑ Measures (Required) ❑ Time Range (Required)

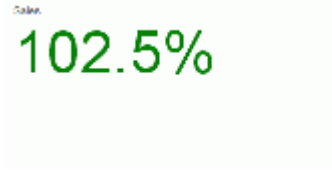
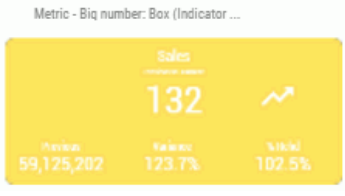
Gadget	Example	Description and Filters
HTML5 - Metric Dim. Breakout Pie		Displays a pie chart showing metric quantities distributed across a selected Dimension and level value. Filters: ❑ Measures (Required) ❑ Time Range (Required)
HTML5 - Metric Dim. Pareto Distribution Chart		Shows the proportion of Actual values for all Measures for the selected Perspective for the current or any single-point Time Period. Differs by Scorecard. Filters: ❑ Measures (Required) ❑ Time Range (Required)
HTML5 - Metric Dimension Stacked Bar		Shows the actual values of a measure stacked into each bar, for all measures selected. The values are broken out by a Dimension, for example, Time. Filters: ❑ Time (Required) ❑ Measures (Required)
HTML5 - Metric Pct Reached for Perspective		Shows the percent reached for all Measures for the selected Perspective. Differs by Scorecard. Filters: ❑ Perspective (Required) ❑ Time Range (Required)

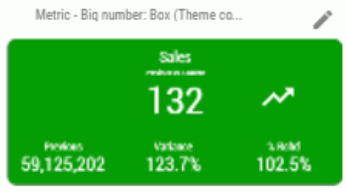
Gadget	Example	Description and Filters
HTML5 - Metric Perf. Gauge		Displays the percent achieved for the selected Measure, and illustrates the Measure set tolerances in red/yellow/green. Filters: ❑ Measures (Required) ❑ Time Range (Required)
HTML5 - Metric Perf. Trend Bars		Displays a time series of bars using indicator colors. Filters: ❑ Measures (Required) ❑ Time Range (Required)
HTML5 - Metric Perf. Trend Lines & Bars		Displays a time series of bars using indicator colors with two lines drawn over the bars to show actual and target values. Filters: ❑ Measures (Required) ❑ Time Range (Required)
HTML5 - Metric Single Dimension Stacked Bar		Shows multiple combined Dimensional values for a single measure in each bar. The values are broken out by Time. Filters: ❑ Time (Required) ❑ Measures (Required)

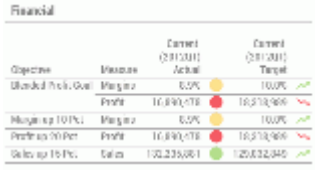
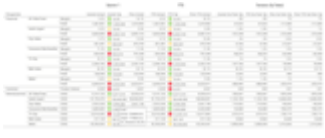
Gadget	Example	Description and Filters
HTML5 - Metric Tree Map		Displays a drillable tree map of shares of various contributors. Filters: ❑ Measures (Required) ❑ Time Range (Required)
HTML5 - Metric Value Trend Bars		Displays a time series of bars using indicator colors. Filters: ❑ Measures (Required) ❑ Time Range (Required)
HTML5 - Metric Value Trend Lines & Bars		Displays a time series of bars using indicator colors with two lines drawn over the bars to show actual and target values. Filters: ❑ Measures (Required) ❑ Time Range (Required)
HTML5 - Metrics Value Multiline		Displays a line chart to show the actual value with a smooth line. For comparison, each line is a different Measure. Filters: ❑ Time Range (Required) ❑ Measures (Required)

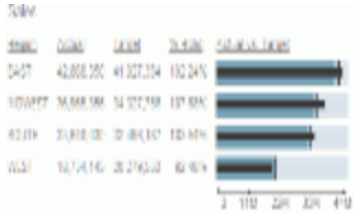
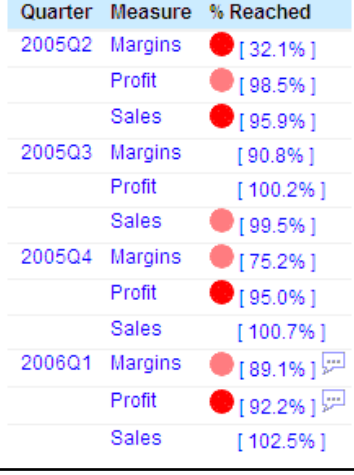
Gadget	Example	Description and Filters
HTML5 - Metrics Pct-Rchd Multiline		Displays a line chart to show the percent reached with a smooth line. For comparison, each line is a different Measure. Filters: ❑ Time Range (Required) ❑ Measures (Required)
HTML5 - Metrics Strategic Pct-Rchd Multibars		Displays a multi-bar chart to show the percent reached for groups of Measures across a dimensional breakout. For comparison, each color series of bar in each group represents a different Measure, and groupings indicate the dimensional breakout. Filters: ❑ Time Range (Required) ❑ Measures (Required)
HTML5 - Metrics Value Multibars		Displays a multi-bar chart to show the actual value for groups of Measures across a dimensional breakout. For comparison, each color series of bar in each group represents a different Measure, and groupings indicate the dimensional breakout. Filters: ❑ Time Range (Required) ❑ Measures (Required)

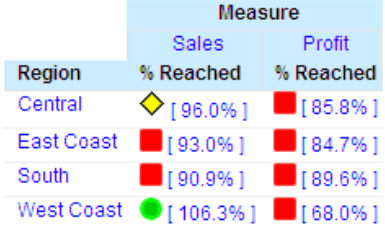
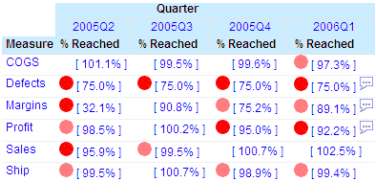
Gadget	Example	Description and Filters
HTML5 - Perspective Compare Perf. - Horz Bars		Displays a horizontal grouping of performance trends for all objectives in a perspective. Filters: ❑ Time Range (Required) ❑ Perspective (Optional)
HTML5 - Perspective Compare Perf. - Vert Bars		Displays a vertical grouping of performance trends for all objectives in a perspective. Filters: ❑ Time Range (Required) ❑ Perspective (Optional)
HTML5 - Perspective Perf. Gauge		Displays the Percent Reached aggregate at the Perspective level for the selected Scorecard. Differs by Scorecard. Filters: ❑ Perspective (Required) ❑ Time Range (Required)
HTML5 - Project Gantt Chart		Displays a graphical overview of project status. Filters: Projects (Required)
Metric Gadgets		

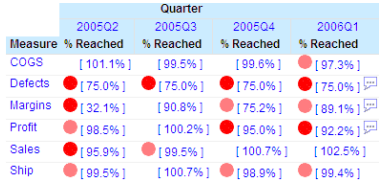
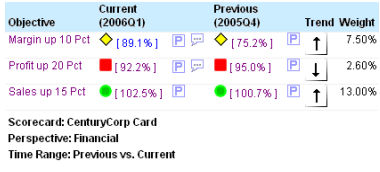
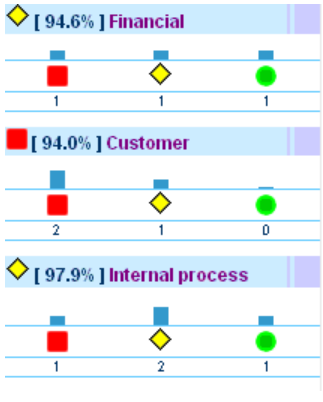
Gadget	Example	Description and Filters
Metric - Advanced Properties		Allows end users with proper access to edit critical Measure properties directly from the Dashboard. Filters: Measures (Required)
Metric - Big Number		Displays a rotating value for Actual and Percent Reached for the Measure. Filters: ❑ Time Range (Required) ❑ Measures (Required)
Metric - Big Number: Box (Indicator only)		Displays Actual, Percent Reached against Target and Prior Value, while showing variance with a trend arrow. Background color is dependent on indicator. Filters: ❑ Measures (Required) ❑ Time (Required) **Note:** To hide the Percent Reached column, set the GDG_SHOW_PCT_RCHD custom parameter to *N*.

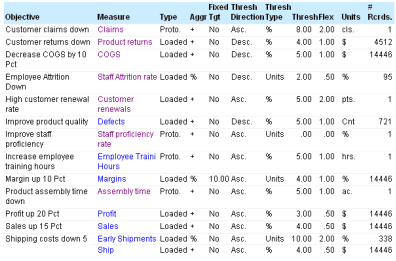
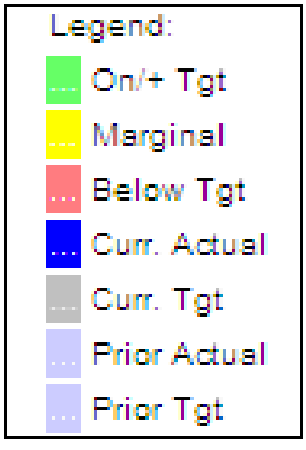
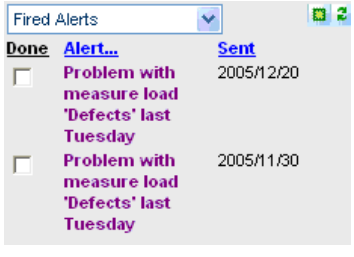
Gadget	Example	Description and Filters
Metric - Big Number: Box (Theme Color)		Displays Actual, Percent Reached against Target and Prior Value, while showing variance with a trend arrow. Background color is dependent on theme. Filters: ❑ Measures (Required) ❑ Time (Required) You can control the display colors used in this Gadget. For more information, see *How to Change the Theme Color of a Big Number Gadget* on page 436 **Note:** To hide the Percent Reached column, set the GDG_SHOW_PCT_RCHD custom parameter to *N*.
Metric - Big Number: Box YTD (Indicator)		Displays actual values for the current year and a prior year, while showing variance with a trend arrow. Filters: ❑ Measures (Required) ❑ Time (Required) **Note:** To hide the Percent Reached column, set the GDG_SHOW_PCT_RCHD custom parameter to *N*.

Gadget	Example	Description and Filters
Metric - By Objective w/Prior Trend (Quadrant)		Displays a Target value for the current time period and the Actual value, as well as the indicator against the target for the Current time period. A trend compares the current to the previous time. Filters: ❑ Perspective (Required) ❑ Time (Required)
Metric - Curr. & Prior Values & Variances		Displays current and prior actual and target values, with an indicator for the current year and a prior year. Also shows current, YTD, prior, and prior YTD variances of actual from target, which are grouped by Perspective. Filters: ❑ Measures (Required) ❑ User Specified Dimension (Optional)
Metric - Curr. & Prior Values & Variances (by Dim)		Displays current and prior actual and target values, with indicator for the current year and a prior year. Also shows current, YTD, prior, and prior YTD variances of actual from target, which are grouped by Perspective and also by Dimension. Filters: ❑ Measures (Required) ❑ User Specified Dimension (Optional)

Gadget	Example	Description and Filters
Metric - Current v. Prior Value Grid w/ Trend		Displays actual values for the current year and a prior year, with a trend comparing them both. Filters: ❑ Time Range (Required) ❑ Perspective (Required)
Metric - Sparkline & Bullet Chart Grid		Displays actual, target, and variance data with an actual vs. target horizontal sparkline and bullet chart. Filters: ❑ Measures (Required) ❑ Time Range (Required)
Metric - Performance Grid		Displays a grid of all metrics for the current scorecard and can show multiple Measure selections if desired. Optional grouping can be done on the Dimension name and level. Filters: ❑ Time Range (Required) ❑ Measures (Optional)

Gadget	Example	Description and Filters
Metric - Values Grid		Displays a grid of all metrics for the current scorecard and can show multiple Measure selections if desired. Optional grouping can be done on the Dimension name and level. Filters: ❑ Time Range (Required) ❑ Measures (Optional)
Metric - Dimensional Crosstab Across Measure Grid		Displays a drillable grid view of multiple Measure values distributed in a particular Dimension and level for use as a quick comparison of metrics. Filters: ❑ Measures (Required) ❑ Time Range (Required)
Metric - Performance Trend Grid		Displays a drillable grid view of values distributed for single or multiple Measures across a selectable time range to provide quick trending of one or more Measures. Filters: ❑ Time Range (Required) ❑ Measures (Optional)

Gadget	Example	Description and Filters
Metric - Values Trend Grid		Displays a drillable grid view of values distributed for single or multiple Measures across a selectable time range to provide quick trending of one or more Measures. Filters: ❑ Time Range (Required) ❑ Measures (Optional)
Perspective - Objectives Summary Grid		Displays a summary showing current and previous achievement percentages, trend, weight, and all corresponding indicators for the selected group of objectives. Filters: Perspective (Optional)
Perspective - Compact Overview Grid		Displays a summary showing bars and indicators for the count of high, mid, and low objectives for each perspective included. Filters: ❑ Time Range (Required) ❑ Perspective (Optional)
Scorecard - Strategy Map		Displays a strategy map in the dashboard that is a peer in display. Filters: User Specified Dimension (Optional)

Gadget	Example	Description and Filters
Utility - Administration - Measures Metadata Grid		Displays detailed information about scorecard metrics to a PMF Administrator and contains drill downs to view detailed properties for all Measures. Filters: None Required
Utility - Legend		Displays the color language used in all Graph Gadgets on the dashboard. Since all legends on all charts would be the same, this saves space on your dashboard. Filters: None Required
Utility - Action Block		Displays the PMF Action Block which enables owners to work with their fired alerts, create new alerts, manage scheduled alerts, manage Schedule This reports, and input user-entered Measures for their scorecard. Filters: None Required

Gadget	Example	Description and Filters
Utility - Administration - DB Overview Grid	**PMF Data Mart statistics:** Rows Owners 10 Scorecards: 3 Dimension types: 4 **L:** Location: 46 **O:** Organization: 90 **P:** Product: 26 **T:** Time: 136 Measures: 77742	Displays overview statistics for the PMF data mart to a PMF Administrator. This grid also fires the resynchronization function if the data mart is switched to point to a different data mart. Filters: None Required
Utility - Analysis Designer		Displays the PMF Analysis Designer, which enables you to specify parameter options and run a view based on those options. The available parameter options are grouped into five sections: Layout, Groupings, Data, Filter, and Report. Filters: None Required
Utility - UE Sources		Allows end users to input data for groups of User Entered Source Datapoints they have access to. Also filterable by Dimensions as defined on each Source. Filters: Time Range (Optional)

Gadget	Example	Description and Filters
Utility - Feedback Live with Update		An easy-to-use accordion view that allows you to quickly view and respond to Feedback on any Measure for the current Dashboard. Filters: Measures (Required)

Procedure: How to Change the Theme Color of a Big Number Gadget

You can control the display colors of the Big Number: Box (Theme color) Gadget by setting the following parameters to a valid HTML color hex code, or color name:

```
Text color parameter is css_color
Background color parameter is css_background_color
```

To change these values:

1. Open the Gadget Catalog.
2. Click the *Edit Gadget* icon for the Big Number: Box (Theme color) Gadget.

   The Edit Gadget Designer panel opens.
3. Click the *Custom Parameters* button.
4. Enter the parameters and their values in the fields provided.
5. Click *OK*.
6. Click *Save*.
7. Click the *Reset Dashboard defaults* button.

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