

HP IT Executive Scorecard

For the Windows® operating system

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Business Analyst User Guide

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Getting Started with Business Analysis

HP IT Executive Scorecard is a strategy enabler that enables executives to continuously improve their business by measuring what happened and what is happening, analyzing that information, and planning new strategies using the gathered information. This enables a better strategy execution resulting in a reduction of cost and risk, and an increase in quality and value.

Getting Started with the HP IT Executive Scorecard Studio and Dashboard

The following topics provide the main steps to follow to get started with the Studio and the Dashboard:

1. Learn about how the Executive Dashboard can help the challenges facing Executives. For details, see ["Learn About the Executive Dashboard" on page 10](#).
2. Make sure the HP IT Executive Scorecard settings are configured. For details, see [Perform the Maintenance of the Executive Scorecard Module](#) in the *Administrator Guide*.
3. Make sure the HP IT Executive Scorecard users and permissions are configured. For details, see [Manage Users](#) in the *Administrator Guide*.
4. Create and activate Scorecards, Perspectives, Objectives, Metrics, and KPIs. For details, see ["Create the Executive Dashboard Contents in the Studio" on page 43](#).
5. Enrich the Dashboard contents with Metric Breakdowns and KPIs, overrides, Cascading Scorecards, and more. For details, see [Enrich the Dashboard Contents](#).
6. Review the out-of-the-box Executive pages, add components to pages, create your own components, or create your own pages. For details, see [Prepare the Dashboard Display](#).
7. The Executive user can now view and analyze the relevant business objectives. For details, see [View and Analyze the Business Objectives](#).

Learn About the Executive Dashboard

This section includes the following topics:

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Executive Personas and their Business Challenges

The Dashboard is part of the HP IT Executive Scorecard agenda. It provides the IT executives with the capability to measure the performance of their IT organization.

Executive Personas

The figure below represents the executive personas who are potential users of the Dashboard. These personas represent potential roles and not necessarily individuals; in some enterprises a single individual may combine several personas or a persona may be split among several individuals. In addition, the names of personas are merely labels of convenience; what is important is the definition of the persona.



For example, major US corporations, particularly in the financial services and media industries, have a similar structure with a CIO per Business Unit and Operations & Infrastructure centralized in a shared services organization. In such a structure, one of the responsibilities of the Business Unit CIO is the Application Development for the business unit. The same Business Unit CIO uses the shared services from Operations in support of the Business Unit live applications. In such a configuration, the CIO is likely to want to see a dashboard that covers only these items as well as the same information through a full-lifecycle Business Service (or Application Service) lens, seeing Application Development and Operations as lifecycle stages of a single Business Service entity.

Manage the Semantic Layer (Contexts and Universes)

Executive Scorecard semantic layer includes contexts and universes.

The Context Designer feature enables you to create and manage Contexts (universes). The universes can be based on your target schema tables or on .CSV files that can be uploaded to the target schema using the Context Designer.

Context Designer can be used when you want to work with the Executive Scorecard and IT Financial Management applications without using Data Warehouse and SAP BusinessObjects Enterprise. It is a direct way to upload data into the Executive Scorecard Studio using files without performing integrations to external sources or to other HP products. It can be used, to integrate third party data, testing, or for Proof of Concept (POC) sessions. It can also be used as a component of Executive Scorecard to integrate third party data.

Context Designer provides KPI results based on your real data.

For details, see [Manage the Semantic Layer \(Contexts and Universes\)](#) in the *Administrator Guide*.

IT Data Model

A data model is an abstract model that documents and organizes the business data for communication between team members and is used as a plan for developing applications, specifically how data is stored and accessed.

The IT Data Model (also known as the Conceptual Data Model) defines business concepts, entities, terms, facts, and relationships.

The entities used in HP IT Executive Scorecard are based on the IT Data Model (not 100% compliant). The entities are described in the universes. For details, see "[Learn About the SAP BusinessObjects Enterprise for IT Executive Scorecard Universe](#)" in the *Content Reference Guide*.

Scorecards

A Scorecard is a high-level snapshot (visual summary) of any organizational performance. Scorecards display a collection of Objectives, and assess the performance of the organization by viewing the status of Objectives.

A Scorecard is a way to map and translate complex business information into something that is understandable to everyone. The methodology starts with targets defined by the organization, followed by Scorecard Objectives.

The following table shows how core Scorecard elements relate to key performance questions.

Scorecard Element	Key Performance Question	More Information and Example
Perspective\Strategy	What is the strategy trying to achieve?	For details about Perspectives, see "Perspectives" on page 18 . A Scorecard can include one or more Perspectives. Example: Operational excellence.
Objective	What is the objective trying to achieve?	For details about Objectives, see "Objectives" on page 19 . A Perspective can include one or more Objectives. Example: Increase responsiveness in IT to service requests for PC orders by 20% in 2010.
KPI	How will performance be measured?	For details about KPIs, see "KPIs and Metrics" on page 20 . An Objective can include more than one KPI. Example: Time to order, configure, and install PC.
Threshold	What performance level is required?	24 hours.

Out-of-the-box templates of Scorecards, Perspectives, Objectives, and KPIs are provided. These templates correspond to business elements. For details, see ["Activate Scorecards, Perspectives, Objectives, Metrics, or KPIs Using Templates" on page 49](#).

Active Scorecards, Perspectives, Objectives, and KPIs display real data in the Dashboard. For details, see ["Active KPIs Pane" on page 56](#).

Balanced Scorecards

A balanced scorecard should translate a business units mission and strategy into tangible objectives and measures.

Balanced scorecards strive to present an immediately comprehensible picture of a complete organizational strategy. This approach recognizes that the different aspects of a business all influence each other. A balanced scorecard examines performance from several critical perspectives.

The balanced scorecards can be a great resource for managing the IT function, as they expose all the perspectives that are crucial to the executive.

Typically, a balanced scorecard depicts the following perspectives:

IT value perspective

The name IT value comes from the motivation to expose the value of IT to the business. It's main role is also to expose to the organization executives the alignment between IT and the business.

The IT value perspective portray the economic results of previous business decisions and actions. Financial metrics generally lag behind actions, and therefore might not necessarily reflect the business as it is run today. However, financial metrics often determine whether a particular strategy is successful.

Financial metrics are often reflective of the stage of a businesses life-cycle (Growth, Sustain, and Harvest). Growth financial requirements may focus on the percentage growth rates in revenues and sales growth rates in target markets, customer groups, and regions. Businesses in the sustain stage may measure return on investment, return on capital employed, and economic value added. Harvest stage analytics are designed to measure the businesses ability to maximize cash flow back to the corporation. Core financial metrics are commonly related to profitability (such as operating income, return on capital employed, and economic value added). Other financial metrics can be related to shareholder values (ROI, and Financial Risk Management) or measurements (revenue growth and mix, cost reduction/productivity improvement, and asset utilization).

Other IT value perspectives can be:

- Any significant forecast can have a real impact on the profitability of the overall enterprise.
- It is important for the executive to always know where the IT stands in relation to the expense forecast.
- Keeping expenses in line with expectations is crucial.
- The executive may be tracking specific cost reduction objectives. A set of financially-oriented objectives and metrics is a critical component of any useful Dashboard.
- How does my spending relate plan versus region.

Customer perspective

This perspective is often the second perspective to be defined when creating a balanced scorecard. This perspective focuses on aligning core customer outcome measurements; satisfaction, loyalty, retention, acquisition, and profitability to targeted customers and market segments. These value propositions represent the drivers, the lead indicators, for the core customer outcome measurements. "What must the company deliver to its customers to achieve high degrees of

satisfaction, retention, acquisition, and, eventually, market share?” Alternate measurements within a customer segment can be either the share of wallet, segment-by-segment, or customer-by-customer. Beyond the core customer metrics, customer value propositions can be organized into three categories; product/service attributes, customer relationship, and image and reputation.

For example:

- Metrics for Product/service attributes could be: service, price, and quality.
- Metrics for Customer relationship could be: delivery to the customer, response and delivery time and customer experience.
- Metrics for Image could be: market share, brand recognition.

Operational excellence perspective

The operational perspective reflects the internal business processes that support the strategy. Once the financial and customer perspectives have been designed, the customers perspective will define their internal perspective. Typically, customers might not notice these processes directly, but business must excel at these processes to succeed. Looking at these critical business processes with a lean and six sigma lens, consumers of the BSC see supplemental measures of quality, yield, throughput, and cycle time that quantify potential financial and customer objectives such as reducing costs and improving the customer's experience. By removing waste and defects from end-to-end critical business processes, organizations can identify opportunities to mature their processes (sigma level or maturity scales) and reduce risk and cost. Another metric: Break Even Time (BET), can be a useful measurement of the product development cycle. This measurement stresses the importance of productivity while also capturing and comparing productivity. This measurement is an indicator rather than an outcome measurement.

Other perspectives can be:

- Executives must constantly inspect and refine the IT organization's internal processes to ensure efficiency, predictability, and long term scalability.
- Key internal IT processes may include project management, change management, support management, and network management.
- There may also be specific cycle time reduction or quality initiatives tracked at this perspective.
- Objectives and metrics related to internal process improvement are an important part of a executive balanced view of IT maturation.

Future orientation perspective

The future orientation perspective covers the human infrastructure of the organization and is the final perspective to be developed. It comes last because as you define the other strategies and objectives you may determine that there are gaps and opportunities to develop the organization. This perspective addresses performance indicators that concern employees, systems, and organizational procedures.

The three primary categories within learning and growth are employee capabilities, information systems capabilities, and motivation empowerment and alignment. Three core employee measurements are employee satisfaction, employee retention, and employee productivity. There may be variations on these metrics based on the related strategies.

For example, employee productivity may be segmented by types of employees or the ratio of those types could also be supplemental. Opportunities to re-skill the workplace may be additional measures based on new technologies, frameworks, or customer segments. Organizational objectives around learning or skills inventories based on roles could be measured as well. Gaps could result in development or outsourcing opportunities.

Other perspectives can be:

- Investment in people within the IT organization is crucial for the long term success.
- Training in pursuit of technical certification or increased capability is a very good indicator of the level of commitment that management has to the development of IT employees.
- Other key indicators include salary competitiveness, employee satisfaction, and employee turnover.
- Where is my team strong and weak?
- Am I growing staff by moving them around?
- What are the total people resources of IT and how do they divide out for Full Time Employees versus Contractors and for Onshore versus Offshore?

User-Orientation Perspective

- The executive direct customers are the senior managers of the business units.
- It is very important that the executive be in touch with the customer perspective on IT effectiveness.
- Measuring the reliability of the systems the customers depend upon.
- Support levels, project status, and overall satisfaction ratings should also be measured.
- How is my customers' satisfaction improving over time?
- How are the quantifiable elements of customer service stacking up—SLA, Request, and Projects?
- How well am I managing the customer's money?

Perspectives

A Perspective represents one of the strategies included in a Scorecard.

Every Scorecard definition includes out-of-the-box definitions as well as Perspectives that include Objectives that are linked to KPIs.

A Perspective represents a group of Objectives that can help the executive track and analyze the relevant business issue.

Objectives

An Objective represents an overall performance goal that is defined by an executive. An Objective is a heading for a group of KPIs of different types that can represent different aspects of the goal.

Example: If an executive wants to measure the IT department responsiveness, an Objective that measures different aspects of the responsiveness of the IT department is created.

Each aspect is measured by a different KPI type (for example: PC purchase time, and more). These KPIs provide values, trends, and statuses.

An Objective always shows the status of a performance goal, but does not display a performance actual value. In a typical Scorecard, Objectives show cumulative performance indicators that roll up the scores of KPIs. On a Scorecard, Objectives appear at the top level of a KPI hierarchy.

Objectives should be “SMART” (Specific, Measurable, Action-Oriented, Realistic, and Time Bound). This distinction makes it possible to know if you have met your objective.

Example: If your Reduce Costs Objective is about cost reduction, your organization may not hit the mark or may go too far. Objectives have both a negative and positive impact on organizational behavior. The “Smarter” your goal, the less variation you will experience in your results. A better objective would be for example, reduce IT operating expenses by 20% in 2011. This new objective gives you a targeted expense to reduce, a percentage goal, a time period and an organization. It meets the criteria and is achievable.

Parent-child dependency:

An Objective is a parent unit for its KPIs. An Objective uses a specific rule for the calculation of its results. The rule is based on the child KPIs score results. The available parent-child rules are:

- **BEST_CHILD** – The parent Objective result corresponds to the highest score of its child KPIs score values.
- **WORST_CHILD** – The parent Objective result corresponds to the worst score of its child KPIs score values.
- **WEIGHTED_AVERAGE** – The parent Objective result is the average value of its weighted child KPIs score values.

KPIs and Metrics

Key Performance Indicators (KPIs) and Metrics reflect and measure key drivers of business value. Value drivers represent activities that, when executed properly, guarantee future success. Value drivers move the organization in the right direction to achieve its stated financial and organizational goals.

Example: Value drivers might be “high customer satisfaction” or “excellent product quality.”

Additional information about KPIs and Metrics

A KPI is a Metric, but a Metric is not always a KPI. The key difference is that KPIs always reflect strategic value drivers whereas Metrics represent the measurement of any business activity. Metrics always show a number that reflects performance. KPIs put that performance in context. Metrics are not matched against a threshold.

KPIs reflect how well the organization is doing in areas that most impact financial measures valued by shareholders, such as profitability and revenues.

A KPI evaluates the performance according to expectations. The context is provided using:

1. **Thresholds.** Upper and lower ranges of acceptable performance.
2. **Targets.** Predefined gains, such as 10% new customers per quarter.
3. **Benchmarks.** Based on industry wide measures or various methodologies, such as Six Sigma.
4. **Trend.** The direction of the performance of the KPI, either “up,” “down,” or “static.”

Example: A metric could be an MTTR (mean time to recover) which measures the average time between the occurrence of a set of incidents and their resolution. An example of a KPI could be an MTTR, which measures the average time between the occurrence of a set of incidents and their resolution, compared to a defined threshold. For example: ‘MTTR less than one hour’.

KPIs measure key drivers of business values using a formula. For details, see ["KPI and Metric Formula and Filter, Threshold, Value, Trend, and Score" on next page](#).

KPI templates (out of the box) help you create new KPIs by activating the KPI templates. Metric templates (out-of-the-box) help you create new Metrics by activating the Metric templates. For details, see ["Activate Scorecards, Perspectives, Objectives, Metrics, or KPIs Using Templates" on page 49](#).

A complete list of KPIs and Metrics is available in [KPI Library in Excel format](#).

KPI and Metric Formula and Filter, Threshold, Value, Trend, and Score

This section describes the information related to a KPI or Metric:

KPI Formula, Filter, and Value

The Scorecard KPI engine calculates the **value** of the KPI using the **formula** specified for the KPI and provides the KPI's **status** and **score** using the thresholds specified for the KPI. You can also build KPI filters to restrict the range of the formula by selecting specific values for the variables used in the formula.

KPI Threshold

The engine compares the KPI **value** to the KPI **threshold**, and calculates the KPI status.

KPI Status

The KPI **status** can be **Error**, **Warning**, or **Good**.

KPI Trend

The trend shows the tendency of a changing KPI result value relative to the previous result.

The trend is:

- **Up** if the current result is higher than the previous result.
- **Down** if the current result is lower than the previous result.
- **Neutral** if the current and previous results are the same.

KPI Score

The KPI value is translated into a score using the threshold specified for the KPI.

All the **scores** are normalized to the same scale of measurement (for example from 0 to 10) to enable the calculation of an Objective that is based on the **scores** of KPI's from different types. The **score** reflects the **status** of the business **value** and its relative distance from the **threshold**.

In addition:

- All the parent child rule calculations are based on the scores of their children.
- The KPI score represents how well the KPI is doing compared to the business Objective. For details, see ["Objectives" on page 19](#).

Example: A KPI calculates a percentage (%) and its thresholds are Good from 90% and up. When the KPI has a value of 90%-100%, the KPI's status is Good. The score for 85% is higher than the score for 65%, and the score for 97% is higher than the score for 93% even though the status is the same, this enables showing the trend of KPIs and Objectives even if the status remains the same.

The normalization process is based on the user-defined threshold for a metric. KPI thresholds have 3 sectors: good (6.6 - 10), warning (3.3 - 6.6), and error score ranges (0 - 3.3).

The Score calculation process is as follows:

1. Get the KPI result.
2. Get the status range as configured by the thresholds in the KPI definition.

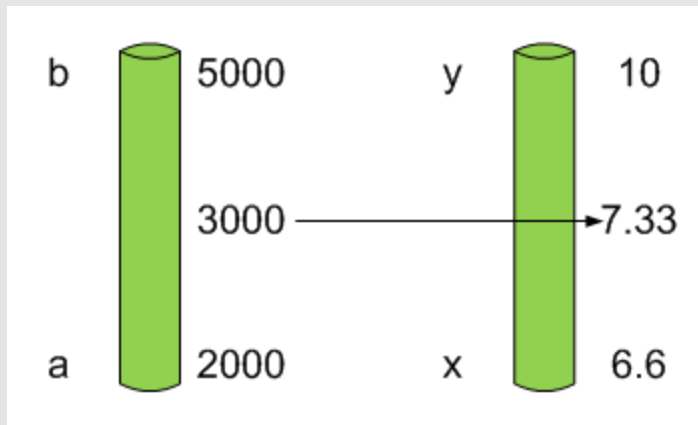
3. Calculate the score as follows:

$$F(n) = ((n - a) / (b - a)) * (y - x) + x$$

where:

- a – minimal value of the threshold range
- b – maximal value of the threshold range
- x – minimal value of according score range
- y – maximal value of according score range
- n – result value

Example: If a=2000 and b=5000, the Score value is 7.33



Example: The threshold of a metric similar to MTTR (time to fix a problem) is 1 day for good status, and 7 days for warning status. The score scale is constant: 8-10 is good status, 7-8 is the warning status and 0-7 is error status.

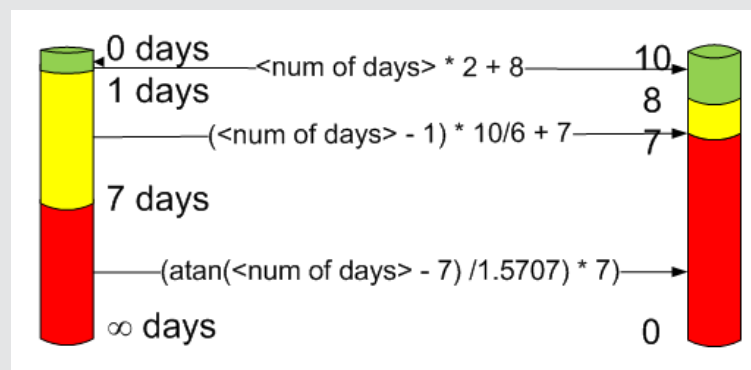
Any value on the MTTR scale needs to be transformed into the score scale by linear or exponential transform. Since the lower threshold is not set (it is equal to ∞), the formula is different:

Lets check the Score based on the following Results :

0.5 day $\rightarrow F(1) = ((0.5 - 0) / (1 - 0)) * (10 - 8) + 8 = 9$ (the score is 9)

4 days $\rightarrow F(4) = ((4 - 1) / (7 - 1)) * (8 - 7) + 7 = 7.5$ (the score is 7.5)

10 days $\rightarrow F(10) = (\text{atan}(10 - 7) / 1.5707) * (7 - 0) = 4.43$ (the score is 4.43)



Metric Formula and Value

The Scorecard KPI engine calculates the **value** of the Metric using the **formula** specified for the Metric. You can also build metric filters to restrict the range of the formula by selecting specific values for the variables used in the formula.

Additional Information

For details, see ["Modify a KPI or Metric Formula" on page 90](#) or ["Modify a KPI or Metric Filter" on page 100](#).

Folders

Folders are used as containers (organizers) for KPI templates. Folders are populated with either KPI templates or other Folders (not both). The same KPI template can belong to more than one Folder.

You use Folders and their KPIs when you do not work with Scorecards and you want to use the Folder's KPIs to create the Dashboard Contents.

The Scorecard KPI Engine

The Scorecard KPI engine works with KPIs and Objectives. For concept details about KPIs, see ["KPIs and Metrics" on page 20](#). For concept details about Objectives, see ["Objectives" on page 19](#).

The Scorecard KPI engine discovers data coming from contexts (data sources).

A KPI provides the status of Objectives. The status can be a value, a percentage, or other. The statuses are normalized.

Each KPI receives a score. Depending on the score, the Objective is fulfilled or not.

Example:

If the Objective is Professionalism, the KPIs can be based on the following measurements. An employee is professional when:

- The number of open bugs assigned to the employee should be less than 100 during the measurement period. A Number of Open Bugs with a threshold of 100 measures that objective element. If the employee has 120 open bugs, the Score of the KPI is 80%.
- The employee should create 10 features during the measurement period. A Create 10 Features KPI, with a threshold of 9, measures that objective element. If the employee has opened only 9 features, the score of the Create 10 Features KPI is 90%.
- The employee should take 2 courses during the measurement period. A 2 Courses KPI with a threshold of 1 measures that objective element. If the employee has taken only one course, the score of the Take 2 Courses KPI is 50%.

The score of the Professionalism Objective is the average of the scores of its KPIs: 70%.

Scores can be calculated using one of the following rules:

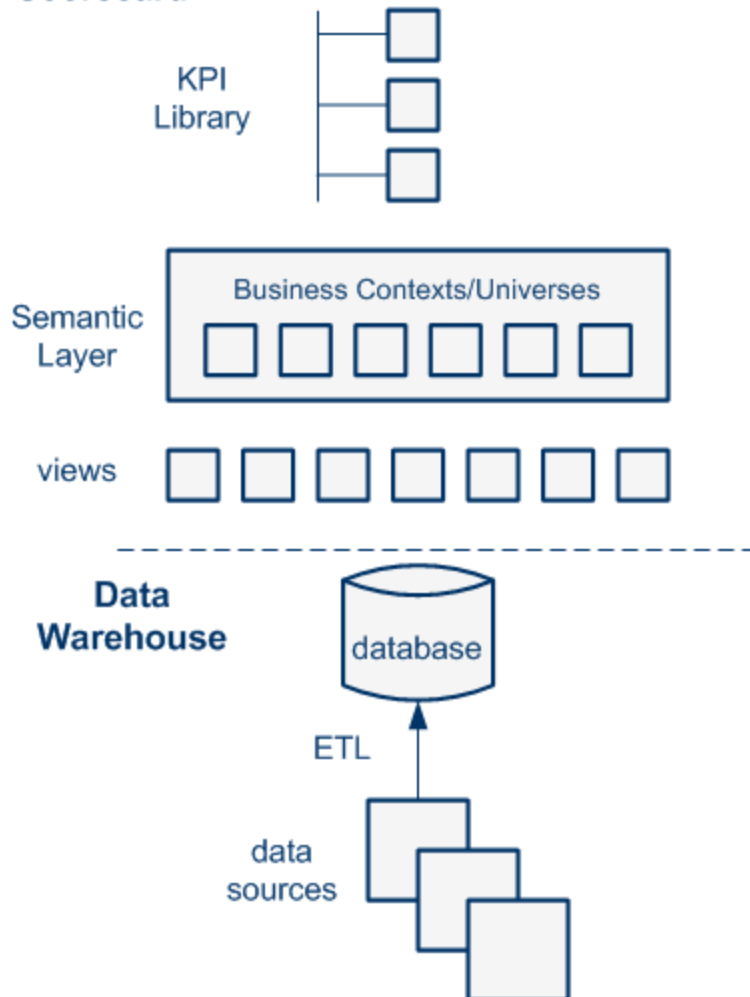
- **Worst child.** The Objective score is the worst score of all the KPIs assigned to the parent Objective (when the Objective has child KPIs) or of the Objectives assigned to the parent Objective.
- **Best child.** The Objective score is the best score of all the KPIs assigned to the parent Objective (when the Objective has child KPIs) or of the Objectives assigned to the parent Objective.
- **Weighted average.** The Objective score is the average of the scores of the KPIs assigned to the parent Objective (when the Objective has child KPIs) or of the child Objectives multiplied by the relevant weights.

HP IT Executive Scorecard Architecture

HP IT Executive Scorecard is a Java enterprise application. It has a large, web-based application that runs inside of a JEE6 Application Server (glassfish).

A number of open source 3rd party jars are used for the product. These jars are used in the standard Java way by including them in the classpath and accessing them with their published APIs.

Executive Scorecard



For details on the KPI Library, see "Activate Scorecards, Perspectives, Objectives, Metrics, or KPIs Using Templates" on page 49.

For details on the Semantic Layer (Business Contexts or universes), see "Business Contexts" on page 107.

For details on Data Warehouse, ETLs, and data sources, see [Getting Started with Administration Tasks](#) in the *Administrator Guide*.

The Executive Scorecard Solution

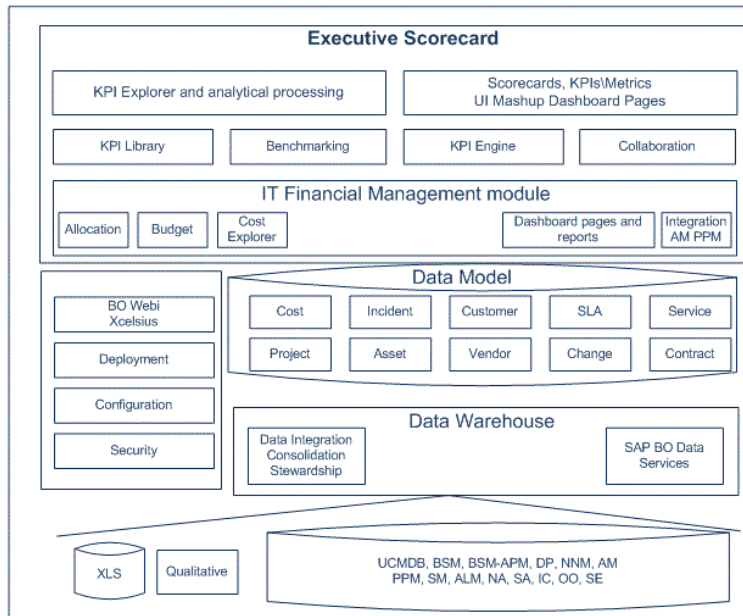
HP IT Executive Scorecard is a strategy enabler.

HP IT Executive Scorecard enables executives to continuously improve their business by measuring what happened and what is happening, analyzing that information, and planning new strategies using the gathered information. This enables a better strategy execution resulting in a reduction of cost and risk, and an increase in quality and value.

HP IT Executive Scorecard provides:

- Performance Measurements (KPIs and metrics) that measure performance and how the IT goals and objectives are met.
- Cascaded Objectives (Scorecards) that provide the means to define IT goals and objectives.
- Actionable insights into performance improvements (KPIs and Data Level Analytics) that increase the performance improvement planning effectiveness via collaboration.
- Actionable insights on the performance measurements that impact the Cascading Scorecards.
- Traceability into the performance measurement and then into the actionable insights.

HP IT Executive Scorecard Solution



HP IT Executive Scorecard includes a data warehouse with data from some products. The data is gathered and analysis performed to present a set of dashboards and reports with actionable insights for executives such as CIO and VP of Operations.

The data sources of the data warehouse can be HP software products such as HP Business Service Management (BSM), HP Universal Configuration Management Database (UCMDB), Service Level Management (SLM), HP Service Manager (SM), HP Asset Manager (AM) and HP Project and Portfolio Management and more, as well as third party open source products.

The HP IT Executive Scorecard application provides the executive with a tool that enables to measure to which extent their organizations objectives have been achieved and to analyze and decide where to put the effort to improve these objectives.

HP IT Executive Scorecard:

- Is driven by the business personas challenges.
- Is aligned with the IT objectives of these challenges.
- Is based on industry standards: Information Technology Infrastructure Library (ITIL), Control Objectives for Information and related Technology (COBIT), and more.
- Its Key Performance Indicators (KPIs) are based on the IT Data Model.
- Its analytics results are presented in a Dashboard.

Reporting Strategy

HP IT Executive Scorecard provides:

- Strategic measurements in the HP IT Executive Scorecard Dashboard:
 - Persona-based dashboards
 - Scorecards
 - Cascaded Scorecards
 - KPI Library (templates)
 - KPI engine
- Strategy Analytics:
 - Long term and eagle eye view analytics
 - Executive and decision maker users
 - Based on an IT Data Warehouse
 - Universes compliant with the IT Data Model
 - May correlate multi-products data.
- Operational reports:
 - Real-time or near real-time access to data.
 - Users are the same as the operational product users.
 - Silo reporting solution.

Executive Scorecard Components

HP IT Executive Scorecard includes several components:

- The **Studio** tab where the administrator creates and manages all the building elements that are used to create the displayed pages and components of the executive Dashboard.
- The **Dashboard** mashup where the administrator configures how to display the information that the executive wants to see. The information is displayed on pages that can include one or more components. The administrator can configure the pages, the components, and the interactions of these components with each other.
- The **Dashboard** display, where the executives can view how well their required objectives are doing, and from where the executive can drill down to subordinates pages to breakdown the information and get a better understanding of the situation.
- The **Explorer** tab, where the executives can view more detailed information about their Objectives and KPIs, and can access other reports or external pages that display other facets of the situation. The executives usually access the Explorer tab in context, by drilling down from the relevant Objectives or KPIs in the Dashboard components.
- The **Finance** tab, where the Executives can use the IT Financial Management (ITFM) tool to consolidate and allocate planned and actual costs from data sources, to budget, and to manage costs more effectively.
- The **Admin** tab, where the administrator selects or configure the relevant settings. For details, see the *Administrator Guide*.

Depending on their permissions the administrator and the executives can view, manage, or administrate tabs, pages, components, and more.

Executive Dashboard Capabilities

The Dashboard provides the capabilities to create a specific page for each executive persona to answer the persona's requests and challenges.

Capabilities

The HP IT Executive Scorecard Dashboard provides the following capabilities:

- **Pages and components.** You can create Dashboard pages using components that can be added to pages. You can use all these components as is or you can customize them to create your customized Dashboard display.
- **Drill down to other pages.** You can create drill downs to other pages, so the executives can cascade to their direct report's pages for a breakdown of the objectives that they measure.
- **Drill down to more detailed information.** You can set up drill downs to more detailed information so the executives can drill down from any element (using pies, bubbles, charts, gauges, scorecard, etc...) in order to perform analytical processing on the critical results.
- **Annotations.** This functionality allows the executives to add notes in the business context of any element that can be viewed later on during strategic planning meeting, or staff meetings.
- **Add wiring.** You can link components using wiring to enable the executives to select a specific element in one of the components and have all the wired components filtered by the selected element.
- **Filter.** You can manage the elements in the components, filter for some elements, change the time frame, and more.

Templates

Out-of-the-box templates of Scorecards, Perspectives, Objectives, KPIs, and Metrics are available in the KPI Library pane.

The pane also includes out-of-the-box Folders.

The templates are built to represent the most common business facets of an enterprise.


You can create new templates by importing new templates or updated templates. For details, see ["Import or Export Trees"](#) in the *Administrator Guide*.

Each template has a unique name.

All the values and thresholds of the Studio KPIs/Metrics depend on their definition in the Configuration details and Calculation details tabs.

For details about Scorecards, Perspectives, Objectives, Folders, KPIs, and Metrics, see ["The Scorecard KPI Engine"](#) on page 25.


To access:

1. Click the **Studio** tab. If the KPI Library pane is not displayed , click the **Toggle Side By Side** button  in the toolbar of the Active KPIs pane.
2. In the KPI Library pane, select the relevant tree.
3. Click:
 - a. A Scorecard template, Perspective template, Objective template, or click a Folder in the tree to display its Configuration Details area.
 - b. A KPI, Orphan KPI, or Metric template in the tree and then click either the **Configuration Details** or the **Calculation Details** tab.

UI Description

Configuration Details Tab for a Scorecard Template

This page displays configuration information for the selected Scorecard template in the KPI Library pane.



Configuration details

General - Scorecard Template

*Name : CIO

Description : CIO Scorecard

General - Scorecard Template

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Name	The name of the Scorecard template. Limitations: The maximum number of characters is 250.
Description	The description of the Scorecard. Limitations: The maximum number of characters is 1000.
Id	The Id of the Scorecard. It is automatically assigned. This information is displayed only when in debug mode. To set the debug mode, click Admin > Scorecard > XS Settings , and in Debug Mode , select the Application Debug Mode setting.
Type	The type of Scorecard. It is automatically assigned. This information is displayed only when in debug mode. To set the debug mode, click Admin > Scorecard > XS Settings , and in Debug Mode , select the Application Debug Mode setting.

Configuration Details Tab for a Perspective Template

This page enables you to display the configuration of a Perspective template.

The screenshot shows a web interface for configuring a Perspective Template. At the top, there is a tab labeled 'Configuration details'. Below the tab, the title 'General - Perspective Template' is displayed. The main area contains two input fields. The first field is labeled 'Name' with a red asterisk, and it contains the text 'IT Value'. The second field is labeled 'Description' and contains the text 'IT Value'.

General - Perspective Template

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Name	The name of the active Perspective template. Limitations: The maximum number of characters is 250.
Description	The description of the Perspective. Limitations: The maximum number of characters is 1000.
Id	The Id of the Perspective. It is automatically assigned. This information is displayed only when in debug mode. To set the debug mode, click Admin > Scorecard > XS Settings , and in Debug Mode , select the Application Debug Mode setting.
Type	The type of Perspective. It is automatically assigned.. This information is displayed only when in debug mode. To set the debug mode, click Admin > Scorecard > XS Settings , and in Debug Mode , select the Application Debug Mode setting.

Configuration Details Tab for an Objective Template

This page displays configuration information for the selected Objective template.

Configuration details

General - Objective Template

Name :

Reduce Cost

Description :

<Description of objective template>

Calculation period :

Monthly

Calculate using :

Weighted Average

Note:

The weight determines the impact of the KPI on the calculation

Assigned KPI templates

Name	Weight
% of Change in Business Service Cost	1
% of Change in Assets Cost	1

General - Objective Template

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Name	The name of the Objective template. Limitations: The maximum number of characters is 250.
Description	The description of the Objective template. Limitations: The maximum number of characters is 1000.
Id	The ID number of the Objective. It is automatically assigned. This information is displayed only when in debug mode. To set the debug mode, click Admin > Scorecard > XS Settings , and in Debug Mode , select the Application Debug Mode setting.
Type	The type of the Objective. It is automatically assigned. This information is displayed only when in debug mode. To set the debug mode, click Admin > Scorecard > XS Settings , and in Debug Mode , select the Application Debug Mode setting.
Calculation Period	The calculation period of the Objective template.
Calculate Using	The type of rule to use to calculate the Objective's score according to the scores of its children. You can select: <ul style="list-style-type: none">• Worst child. The Objective score is the worst score of all the KPIs assigned to the parent Objective (when the Objective has child KPIs) or of the Objectives assigned to the parent Objective.• Best child. The Objective score is the best score of all the KPIs assigned to the parent Objective (when the Objective has child KPIs) or of the Objectives assigned to the parent Objective.• Weighted average. The Objective score is the average of the scores of the KPIs assigned to the parent Objective (when the Objective has child KPIs) or of the child Objectives multiplied by the relevant weights. When you select this rule, an additional column (Weight) where the user can configure the weight of each child (Objective or KPI) for the weighted average calculation. When you select this value a note is displayed explaining what is weighted average.

Assigned KPIs or Assigned KPI Templates

This section lists the KPI templates as assigned to the selected Objective template.

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
<Table>	The table lists: <ul style="list-style-type: none">• Name. The KPI templates assigned to the Objective template.• Weight. The weight of the KPI used in the calculation of the Objective score.

Calculation Details Tab for a KPI Template

This page displays the calculation details for the selected KPI template.

The screenshot shows the 'Calculation details' tab selected. It features a dark-themed interface with several sections:

- Configuration details** and **Calculation details** tabs at the top.
- Business Context** section with a text box containing 'FinancialManagement'.
- Formula** section with a text box containing the formula: `PERCENTAGE_MATH(SUM(Cost.Amount, Cost.ExpenseType = 'CAPEX' and PERIOD_ENTITY=Period),SUM(Cost.Amount, Cost.ExpenseType = 'OPEX' and PERIOD_ENTITY=Period),100)`.
- Filter** section with a text box containing the placeholder text: *<Data is used to calculate the formula>*.
- Comments** section with a text box containing the placeholder text: *<Explanations to provide more depth to the business logic behind the formula and the filter>*.

Business Context

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
<Business context>	The box displays the Business Context of the KPI template.

Formula

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
KPI Formula	The formula used to calculate the value of the KPI.

Filter

You use the Filter area to limit the range of data used for the KPI's calculation.

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Filter	The filter that limits the range of data on which the KPI is to be calculated.

Comments

The Comments area may include a description of the formula and its purpose.

Configuration Details Tab for a KPI Template

This page displays the configuration details of the selected KPI template.

The screenshot displays the 'Configuration details' tab for a KPI Template. The interface is organized into several sections:

- General - KPI Template**:
 - Name**: % of Capex vs Opex Spending
 - Unit**: %
 - Description**: The capitalized expense relative to the operational expense.
 - Calculation period**: Monthly
- Result Threshold**:
 - Direction**: Centralize
 - Include marginal status (Warning)**: ☒
 - A horizontal bar chart showing a range from 0 to 200. The bar is divided into segments of red, orange, and green, with markers at 0, 40, 80, 120, 160, and 200.
- Additional Details**:
 - Business Motivation**:
 - How does Capex spending compare to Opex spending?
 - Is the organization within its PoR for capital (Capex) and operating (Opex) expenses?
 - What percentage of spending is capital expenses versus operating expenses?
 - Where is the organization spending the majority of its actual expenses: on capital or on

General KPIs

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Name	The name of the KPI template. Limitations: The maximum number of characters is 250.
Unit	The unit of the KPI's value.
Description	The description of the KPI template. Limitations: The maximum number of characters is 1000.
Calculation Period	The time period used to calculate the value of the KPI (using the formula specified in the Calculation details tab).

Result Threshold

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Direction	It can be: <ul style="list-style-type: none">• Centralize. When the status of the KPI is best when it has either a specific value or its value is in a specific range, and higher or lower values are worse.• Minimize. When the status of the KPI is best when it is low.• Maximize. When the status of the KPI is best when it is high.
Threshold	<p>The relevant thresholds are displayed in the boxes attached to the arrows. The threshold is used to assign a status to the KPI. For details on statuses, see "KPI and Metric Formula and Filter, Threshold, Value, Trend, and Score" on page 21.</p> <p>An empty lowest and highest ends means that the threshold is an infinite value (minus infinity and plus infinity). In such a case, the threshold uses the lowest and highest historical values of the KPI template.</p> <p>The Threshold fields values increase from left to right.</p>
Include marginal status (Warning)	<p>This option is selected when the status of the KPI is either Good, Warning, or Error.</p> <p>This option is not selected when the status of the KPI is only Good, or Error.</p>

Additional Details

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Business Motivation	The business motivation of the KPI.

Calculation Tab for a Metric Template

This page displays the calculation details for the selected Metric template.

The screenshot shows a software interface with two tabs: "Configuration details" and "Calculation details". The "Calculation details" tab is active. It contains four sections: "Business Context" with a text input field containing "AssetManagement"; "Formula" with a text area containing a complex SQL-like formula: `DATE_CONVERT('ms','d', AVG(PurchaseOrderPeriod.EndDate, Asset.Type<=>'Software license' And PurchaseRequestPeriod.Periodicity<=>'INVALID' and PurchaseRequestPeriod.Periodicity<=>'UNKNOWN' and PERIOD_ENTITY = PurchaseOrderPeriod) - AVG(PurchaseRequestPeriod.EndDate, Asset.Type<=>'Software license' And`; "Filter" with a text area containing the placeholder text "<Data is used to calculate the formula>"; and "Comments" with a text area containing the placeholder text "<Explanations to provide more depth to the business logic behind the formula and the filter>".

Business Context

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
<Business context>	The box displays the Business Context of the Metric template.

Formula

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
<Metric Formula>	The formula used to calculate the value of the Metric.

Filter

You use the Filter area to limit the range of data used for the Metric's calculation.

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

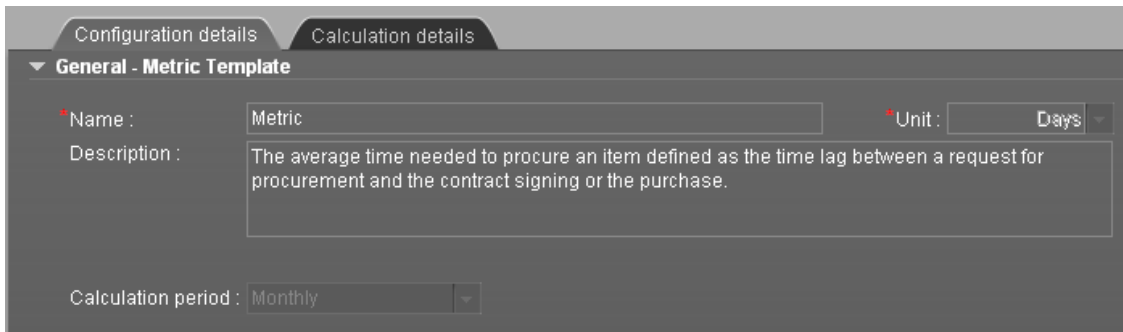
UI Element	Description
Filter	The filter that limits the range of data on which the Metric is to be calculated.

Comments

The Comments area may include a description of the formula, filter, Metric, and their purpose.

Configuration Tab for a Metric Template

This page displays the configuration details of the selected KPI template.



The screenshot shows a web interface with two tabs: "Configuration details" (selected) and "Calculation details". Under the "Configuration details" tab, there is a section titled "General - Metric Template". This section contains the following fields:

- Name :** A text input field containing the word "Metric".
- Unit :** A dropdown menu currently set to "Days".
- Description :** A text area containing the text: "The average time needed to procure an item defined as the time lag between a request for procurement and the contract signing or the purchase."
- Calculation period :** A dropdown menu currently set to "Monthly".

General KPIs

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Name	The name of the Metric template. Limitations: The maximum number of characters is 250.
Unit	The unit of the Metric's value.
Description	The description of the Metric template. Limitations: The maximum number of characters is 1000.
Calculation Period	The time period used to calculate the value of the Metric (using the formula specified in the Calculation details tab).

Configuration Details Tab for a Folder

This page displays configuration information for the selected Folder.

Configuration details

▼ General - Folder

Name : Asset Management

Description : Asset Management

▼ Assigned KPI templates

Name ▼

- Avg Time to Procure Hardware
- Avg Age of Hardware Assets
- % of Software Licenses in Use
- % of Change in Assets Cost
- % of Assets Returned to Supplier
- % of Assets in Maintenance

General - Folder

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Name	The name of the Folder. Limitations: The maximum number of characters is 250.
Description	The description of the Folder. Limitations: The maximum number of characters is 1000.
Id	The ID number of the Folder. It is automatically assigned. This information is displayed only when in debug mode. To set the debug mode, click Admin > Scorecard > XS Settings , and in Debug Mode , select the Application Debug Mode setting.
Type	The type of the Folder. It is automatically assigned. This information is displayed only when in debug mode. To set the debug mode, click Admin > Scorecard > XS Settings , and in Debug Mode , select the Application Debug Mode setting.

Assigned KPIs

This section lists the KPIs assigned to the selected Folder.

Note: This section is displayed only if the Folder does not have child Folders.

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Name	The table lists the KPIs templates assigned to the Folder.

Create the Executive Dashboard Contents in the Studio

You use the Studio to create and manage all the elements that are displayed on the Dashboard, as well as their interactions with each other: wiring, drill downs, and other features.

The Executive Dashboard includes Scorecards, Perspectives, Objectives, KPIs, and Metrics.

Learn More


About the Studio

The Studio is the environment you use to build the Dashboard display.

The Studio includes:

- The KPI Library pane that is a repository of the Scorecard, Perspective, Objective, KPI, and Metric templates, and of Folders.
- The Active KPIs pane that shows all the active Scorecards, Perspectives, Objectives, KPIs, and Metrics. You can select to display a subset of these items in the Dashboard.
- The Configuration details tab that presents the configuration of the selected element, and a Calculation tab that presents the calculation configuration of the selected KPI or Metric.

To create the display you must first activate out-of-the-box templates by moving them from the KPIs Library pane to the Active KPIs pane, or you can create your own elements directly in the Active KPIs pane. For task details, see ["Activate Scorecards, Perspectives, Objectives, Metrics, or KPIs Using Templates" on page 49](#) or ["Create Active Scorecards, Perspectives, Objectives, Metrics, or KPIs" on page 54](#).

Note: When in Executive Scorecard, you navigate to another tab and then return to the Studio, the display is not automatically refreshed. To refresh the display, click  in the toolbar of the Active KPIs or KPI Templates pane.

About the KPI Library

The KPI Library is part of the Studio. It provides out-of-the-box Scorecard, Perspective, Objective, KPI, and Metric templates, as well as Folders.

Scorecard templates and their contents represent recommendations on the business aspect they represent and the information they should display.

You can use the templates as the basis for active Scorecard, Perspective, Objective, KPI, and Metric that are used to create the Dashboard display and to show data that enables the end-user to see if the enterprise objectives are met or not.

The KPI Library pane can contain several trees. A tree can be a Scorecard tree or a folder tree. A folder tree includes only folders, KPIs, and Metrics.

About the Active KPIs

The Active KPIs pane is part of the Studio. It contains the active Scorecards, Perspectives, Objectives, KPIs, and Metrics, as well as KPI/Metric Breakdowns.

Active Scorecard, Perspective, Objectives, KPIs, and Metrics are the building blocks of the elements (components and pages) the Executive end-user views in the Dashboard.

You can add to the pool of out-of-the-box elements that are used to create the Dashboard display, by dragging the relevant Scorecard, Perspective, Objective, KPI, and Metric templates from the KPI Library pane to the Active KPIs pane.

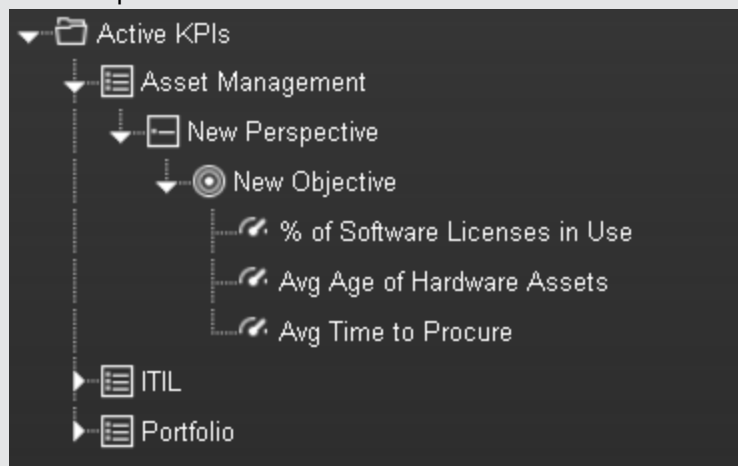
The Active KPIs pane contains only one tree that can include one or more Scorecards and their contents, as well as individual KPIs or Metrics (Orphan KPIs or Metrics). Orphan KPIs or Metrics are used when the user does not work with Scorecards, Perspectives, and Objectives.

You can modify the active entities in the Active KPIs pane. For task details, see ["Create Active Scorecards, Perspectives, Objectives, Metrics, or KPIs" on page 54](#).

About Trees





In the Studio's KPI Library pane or Active KPIs pane, you can view the template or active Scorecards, Perspectives, Objectives, Folders, KPIs, and Metrics organized in **tree** structures.




For example:



The KPI Library pane may include several trees. These trees can include Scorecards, Orphan KPIs, or Metrics, or Folders. Template KPIs are Orphans when they are not included in any Objective in the relevant Scorecard tree or in any Folder in the relevant Folder tree. So for each Scorecard tree or Folder, the Orphan KPIs can be different.


The Active KPIs pane includes one tree that can include one or more Scorecard trees as well as Orphan KPIs or Metrics.


Scorecards are indicated by  or . Each Scorecard is in itself a tree that can include some Perspectives (indicated by  or ). Each Perspective includes some Objectives (indicated by

 or ). Each Objective includes either child Objectives or KPIs (but not both). KPIs are indicated by .

The names of the nodes (Scorecards, Perspectives, Objectives, and KPIs) are unique for the same hierarchical level. ["Create Active Scorecards, Perspectives, Objectives, Metrics, or KPIs" on page 54](#)

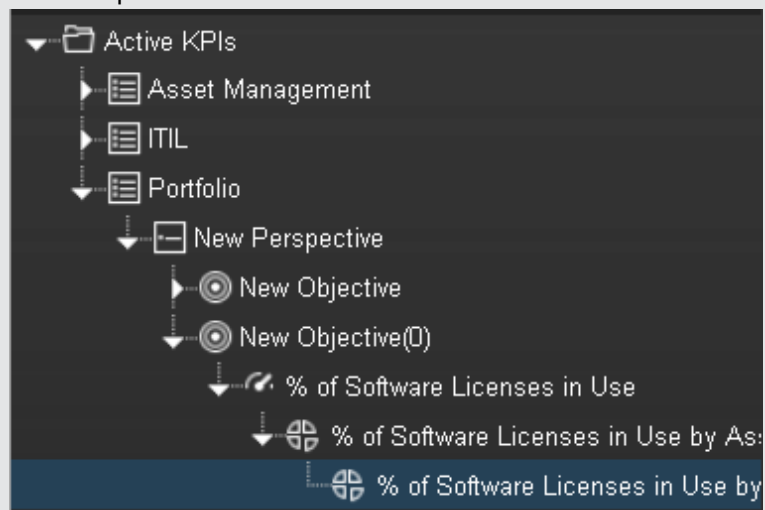
Metrics are indicated by .

Each KPI can include KPI Breakdowns (indicated by ). KPI Breakdowns can also include KPI Breakdowns.

Each Metric can include Metric Breakdowns (indicated by ). Metric Breakdowns can also include Metric Breakdowns.

Note: KPI/Metric Breakdowns can be configured for active KPIs or Metrics; they do not exist in the KPI Library. They are displayed only in the Active KPIs pane. For details, see ["Manage KPI Breakdowns" on page 123](#).

For example:



In the Active KPIs pane, you can add active KPIs or Metrics, Objectives, and Perspectives to existing Scorecards. For task details, see ["Create Active Scorecards, Perspectives, Objectives, Metrics, or KPIs" on page 54](#).

Tasks

This task includes the following steps

1. ["Prerequisite - Interview the Dashboard End-User" on next page](#)
2. ["Import out-of-the-box templates - optional" on next page](#)
3. ["Activate Scorecards, their Perspectives, Objectives, and KPIs" on next page](#)
4. ["Customize Scorecards, their Perspectives, and Objectives" on next page](#)
5. ["Create Active Scorecards, their Perspectives, Objectives, KPIs, and Metrics" on next page](#)

6. ["Customize KPIs or Metrics" below](#)
7. ["Enrich the Executive Dashboard Display" on next page](#)
8. ["Calculate for the current period, recalculate for the historical period, or schedule the calculation" on next page](#)
9. ["Out-of-the-box Dashboard Pages" on next page](#)
10. ["Prepare the Dashboard Display" on next page](#)

1. **Prerequisite - Interview the Dashboard End-User**

To design the end-user's scorecards, you must interview the end-user to understand what are his business objectives.

For details, see ["Executive Personas and their Business Challenges" on page 11](#).

2. **Import out-of-the-box templates - optional**

When you start HP IT Executive Scorecard, the out-of-the-box Scorecard, Perspective, Objective, KPI, or Metric templates, Folders, Orphan KPI or Metric templates, components, and Dashboard pages are automatically imported into the KPI Library pane.

You may want to import additional templates, for example, if you have upgraded to a new version and you want to keep your former templates. For details, see ["Import or Export Trees" in the Administrator Guide](#).

3. **Activate Scorecards, their Perspectives, Objectives, and KPIs**

HP IT Executive Scorecard provides out-of-the-box Scorecard templates in the KPI Library. You can drag the out-of-the-box Scorecard templates from the KPI Library to the Active KPIs pane to activate them. In the Active KPIs pane, you can then customize, clone, or create new Scorecards.

You can do the same for Perspective templates, Objective templates, and KPI or Metric templates.

For details, see ["Activate Scorecards, Perspectives, Objectives, Metrics, or KPIs Using Templates" on page 49](#).

4. **Create Active Scorecards, their Perspectives, Objectives, KPIs, and Metrics**

You can create new active Scorecards, their Perspectives, and Objectives. For details, see ["Create Active Scorecards, Perspectives, Objectives, Metrics, or KPIs" on page 54](#).

5. **Customize Scorecards, their Perspectives, and Objectives**

You can customize out-of-the-box Scorecards, their Perspectives, and Objectives. For details, see ["Configure a Scorecard" on page 62](#), ["Configure a Perspective" on page 66](#), or ["Configure an Objective" on page 69](#).

6. **Customize KPIs or Metrics**

You can customize KPIs or Metrics by:

- Changing a KPI or a Metric configuration. For details, see ["Configure a KPI or a Metric" on page 77](#).

- Directly creating active KPIs and assigning them to Objectives or creating active Metrics. For details, see ["Create Active Scorecards, Perspectives, Objectives, Metrics, or KPIs" on page 54](#).
- Changing their Business Context of a KPI or a Metric. For details, see ["Customize a KPI or a Metric Business Context" on page 107](#).
- Changing the formula used to calculate the KPI or a Metrics. For details, see ["Modify a KPI or Metric Formula" on page 90](#).
- Changing the filter used to limit the range of data used in the calculation of the KPI or the Metric. For details, see ["Modify a KPI or Metric Filter" on page 100](#).
- Change the thresholds to recalculate the status of a KPI. For details, see ["Calculate Displayed Values after Configuration Change" on page 110](#) or ["Recalculate Displayed Values after Configuration Change" on page 112](#).

7. Enrich the Executive Dashboard Display

You can enrich the Executive Dashboard display by:

- Creating cascading Scorecards that enable the Executive to drilldown to lower levels of the same Scorecard. For details, see ["Create Cascading Scorecards" on page 140](#).
- Creating breakdowns of KPIs to obtain more detailed information about the KPI's measurements. For details, see ["Manage KPI Breakdowns" on page 123](#).
- Managing overrides. For details, see ["Manage Overrides" on page 134](#).
- Adding additional information to the KPI or to an Objective. For details, see ["Provide Additional Information for a KPI or an Objective" on page 137](#).

8. Calculate for the current period, recalculate for the historical period, or schedule the calculation

After you complete the customization and enrichment of the Scorecards and their contents, you can either:

- Wait for the automatic scheduled calculation to take place.
- Activate the calculation of the values, statuses, and scores of the KPIs or Metrics to display the resulting information in the Dashboard. For details, see ["Calculate Displayed Values after Configuration Change" on page 110](#).
- Activate the recalculation of the values, statuses, and scores of the KPIs or Metrics for a historical (past) period to display the resulting information in the Dashboard. For details, see ["Recalculate Displayed Values after Configuration Change" on page 112](#).

You can schedule the calculation of specific business context automatically. For details, see ["Schedule Business Context Calculations" on page 115](#).

9. Out-of-the-box Dashboard Pages

The Executive can view the relevant information on the out-of-the-box pages in the Dashboard. For details, see ["View and Analyze the Business Objectives" on page 282](#).

10. Prepare the Dashboard Display

You can also create pages, enrich pages with additional components, create components, and

wire the components so selecting a specific element in one component impacts the display of other components in the page. For details, see "[Prepare the Dashboard Display](#)" on page 149.


Activate Scorecards, Perspectives, Objectives, Metrics, or KPIs Using Templates

Activate the relevant Scorecards, their Perspectives, Objectives, Metrics, and KPIs by dragging the corresponding templates from the KPI Library pane to the Active KPI Pane.

You can also create active KPIs by dragging the corresponding KPI templates from Folders.

To access:

Click the **Studio** tab. If the KPI Library pane is not displayed, click the **Toggle Side By Side**

button  in the toolbar of the Active KPIs pane or click the vertical KPI Library button (on the left of the Studio).

Tasks

This section includes:

["Activate a node by dragging the relevant template from the KPI Library to the Active KPI pane" below](#)


["Activate a Metric or KPI" on next page](#)

["Activate a Folder KPI " on next page](#)

Activate a node by dragging the relevant template from the KPI Library to the Active KPI pane

You can create an active copy of the node template by dragging the template from the KPI Library pane to the Active KPIs pane. You can then modify the active copy in the Active KPIs pane.

To create a node using a node template, proceed as follows:

1. Click the **Studio** button (top right corner) to open the Studio.
2. You must work with the KPI Library pane and the Active KPIs pane side-by-side, so if necessary, click the **Toggle side-by-side view** button  to display the **KPI Library** pane and the **Active KPIs** pane side by side.
3. Select **Scorecard template tree** in the **Show:** list. The KPI Library pane displays the Scorecard template tree and Orphan KPIs.
4. To create the active node, click the relevant node template in the Scorecard tree in the KPI Library pane and drag it to the Active KPIs pane.

You can drag and drop nodes from the KPI Library pane to the Active KPIs pane:

- The Scorecard template anywhere in the Active KPIs pane.
- The Perspective template only to the relevant Scorecard.
- The Objective template only to the relevant Perspective or to another Objective if the target Objective does not include KPIs.

This creates a working copy of the node template with all its sub-tree structure. The new node is given a unique name. For details about the unique names, see the Learn About section in ["Create Active Scorecards, Perspectives, Objectives, Metrics, or KPIs" on page 54](#).

Activate a Metric or KPI

You can create a copy of the Metric or KPI template by dragging the template to the Active KPIs pane. You can then modify the active copy in the Active KPIs pane.

To create a Metric or KPI using a Metric or KPI template, proceed as follows:


1. Click the **Studio** button (top right corner) to open the Studio.
2. Click the **KPI Library** bar to open the KPI Library.
3. Select **KPIs** in the **Show:** list. The list of Metrics or KPIs is displayed under the **Show:** box.
4. To create the active Metric or KPI, click the relevant Metric or KPI template in the KPI tree in the KPI Library pane and drag it to the Active KPIs pane.

This creates a working copy of the Metric or KPI template. Once the Metric or KPI is located in the Active KPIs pane it is activated, and the relevant data is displayed in the relevant components in the Dashboard.

Activate a Folder KPI

You can create an active a KPI by dragging a Folder KPI template from the KPI Library to the Active KPIs pane. You can then modify the active copy in the Active KPIs pane.

To create a KPI using a Folder KPI template, proceed as follows:

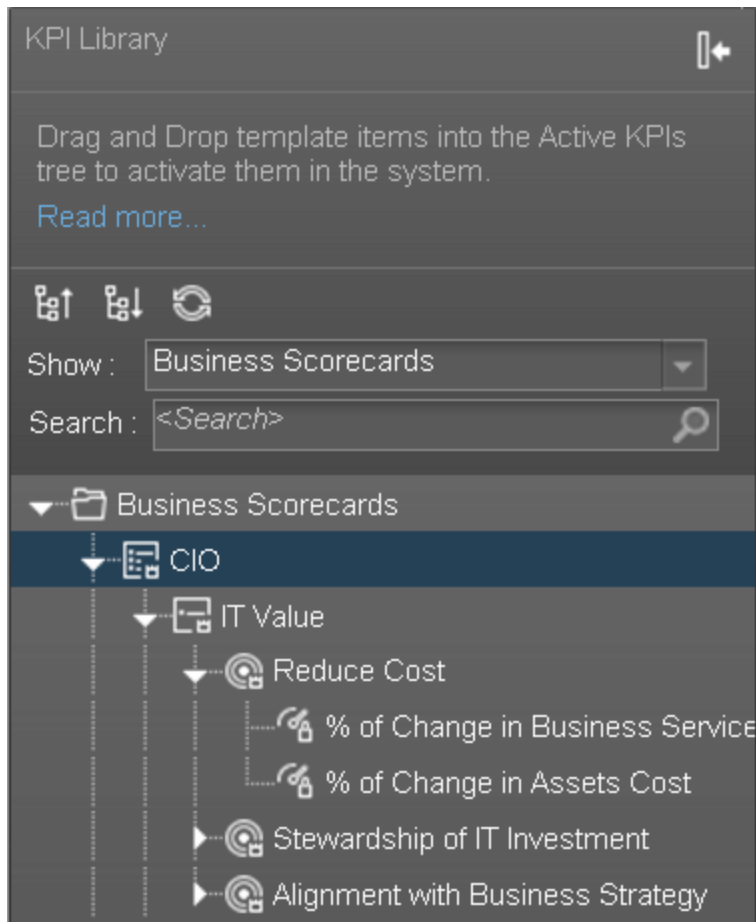
1. Click the **Studio** button (top right corner) to open the Studio.
2. You must work with the KPI Library pane and the Active KPIs pane side-by-side, so if necessary, click the **Toggle side-by-side view** button  to display the **KPI Library** pane and the **Active KPIs** pane side by side.
3. Select **HP Portfolio** in the **Show:** list. The KPI Library pane displays the Folder template tree and Orphan KPIs.
4. To create the active node, click the relevant KPI template in the Folder tree in the KPI Library pane and drag it to the Active KPIs pane.

This creates an active copy of the KPI template. The new KPI is given a unique name. For details about the unique names, see the Learn More section in ["Create Active Scorecards, Perspectives, Objectives, Metrics, or KPIs" on page 54](#).

UI Description

KPI Library Pane

This pane displays the trees of available Scorecard, Perspective, Objective, and KPI templates, as well as Folders, and Orphan KPI templates.





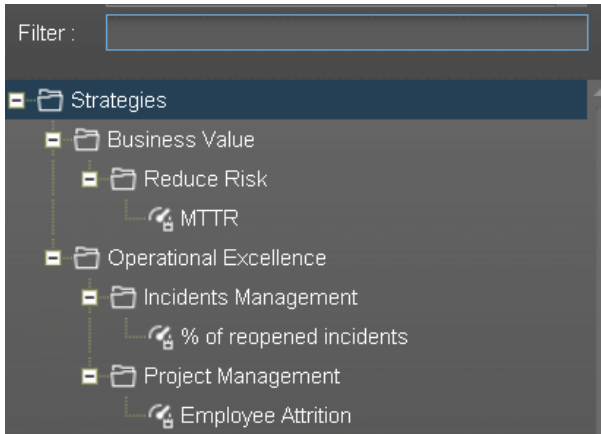


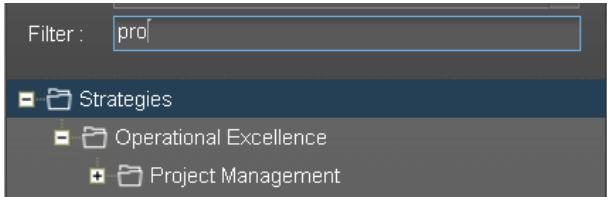
When you select an element in the KPI Library pane, the rightmost pane in the Studio displays the configuration of the selected element.

Note: The contents of fields is automatically validated when you type in the relevant information where fields can be empty.

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
	<p>Show trees side-by-side. If the KPI Library pane or the Active KPIs pane is closed, click the button to open the closed pane (or click the vertical KPI Library or Active KPIs buttons). The pane is then displayed side-by-side with the other pane and with the Configuration/Calculation details tabs.</p> <p>If the KPI Library pane and the Active KPIs pane are both open, click:</p> <ul style="list-style-type: none"> The Collapse the Active KPIs button to hide the Active KPIs pane.

UI Element	Description
	<ul style="list-style-type: none"> The Collapse the KPI Library  button to hide the KPI Library.
	Refresh the tree. Click to refresh the display of the tree. For details, see "Templates" on page 32 .
 	Collapse and expands the tree nodes.
<Tree>	The tree displays the hierarchy of Scorecard templates, Perspective templates, Objective templates, and KPI templates. It can also display Folders and their KPI templates, and Orphan KPI templates. For concept details, see the Learn More section in "Templates" on page 32 .
Show	<p>Displays the current template tree.</p> <p>Note: To change the selection, click the arrow to the right of the box and select the template you want to display in the list of templates.</p>
Search	<p>Enter the relevant string to search for all the elements (Scorecard, Perspective, Objective, and KPI templates, Orphan KPI templates, and Folders) in the tree, whose name includes the string.</p> <p>The filter returns the section of tree from the root down to the element whose name includes the specified string (path). It does not include elements that are not directly part of that path. The child subtree of the element is collapsed and displayed under the element.</p> <p>If more than one element includes the specified string, the paths to these elements are also displayed.</p> <p>Example: If the tree is as follows:</p>  <p>After searching for the string: pro, the resulting tree is as follows:</p>

UI Element	Description
	

Create Active Scorecards, Perspectives, Objectives, Metrics, or KPIs

You can create Scorecards, their Perspectives, Objectives, Metrics, and KPIs directly in the Active KPI Pane.

Note: In the following sections, "node" represents Scorecards, Perspectives, or Objectives.

To access:

Click the **Studio** tab. If the Active KPIs pane is not displayed (it is displayed by default), click the

Toggle Side By Side button  in the toolbar of the KPI Library pane.

Learn More

About unique names

The name of each entity (Scorecard, Perspective, Objective, Metric, or KPI) must be unique but the context in which it needs to be unique is different.

Scorecard names must be unique in the same active tree

When you drag and drop a Scorecard template to the Active KPIs pane you create an active copy of the Scorecard template with all its sub-tree structure. If a Scorecard with the same name already exists in the Active KPIs pane, the name of the newly added Scorecard gets the (n) suffix (where n=0 the first time and n gets incremented if necessary).

Perspective names must be unique in the same Scorecard

When you drag and drop a Perspective template to the Active KPIs pane, you create an active copy of the Perspective template. The new Perspective must have a unique name in the Scorecard tree. If the Perspective does not already exist in the Scorecard tree, it is given the same name as the Perspective template. If a Perspective with the same name already exists in the same Scorecard tree, the name of the newly added Perspective gets the (n) suffix (where n=0 the first time and n gets incremented if necessary).

Objective names must be unique under the same parent (Perspective or Objective)

When you drag and drop an Objective template to the Active KPIs pane, you create an active copy of the Objective template. The new Objective must have a unique name in the Perspective or Objective tree. If the Objective does not already exist in the Perspective or Objective tree, it is given the same name as the Objective template. If an Objective with the same name already exists in the same Perspective or Objective tree, the name of the newly added Objective gets the (n) suffix (where n=0 the first time and n gets incremented if necessary).

KPI names must be unique in the same active tree

When you drag and drop a KPI template to the Active KPIs pane, you create an active copy of the KPI template. The new KPI must have a unique name in the Active KPIs pane. If the KPI does not already exist in the tree, it is given the same name as the KPI template. If a KPI with the same name already exists in the same tree, the name of the newly added KPI gets the (n) suffix (where

n=0 the first time and n gets incremented if necessary). The same KPI might be assigned to several Objectives.

Metric names must be unique in the same active tree

When you drag and drop a Metric template to the Active KPIs pane, you create an active copy of the Metric template. The new Metric must have a unique name in the Active KPIs pane. If the Metric does not already exist in the tree, it is given the same name as the Metric template. If a Metric with the same name already exists in the same tree, the name of the newly added Metric gets the (n) suffix (where n=0 the first time and n gets incremented if necessary).

Important Information

When you select an element in the Active KPIs pane, the rightmost pane in the Studio displays the configuration of the selected element.

- For a Scorecard, see the UI Description section in ["Configure a Scorecard" on page 62](#).
- For a Perspective, see the UI Description section in ["Configure a Perspective" on page 66](#).
- For an Objective, see the UI Description section in ["Configure an Objective" on page 69](#).
- For a KPI, see the UI Description section in ["Configure a KPI or a Metric" on page 77](#).

Note: The contents of a field are automatically validated when you type in the relevant information where fields can be empty.

Tasks


This section includes:

["Create a new node" below](#)

["Create new active KPIs or Metrics" on next page](#)

["Create active KPIs or Metrics by cloning existing KPIs or Metrics" on next page](#)

Create a new node



1. Click the **Studio** button (top right corner) to open the Studio.
2. In the **Active KPIs** pane, click the **Create a new entity**  button.
3. Select the **Scorecard**, **Perspective**, or **Objective** option in the menu that opens. Depending on your selection, the following happens in the **Active KPIs** pane:
 - A **New Scorecard** node is added at the bottom of the tree in the **Active KPIs** pane. The new Scorecard has an automatically generated unique name. The Scorecard is automatically selected in the tree. You can then configure the Scorecard. For details, see ["Configure a Scorecard" on page 62](#).
 - A **New Perspective** node is added at the bottom of the Scorecard tree you selected before adding the Perspective (the option to create a new Perspective is only available if you have already selected a Scorecard). The new Perspective has an automatically generated unique name. The Perspective is automatically selected in the tree. You can then configure the Perspective. For details, see ["Configure a Perspective" on page 66](#).

- A **New Objective** node is added at the bottom of the Perspective you selected before adding the Objective (the option to create a new Objective is only available if you have already selected a Perspective). The new Objective has an automatically generated unique name. The Objective is automatically selected in the tree. You can then configure the Objective. For details, see ["Configure an Objective" on page 69](#).

Note: The new Objective can also be created at the bottom of the Objective you have selected, if the selected Objective does not already have KPIs.



Create new active KPIs or Metrics

To create a new active KPI or Metric, proceed as follows:

1. Click the **Studio** button (top right corner) to open the Studio.
2. In the **Active KPIs** pane, you can:
 - Select the Objective to which you want to assign the KPI, click the **Create a new entity**  button, and select the **KPI** option in the menu that opens. The new KPI is added at the bottom of the Objective tree. The new KPI has an automatically generated unique name. The KPI is automatically selected in the tree. You can modify the KPI name. You can then configure the KPI. For details, see ["Configure a KPI or a Metric" on page 77](#).
 - Select the root directory, and click the **Create a new entity**  button and select the **KPI**, or **Metric** option in the menu that opens. A new Orphan KPI or Metric is added at the bottom of the tree. Its name is followed by (n) where n represents the number of clones created from the same KPI or Metric. You can modify the KPI or Metric name. You can then configure the KPI or Metric. For details, see ["Configure a KPI or a Metric" on page 77](#). You can then move the KPI to the relevant Objective.

Create active KPIs or Metrics by cloning existing KPIs or Metrics

To create a new active KPI or Metric, proceed as follows:

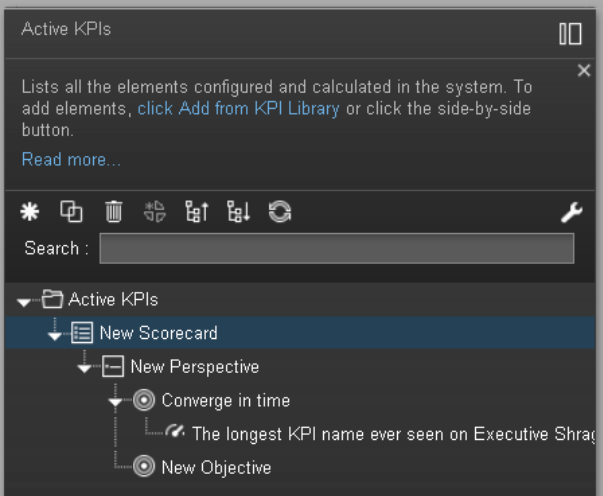
1. Click the **Studio** button (top right corner) to open the Studio.
2. In the **Active KPIs** pane, right-click the KPI or Metric you want to clone and click the **Create a copy of the current entity**  option or select the KPI or Metric and click the **Create a copy of the current entity**  button in the Active KPIs toolbar. The cloned KPI or Metric is added at the bottom of the list of KPIs or Metrics for the Objective. Its name is followed by (n) where n represents the number of clones created from the same KPI. You can modify the KPI or Metric name.

You can then configure the KPI or Metric. For details, see ["Configure a KPI or a Metric" on page 77](#).






UI Description




Active KPIs Pane








This pane displays the tree of active Scorecards, Perspectives, Objectives, Metrics, KPIs, and Orphan KPIs or Metrics.

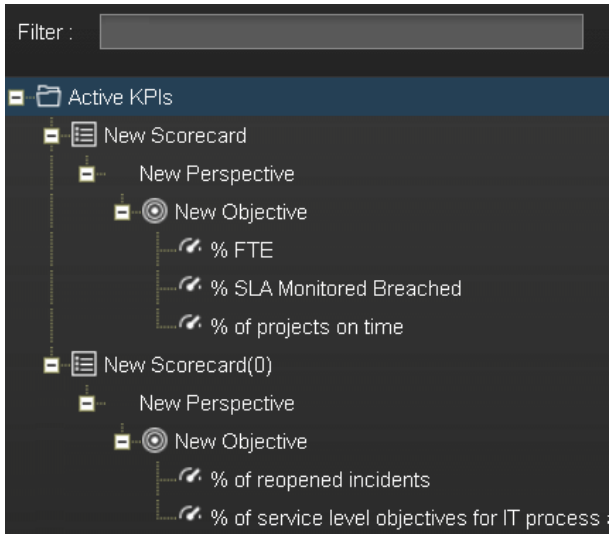
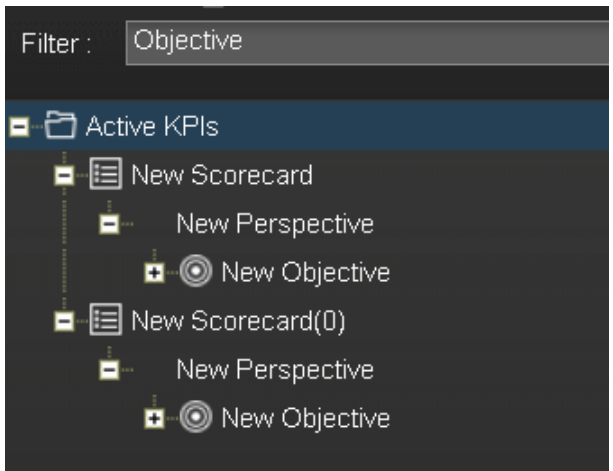




User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
	<p>Show trees side-by-side. If the KPI Library pane or the Active KPIs pane is closed, click the  button to open the closed pane (or click the vertical KPI Library or Active KPIs buttons). The pane is then displayed side-by-side with the other pane and with the Configuration/Calculation details tabs.</p> <p>If the KPI Library pane and the Active KPIs pane are both open, click:</p> <ul style="list-style-type: none">• The Collapse the Active KPIs  button to hide the Active KPIs pane.• The Collapse the KPI Library  button to hide the KPI Library.
	<p>Create a new entity. Click to display a menu that enables you to select:</p> <ul style="list-style-type: none">• Scorecard. A new Scorecard is displayed at the bottom of the tree. The Configuration tab for the Scorecard is displayed in the Configuration pane where you can enter the details for the new Scorecard. For details, see the UI Description section in "Configure a Scorecard" on page 62.• Perspective. A new Perspective is displayed at the bottom of the tree under the selected Scorecard. The Configuration tab for the Perspective is displayed in the Configuration pane where you can enter the details for the new Perspective. For details, see the UI Description section in "Configure a Perspective" on page 66.• Objective. A new Objective is displayed at the bottom of the tree under the selected Perspective. The Configuration tab for the Objective is displayed in the Configuration pane where you can enter the details for the new Objective. For details, see the UI Description section in "Configure an Objective" on page 69.• KPI. A new Orphan KPI or a KPI under a selected Objective is displayed at the

UI Element	Description
	<p>bottom of the tree. The Configuration tab and Calculation tab for the KPI, where you can enter the details for the new KPI, are displayed. For details, see the UI Description section in "Configure a KPI or a Metric" on page 77.</p> <ul style="list-style-type: none">• Metric. A new Orphan Metric is displayed at the bottom of the tree. The Configuration tab and Calculation tab for the Metric, where you can enter the details for the new Metric, are displayed. For details, see the UI Description section in "Configure a KPI or a Metric" on page 77.
	<p>Create a copy of the current entity. Select an entity in the tree and click the button to duplicate the entity. The entity is created in the tree below the original entity, with the same name. A number between parenthesis is added at the end of the entity's name (for example: MTTR(0)).</p>
	<p>Delete Currently Selected Node. Select the Scorecard, Perspective, Objective, Metric, KPI, or KPI or Metric Breakdown you want to delete and click the button.</p>
	<p>Create KPI or Metric Breakdown. The list of available entities for the KPI or Metric is displayed.</p> <p>To create a KPI Breakdown or Metric you can do one of the following:</p> <ul style="list-style-type: none">• Right-click the relevant KPI, Metric, KPI Breakdown, or Metric Breakdown, select Breakdown and then select the entity and dimension in the list that opens.• Select the relevant KPI, Metric, KPI Breakdown, or Metric Breakdown, and click the button in the tool bar. In the list of entities and dimensions that open select the relevant entity and dimension. <p>To understand KPI/Metric Breakdowns, see "Manage KPI Breakdowns" on page 123 or "Manage Metric Breakdowns" on page 130.</p>

UI Element	Description
	<p>Calculation options. Displays the calculation options:</p> <p> Calculate now. Calculates all KPIs and Objectives values, statuses, and scores in the selected universe. The Calculate Now dialog box opens where you select the universe and confirm that you want to perform the calculation for the current time period. For details, see "Calculate Displayed Values after Configuration Change" on page 110.</p> <p> Recalculate. Recalculates the selected entity for the selected historical (past) time period. The recalculation period is limited to up to a year in the past. The Recalculate dialog box opens where you can specify the universe and the time frame. For details, see "Recalculate Displayed Values after Configuration Change" on page 112.</p> <p> Schedule context calculation. Opens the Business Context Calculation Scheduling dialog box where you can schedule the context calculation. For details, see "Schedule Business Context Calculations" on page 115.</p> <p> Calculation monitoring. Opens the Calculation Monitoring dialog box where you can monitor the calculation or recalculation history for each Business Context, or to view the Business Contexts that are currently being calculated or recalculated. For details, see "Monitor the Calculation and Recalculation Processes" on page 118.</p>
	<p>Collapses and expands the tree nodes.</p>
	<p>Refresh the tree. Click to refresh the display of the tree.</p>

UI Element	Description
Search	<p>Enter the relevant string to search for all the elements (Scorecards, Perspectives, Objectives, KPIs, Metrics, KPI Breakdowns, or Metric Breakdowns) in the tree, whose name includes the string.</p> <p>The filter returns the section of tree from the root down to the element whose name includes the specified string (path). It does not include elements that are not directly part of that path. The child subtree of the element is collapsed and displayed under the element.</p> <p>If more than one element includes the specified string, the paths to these elements are also displayed.</p> <p>Example:</p> <p>If the tree is as follows:</p>  <p>After searching for the string: Objective, the resulting tree is as follows:</p> 

UI Element	Description
<tree>	<p>The pane displays the active tree with the relevant Scorecards, Perspectives, Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, Orphan KPIs, and Orphan Metrics.</p> <p>It can also include Orphan KPIs and KPI Breakdowns.</p> <ul style="list-style-type: none"> • Right-click any element in the tree to display the relevant options that correspond to the options available in the toolbar and also include a Help button that enable you to access the online help. • You can move tree nodes (Scorecards, Perspectives, Objectives, and KPIs) by dragging and dropping them in the relevant location in the tree. For example, you can drag a KPI from an Objective to another Objective. • You cannot drag a KPI Breakdown from one KPI to another. • You cannot drag a Metric Breakdown from one Metric to another. • You can drag an Orphan KPI to an Objective, but you cannot drag a KPI assigned to an Objective to change it into an Orphan KPI. • When you are performing a drag and drop operations: <ul style="list-style-type: none"> ■ The  icon indicates that the drop is not allowed. ■ The  % of Software Licenses in Use icon indicates that the drop is allowed.

Configure a Scorecard

An activated Scorecard displays, in the Dashboard relevant Scorecard component, how well the corresponding objectives are met.

You can display and modify the configuration information for the selected active Scorecard in the Active KPIs pane.

Note: In this section, "node" represents Scorecards.

To access:

Click a Scorecard in the Active KPIs pane.

Learn More

About Active Scorecards

A Scorecard is a high-level snapshot (visual summary) of any organizational performance. Scorecards display a collection of Objectives, and assess the performance of the organization by viewing the status of Objectives.

A Scorecard is a way to map and translate complex business information into something that is understandable to everyone. The methodology starts with targets defined by the organization, followed by Scorecard Objectives.

The following table shows how core Scorecard elements relate to key performance questions.

Scorecard Element	Key Performance Question	More Information and Example
Perspective\Strategy	What is the strategy trying to achieve?	<p>For details about Perspectives, see "Perspectives" on page 18.</p> <p>A Scorecard can include one or more Perspectives.</p> <p>Example: Operational excellence.</p>
Objective	What is the objective trying to achieve?	<p>For details about Objectives, see "Objectives" on page 19.</p> <p>A Perspective can include one or more Objectives.</p> <p>Example: Increase responsiveness in IT to service requests for PC orders by 20% in 2010.</p>

Scorecard Element	Key Performance Question	More Information and Example
KPI	How will performance be measured?	For details about KPIs, see "KPIs and Metrics" on page 20 . An Objective can include more than one KPI. Example: Time to order, configure, and install PC.
Threshold	What performance level is required?	24 hours.

Out-of-the-box templates of Scorecards, Perspectives, Objectives, and KPIs are provided. These templates correspond to business elements. For details, see ["Activate Scorecards, Perspectives, Objectives, Metrics, or KPIs Using Templates" on page 49](#).

Active Scorecards, Perspectives, Objectives, and KPIs display real data in the Dashboard. For details, see ["Active KPIs Pane" on page 56](#).

Scorecard names must be unique in the same active tree.

When you drag and drop a Scorecard template to the Active KPIs pane you create an active copy of the Scorecard template with all its sub-tree structure. If a Scorecard with the same name already exists in the Active KPIs pane, the name of the newly added Scorecard gets the (n) suffix (where n=0 the first time and n gets incremented if necessary).

Tasks

This section includes:

["Customize the Node" below](#)

["Populate the Node" below](#)

["Delete a Node" on page 76](#)

Customize the Node

To customize the node:

1. Click the **Studio** button (top right corner) to open the Studio.
2. In the **Active KPIs** pane, select the relevant node. Its details are displayed in the Configuration Details pane.
3. Modify the node's details and click **Save** to save the changes.

Populate the Node

1. Click the **Studio** button (top right corner) to open the Studio.
2. In the **Active KPIs** pane, select the relevant node. Its details are displayed in the Configuration Details pane.

3. You can also populate the node by adding or removing the following nodes:
 - a. Perspectives. For details, see ["Configure a Perspective" on page 66](#).
 - b. Objectives. For details, see ["Configure an Objective" on page 69](#).
 - c. KPIs. For details, see ["Configure a KPI or a Metric" on page 77](#).
 - d. KPI Breakdowns. For details, see ["Manage KPI Breakdowns" on page 123](#).

UI Description

Configuration Details Tab for a Scorecard

This page displays configuration information for the selected active Scorecard in the Active KPIs pane.

Active KPIs pane: After you have created, modified, or deleted an entity in the Active KPIs pane, the changes affect the Dashboard after about 5 minutes (this time period is configurable in **Admin > Scorecard > XS Settings > Configuration reload rate(Minutes)**). If you run a calculation after making modifications that affect the results of a KPI, the changes automatically affect the Dashboard.

Configuration details

Navigate to the source template

General - Scorecard

Name : VP Operations

Description : Business Value

Id : 80

Type : Scorecardinstance


▼ Cascading Scorecards

Manage Cascading Scorecards

Name	
SM Director	
Additional Scorecard	

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Navigate to the source template	Moves the cursor to the template that was used to create the current Scorecard, in the KPI Library pane. The details of the template are displayed in the Configuration Details pane.
Save	Click to save the changes.

UI Element	Description
Discard	Click to discard the changes you have made since the last Save operation.
	Click to refresh the display.


General - Scorecard

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Name	<p>The name of the active Scorecard.</p> <p>Limitations:</p> <ul style="list-style-type: none">• The characters: \ / : * ? " < > are not supported.• The maximum number of characters is 250.
Description	<p>The description of the Scorecard.</p> <p>Limitations: The maximum number of characters is 1000.</p>
Id	<p>The Id of the Scorecard. It is automatically assigned.</p> <p>This information is displayed only when in debug mode. To set the debug mode, click Admin > Scorecard > XS Settings, and in Debug Mode, select the Application Debug Mode setting.</p>
Type	<p>The type of Scorecard. It is automatically assigned.</p> <p>This information is displayed only when in debug mode. To set the debug mode, click Admin > Scorecard > XS Settings, and in Debug Mode, select the Application Debug Mode setting.</p>

Cascading Scorecards

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Manage Cascading Scorecards	Click to open the Manage Cascading Scorecards dialog box where you can select the Scorecards that are to be the target Scorecards for the drilldown from the current Scorecard. For details, see " Create Cascading Scorecards " on page 140.
Name	The name of the Cascading Scorecard.
Remove	Click the relevant Remove  button to remove the selected Scorecard from the list of Cascading Scorecards.

Configure a Perspective

An activated Perspective represents one of the strategies included in a Scorecard.

Note: In this section, "node" represents Perspectives.

To access:

Click a Perspective in the Active KPIs pane.

Learn More

About Perspectives

A Perspective represents one of the strategies included in a Scorecard.

Every Scorecard definition includes out-of-the-box definitions as well as Perspectives that include Objectives that are linked to KPIs.

A Perspective represents a group of Objectives that can help the executive track and analyze the relevant business issue.

Perspective names must be unique in the same Scorecard.

When you drag and drop a Perspective template to the Active KPIs pane, you create an active copy of the Perspective template. The new Perspective must have a unique name in the Scorecard tree. If the Perspective does not already exist in the Scorecard tree, it is given the same name as the Perspective template. If a Perspective with the same name already exists in the same Scorecard tree, the name of the newly added Perspective gets the (n) suffix (where n=0 the first time and n gets incremented if necessary).

Important Information

Active KPIs pane: After you have created, modified, or deleted an entity in the Active KPIs pane, the changes affect the Dashboard after about 5 minutes (this time period is configurable in **Admin > Scorecard > XS Settings > Configuration reload rate(Minutes)**). If you run a calculation after making modifications that affect the results of a KPI, the changes automatically affect the Dashboard.

Tasks

This section includes:

["Customize the Node" on next page](#)

["Populate the Node" on next page](#)

["Delete a Node" on page 76](#)

Customize the Node

To customize the node:

1. Click the **Studio** button (top right corner) to open the Studio.
2. In the **Active KPIs** pane, select the relevant node. Its details are displayed in the Configuration Details pane.
3. Modify the node's details and click **Save** to save the changes.

Populate the Node

1. Click the **Studio** button (top right corner) to open the Studio.
2. In the **Active KPIs** pane, select the relevant node. Its details are displayed in the Configuration Details pane.
3. You can also populate the node by adding or removing the following nodes:
 - a. Objectives. For details, see ["Configure an Objective" on page 69](#).
 - b. KPIs. For details, see ["Configure a KPI or a Metric" on page 77](#).
 - c. KPI Breakdowns. For details, see ["Manage KPI Breakdowns" on page 123](#).


UI Description

Configuration Details Tab for a Perspective

This page enables you to display the configuration of an active Perspective.

The screenshot shows the 'Configuration details' tab in the Studio interface. The tab is titled 'Configuration details' and has a link 'Navigate to the source template' in the top right corner. Below the tab title, there is a section titled 'General - Perspective'. This section contains four fields: 'Name' with the value 'CFO Perspective', 'Description' with the value 'Perspective for the CFO', 'Id' with the value '46', and 'Type' with the value 'Perspectiveinstance' and a dropdown arrow.

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Navigate to the source template	Moves the cursor to the template that was used to create the current Perspective, in the KPI Library pane. The details of the template are displayed in the Configuration Details pane.
Save	Click to save the changes.
Discard	Click to discard the changes you have made since the last Save operation.
	Click to refresh the display.

General - Perspective

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Name	<p>The name of the active Perspective.</p> <p>Limitations:</p> <ul style="list-style-type: none">• The characters: \ / : * ? " < > are not supported.• The maximum number of characters is 250.
Description	<p>The description of the Perspective.</p> <p>Limitations: The maximum number of characters is 1000.</p>
Id	<p>The Id of the Perspective. It is automatically assigned.</p> <p>This information is displayed only when in debug mode. To set the debug mode, click Admin > Scorecard > XS Settings, and in Debug Mode, select the Application Debug Mode setting.</p>
Type	<p>The type of Perspective. It is automatically assigned.</p> <p>This information is displayed only when in debug mode. To set the debug mode, click Admin > Scorecard > XS Settings, and in Debug Mode, select the Application Debug Mode setting.</p>

Configure an Objective

An activated Objective represents one of the strategies includes in a Scorecard.

Note: In this section, "node" represents Objectives.

To access:

Click an Objective in the Active KPIs pane.

Learn More

About Active Objectives

An Objective represents an overall performance goal that is defined by an executive. An Objective is a heading for a group of KPIs of different types that can represent different aspects of the goal.

Example: If an executive wants to measure the IT department responsiveness, an Objective that measures different aspects of the responsiveness of the IT department is created.

Each aspect is measured by a different KPI type (for example: PC purchase time, and more). These KPIs provide values, trends, and statuses.

An Objective always shows the status of a performance goal, but does not display a performance actual value. In a typical Scorecard, Objectives show cumulative performance indicators that roll up the scores of KPIs. On a Scorecard, Objectives appear at the top level of a KPI hierarchy.

Objectives should be "SMART" (Specific, Measurable, Action-Oriented, Realistic, and Time Bound). This distinction makes it possible to know if you have met your objective.

Example: If your Reduce Costs Objective is about cost reduction, your organization may not hit the mark or may go too far. Objectives have both a negative and positive impact on organizational behavior. The "Smarter" your goal, the less variation you will experience in your results. A better objective would be for example, reduce IT operating expenses by 20% in 2011. This new objective gives you a targeted expense to reduce, a percentage goal, a time period and an organization. It meets the criteria and is achievable.

Parent-child dependency:

An Objective is a parent unit for its KPIs. An Objective uses a specific rule for the calculation of its results. The rule is based on the child KPIs score results. The available parent-child rules are:

- **BEST_CHILD** – The parent Objective result corresponds to the highest score of its child KPIs score values.
- **WORST_CHILD** – The parent Objective result corresponds to the worst score of its child KPIs score values.
- **WEIGHTED_AVERAGE** – The parent Objective result is the average value of its weighted child KPIs score values.

Objective names must be unique under the same parent (Perspective or Objective).

When you drag and drop an Objective template to the Active KPIs pane, you create an active copy of the Objective template. The new Objective must have a unique name in the Perspective or Objective tree. If the Objective does not already exist in the Perspective or Objective tree, it is given the same name as the Objective template. If an Objective with the same name already exists in the same Perspective or Objective tree, the name of the newly added Objective gets the (n) suffix (where n=0 the first time and n gets incremented if necessary).

Important Information

Active KPIs pane: After you have created, modified, or deleted an entity in the Active KPIs pane, the changes affect the Dashboard after about 5 minutes (this time period is configurable in **Admin > Scorecard > XS Settings > Configuration reload rate(Minutes)**). If you run a calculation after making modifications that affect the results of a KPI, the changes automatically affect the Dashboard.

Tasks

This section includes:

["Customize the Node" below](#)

["Populate the Node" below](#)

["Delete a Node" on page 76](#)

["Configure an Objective" on previous page](#)

Customize the Node

To customize the node:


1. Click the **Studio** button (top right corner) to open the Studio.
2. In the **Active KPIs** pane, select the relevant node. Its details are displayed in the Configuration Details pane.
3. Modify the node's details and click **Save** to save the changes.

Populate the Node

1. Click the **Studio** button (top right corner) to open the Studio.
2. In the **Active KPIs** pane, select the relevant node. Its details are displayed in the Configuration Details pane.
3. You can also populate the node by adding or removing the following nodes:
 - a. KPIs. For details, see ["Configure a KPI or a Metric" on page 77](#).
 - b. KPI Breakdowns. For details, see ["Manage KPI Breakdowns" on page 123](#).

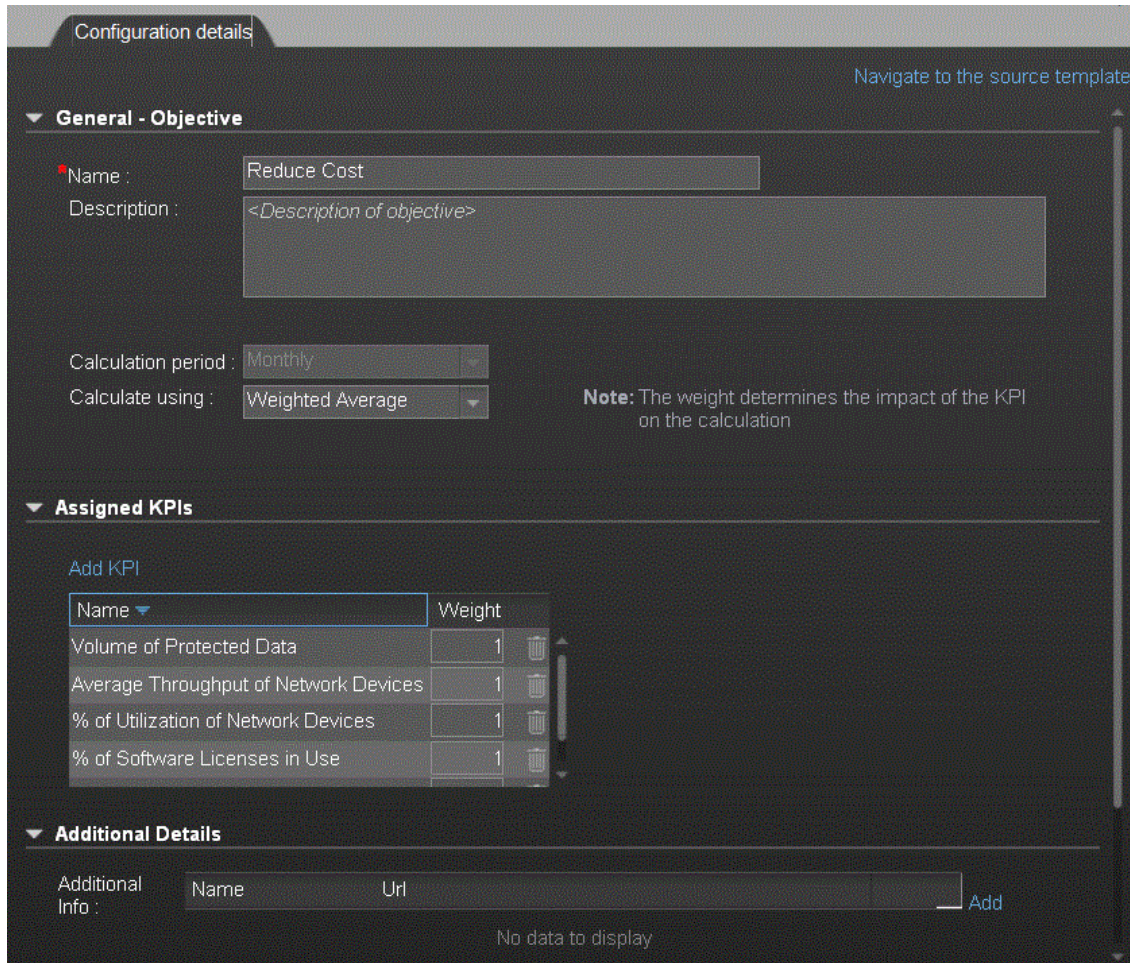
Unassign a KPI from an Objective

1. In the Active KPIs pane, select an Objective.

2. In the Configuration Details tab, in the **Assigned KPIs** section, click the **Un-assign**  button for the relevant KPI. The KPI immediately disappears from the KPIs table.
3. To save the changes you must save the Objective by clicking **Save**.

UI Description

Configuration Details Tab for an Objective



Configuration details

Navigate to the source template

General - Objective

Name : Reduce Cost

Description : <Description of objective>

Calculation period : Monthly

Calculate using : Weighted Average

Note: The weight determines the impact of the KPI on the calculation

Assigned KPIs

Add KPI

Name	Weight
Volume of Protected Data	1
Average Throughput of Network Devices	1
% of Utilization of Network Devices	1
% of Software Licenses in Use	1


Additional Details

Name	Url
No data to display	

Add

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Navigate to the source template	Moves the cursor to the template that was used to create the current Objective, in the KPI Library pane. The details of the template are displayed in the Configuration Details pane.
Save	Click to save the changes.

UI Element	Description
Discard	Click to discard the changes you have made since the last Save operation.
	Click to refresh the display.

General - Objective

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Name	<p>The name of the active Objective.</p> <p>Limitations:</p> <ul style="list-style-type: none"> • The characters: \ / : * ? " < > are not supported. • The maximum number of characters is 250.
Description	<p>The description of the Objective.</p> <p>Limitations: The maximum number of characters is 1000.</p>
Id	<p>The ID number of the Objective. It is automatically assigned.</p> <p>This information is displayed only when in debug mode. To set the debug mode, click Admin > Scorecard > XS Settings, and in Debug Mode, select the Application Debug Mode setting.</p>
Type	<p>The type of the Objective. It is automatically assigned.</p> <p>This information is displayed only when in debug mode. To set the debug mode, click Admin > Scorecard > XS Settings, and in Debug Mode, select the Application Debug Mode setting.</p>
Calculation Period	<p>The calculation period of the Objective.</p> <p>Since an Objective and its children must have the same calculation period, you can modify the value in this field only when the Objective does not have child KPIs or Objectives.</p>

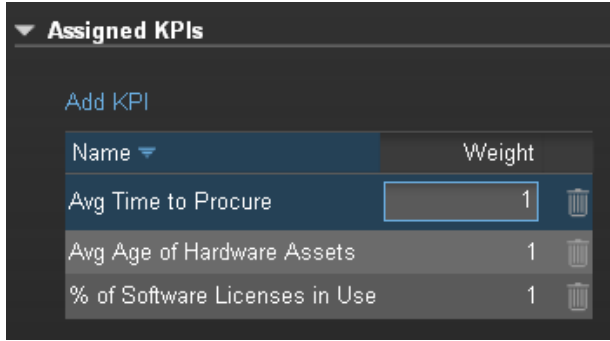

UI Element	Description
Calculate Using	<p>The type of rule to use to calculate the Objective's score according to the scores of its children. You can select:</p> <ul style="list-style-type: none">• Worst child. The Objective score is the worst score of all the KPIs assigned to the parent Objective (when the Objective has child KPIs) or of the Objectives assigned to the parent Objective.• Best child. The Objective score is the best score of all the KPIs assigned to the parent Objective (when the Objective has child KPIs) or of the Objectives assigned to the parent Objective.• Weighted average. The Objective score is the average of the scores of the KPIs assigned to the parent Objective (when the Objective has child KPIs) or of the child Objectives multiplied by the relevant weights. When you select this rule, an additional column (Weight) where the user can configure the weight of each child (Objective or KPI) for the weighted average calculation. When you select this value a note is displayed explaining what is weighted average.

Assigned KPIs

This section lists the KPIs assigned to the selected active Objective.



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Add KPI	Click to open the Assign KPI to Objective dialog box where you can assign the relevant KPIs to the current Objective. For details, see "Assign/Unassign KPIs to/from Objectives" on page 88 .

UI Element	Description
<Table>	<p>The table lists:</p> <ul style="list-style-type: none"> • Name. The KPIs assigned to the Objective. • Weight. This column is displayed only when you select Weighted Average in the Calculate Using field in the General - Objective area. Enter the weight you want to use for the KPI in the calculation of the Objective score. You can click the Weight value in the Assigned KPIs table to open a box where you can change the weight. After you have changed the value of the weight, the Save and Discard buttons are enabled. To save the changes you must save the Objective by clicking Save.  <ul style="list-style-type: none"> •  Click to unassign the KPI. The list of KPIs in the Assign KPIs area is immediately updated. The Save and Discard buttons becomes enabled. To save the changes you must save the Objective by clicking Save.

Additional Details

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Additional Info	<p>Lists the additional information available for the Objective. It can be links to BO or Xcelcius reports, external links, or links to Dashboard pages.</p> <p>The table includes:</p> <ul style="list-style-type: none"> • Name. The name of the link or the reports. • URL. The hyperlink to access additional external information. •  Click to open the Edit Info Link dialog box where you can edit the selected additional information. For details, see "Provide Additional Information for a KPI or an Objective" on page 137. •  Click to delete the selected additional information.


UI Element	Description
Owner	<p>The owner of the active Objective.</p> <p>The list of available owners corresponds to the users that were defined in Admin > Users and Roles > User Management. For details, see "Manage Users" in the <i>Administrator Guide</i>.</p>
Add Info	<p>Click to open the Add Info Link dialog box where you can add additional information for the Objective. For details, see "Provide Additional Information for a KPI or an Objective" on page 137.</p>

Delete a Node

You can permanently delete a node (Scorecard, Perspective, or Objective).

For details on deleting a KPI, see ["Configure a KPI or a Metric" on next page](#).

To permanently delete a node:

1. In the Active KPIs pane, do one of the following:
 - Select the relevant node and click the **Delete the currently selected node** button  in the pane toolbar.
 - Right-click the relevant node and select the **Delete** menu option.
2. You are prompted to select one of the following options:
 - **Delete all elements including KPIs. KPIs that are assigned to Objectives in other subtrees will not be deleted.** Deleting the node also deletes its subtree and the KPIs in the subtree. KPIs that are assigned to Objectives in other subtrees are not deleted. If the KPIs in the subtree of the node you want to delete also belong to another subtree, the KPIs are not deleted from the other subtree.

For example, if Objective A and B both include KPI C, when you delete Objective A, KPI C remains in Objective B's subtree.
 - **Delete all elements except for the KPIs.** Deleting the node also deletes its subtree but does not delete the KPIs in its subtree. These KPIs remain in the other subtree structures. They become Orphan KPIs if they don't exist in any other subtrees.
2. When you are prompted to approve the deletion, click **Yes**. The tree is immediately updated.

Configure a KPI or a Metric

You can activate a KPI or a Metric by dragging the KPI or Metric template to the Active KPIs pane. You can then modify the active copy in the Active KPIs pane.

You can also create a KPI or a Metric directly in the Active KPIs pane. For details, see ["Create Active Scorecards, Perspectives, Objectives, Metrics, or KPIs" on page 54.](#)

To access:

Click a KPI or a Metric in the Active KPIs pane to display the **Configuration Details** tab and the **Calculation Details** tab for the selected KPI.

Learn More

About KPIs and Metrics

Key Performance Indicators (KPIs) and Metrics reflect and measure key drivers of business value. Value drivers represent activities that, when executed properly, guarantee future success. Value drivers move the organization in the right direction to achieve its stated financial and organizational goals.

Example: Value drivers might be "high customer satisfaction" or "excellent product quality."

Additional information about KPIs and Metrics

A KPI is a Metric, but a Metric is not always a KPI. The key difference is that KPIs always reflect strategic value drivers whereas Metrics represent the measurement of any business activity. Metrics always show a number that reflects performance. KPIs put that performance in context. Metrics are not matched against a threshold.

KPIs reflect how well the organization is doing in areas that most impact financial measures valued by shareholders, such as profitability and revenues.

A KPI evaluates the performance according to expectations. The context is provided using:

1. **Thresholds.** Upper and lower ranges of acceptable performance.
2. **Targets.** Predefined gains, such as 10% new customers per quarter.
3. **Benchmarks.** Based on industry wide measures or various methodologies, such as Six Sigma.
4. **Trend.** The direction of the performance of the KPI, either "up," "down," or "static."

Example: A metric could be an MTTR (mean time to recover) which measures the average time between the occurrence of a set of incidents and their resolution. An example of a KPI could be an MTTR, which measures the average time between the occurrence of a set of incidents and their resolution, compared to a defined threshold. For example: 'MTTR less than one hour'.

KPIs measure key drivers of business values using a formula. For details, see ["KPI and Metric Formula and Filter, Threshold, Value, Trend, and Score" on page 21.](#)

KPI templates (out of the box) help you create new KPIs by activating the KPI templates. Metric templates (out-of-the-box) help you create new Metrics by activating the Metric templates. For details, see "[Activate Scorecards, Perspectives, Objectives, Metrics, or KPIs Using Templates](#)" on page 49.

A complete list of KPIs and Metrics is available in [KPI Library in Excel format](#).

Important Information

Active KPIs pane: After you have created, modified, or deleted an entity in the Active KPIs pane, the changes affect the Dashboard after about 5 minutes (this time period is configurable in **Admin > Scorecard > XS Settings > Configuration reload rate(Minutes)**). If you run a calculation after making modifications that affect the results of a KPI, the changes automatically affect the Dashboard.

Note: All the values and thresholds of the Studio KPIs depend on their definition in the Configuration details and Calculation details tabs. You can modify the definitions.

Tasks

This section includes:

["Display and modify a KPI properties" below](#)

["Create a new Metric" on next page](#)

["Delete a KPI" on next page](#)

Display and modify a KPI properties


In this section you will learn how to modify a KPI configuration.

1. Click the **Studio** button (top right corner) to open the Studio.
2. In the **Active KPIs** pane, select the KPI you want to modify.
3. In the right pane, select the **Configuration Details** tab.
4. In the **General – KPI** area you can change the KPI name, select a different unit or enter a custom unit, and you you can also change the calculation period of the KPI.
5. In the **Result Threshold** area, you can change the Threshold direction, include marginal status, and set the thresholds boundaries freely.
6. In the **Metadata** area, you can add to the KPI additional information that will be shown in the Dashboard and the Explorer.
7. In the **Business Motivation** field you can add the business justification of the KPI and in the **Additional info** field you can add information that will be displayed with the KPI. This can be a URL, a BO report, another Dashboard page and even Xcelsius reports.
8. In addition, you can set an owner for the KPI. The owner will get the annotations of the KPI when they are added for the KPI in the Explorer tab.
9. Save your changes and click the **Calculation Details** tab.

10. In the **Calculation Details** tab, you can change the KPI's business context and you can update the KPI formula and filter.
11. Use the **Comments** field to store any additional information.
12. Save your changes and click the **Test KPI** button to check if the current configuration gives you the expected result.

Create a new Metric

In this section you will learn how to create a new Metric.

1. Click the **Studio** button (top right corner) to open the Studio.
2. In the **Active KPIs** pane, select the main root folder and click the **Create a new entity**  icon and select **Metric**.
3. Name the new Metric, enter a description, set the units and the calculation period. Click **Create** to complete the Metric creation.

For more details, see ["Configure a KPI or a Metric" on page 77](#) in the *Business Analyst Guide*.


4. Click the **Calculation Details** tab to select the relevant **Business Context** and to set the formula and filter. Once you are done, click **Create**.
5. To find out the expected result for the Metric you created, click the **Test Metric** button. If the result does not meet your expectations, modify the Metric formula and check again to check the expected result.
6. Once the Metric you created is ready to be calculated, launch the Engine by clicking **Calculate now**. For more details, see ["Calculate Displayed Values after Configuration Change" on page 110](#)

The engine will calculate the new Metric result and you will be able to view it in the Dashboard.

Movie: To display the movie, open the XS application in Internet Explorer 9 or Chrome, click **Help** in the top right corner of the application main page and select the **Movies** option. Select the relevant movie. For details, see [Movies](#).

Delete a KPI

To permanently delete an existing active KPI:

1. Click the **Studio** button (top right corner) to open the Studio.
2. In the **Active KPIs** pane, you can do one of the following:
 - Select the relevant KPI, and click the **Delete the currently selected node**  button in the Active KPIs toolbar.
 - Right-click the relevant KPI, and select the **Delete** option in the menu that opens.
3. If the selected KPI is:
 - The child of an Objective, when you are prompted to accept the deletion, you can select to:
 - Un-assign this specific KPI from the Objective when you click **Yes**.
 - Delete this KPI from the system. If you select this option, all the listed active KPI instances are removed when you click **Yes**.

- An Orphan KPI, the KPI is deleted when you click **Yes**.

UI Description

Calculation Details Tab

Configuration details | **Calculation details** | [Navigate to the source template](#)

▼ **Business Context**

ServiceDesk [Select business context](#)

▼ **Formula**

DATE_CONVERT('ms','m' , AVG(Interaction.ClosedTime , Interaction.ClosedTime is Not Null And PERIOD_ENTITY = CreateTimePeriod) - AVG(Interaction.CreateTime , Interaction.ClosedTime is Not Null And PERIOD_ENTITY = CreateTimePeriod)) [Open Formula Builder](#)

[Validate](#)

▼ **Filter**

<Select the data used to calculate the formula> [Open Filter Builder](#)

[Validate](#)

▼ **Comments**

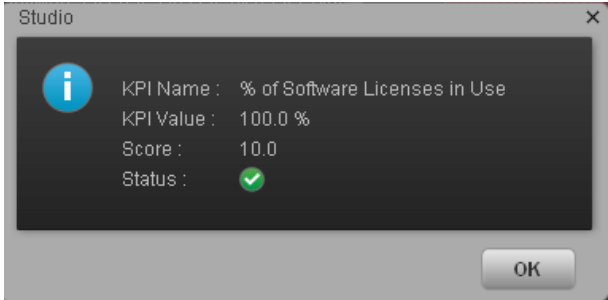

<Add more explanations to provide more depth to the business logic behind the formula and the filter>

[Test KPI](#) [Save](#) [Discard](#)

General Information

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Navigate to the source template	Moves the cursor to the template that was used to create the current KPI, in the KPI Library pane. The details of the template are displayed in the Configuration Details pane.

UI Element	Description
Test KPI	<p>After you make changes to the KPI configuration, click Save to save your changes. The Test KPI button is enabled. Click it to test the changes you made to the KPI configuration. The KPI value is calculated and displayed in a popup window. The window displays the new value, score, and status of the modified KPI. The result is not saved to the database.</p>  <p>The button is disabled for KPI Breakdowns.</p>
Save	Click to save the changes.
Discard	Click to discard the changes you have made since the last Save operation.
	Click to refresh the display.

Business Context

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
<Business context>	<p>The box displays the Context you selected.</p> <p>You can use additional variables and entities by creating Contexts using Context Designer. For details, see "Create and Manage Contexts Using Context Designer" in the <i>Administrator Guide</i>.</p> <div style="background-color: #f0f0f0; padding: 10px; margin-top: 10px;"> <p>Note: If you have assigned to a KPI a Context created with the Context Designer, and then you modify the Context name in the Context Designer, make sure that you assign the modified Context to the KPI in the Studio otherwise the KPI becomes invalid as it uses a Context that does not exist.</p> </div>

UI Element	Description
Select business context	<p>Click to open the Business Context dialog box, where you select the Business Context. That selection determines the business entities that are the basis of the calculation of the KPI value and defines the entities used in the formula. For details, see "Add a Context to the Studio" on page 145.</p> <p>This link is displayed only when no KPI Breakdown has been defined for the KPI. If the KPI already has a Breakdown KPI then a message indicates why you cannot change the Context.</p>

Formula

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
KPI Formula	The formula used to calculate the value of the KPI.
Validate	Click to validate the formula that appears in the Formula box.
Open Formula Builder	Click to open the Formula Builder dialog box where you can build the relevant formula to calculate the value of the KPI. For user interface details, see "Modify a KPI or Metric Formula" on page 90

Filter

You use the Filter area to limit the range of data used for the KPI's calculation.

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Filter	Specify the filter to limit the range of data you want the KPI to be calculated on.
Validate	Click to validate the filter.
Open Filter Builder	Click to open the Filter Builder dialog box where you can build the relevant filter that limits the range of the data the KPI calculation is based on. For user interface details, see "Modify a KPI or Metric Filter" on page 100

Comments

Use the Comments area to enter a description of the formula and its purpose in your own words.

Configuration Details Tab

Configuration details

Calculation details

Navigate to the source template

General - KPI

Name :

Rony KPI

Unit :

%

Description :

<Description of KPI>

Calculation period :

Monthly

Result Threshold

Direction :

Centralize

☒ Include marginal status (Warning)

-100

-50

0

100

150

200

Additional Details

Business Motivation :

<An explanation of business question addressed by KPI>

Additional Info :

Name

Uri

Add

No data to display

Owner :

<Start typing to filter list of users>

Test KPI

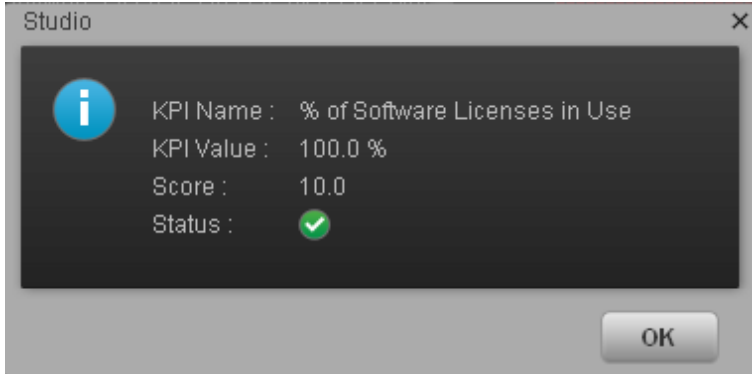

Save

Discard

General Information

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Navigate to the source template	Moves the cursor to the template that was used to create the active KPI/Metric, in the KPI/Metric Library pane. The details of the template are displayed in the Configuration Details pane. This option is disabled for KPI/Metric Breakdowns.

UI Element	Description
Test KPI/Metric	<p>After you change the KPI/Metric configuration, click Save to save your changes. The Test KPI/Metric button is enabled. Click it to test the changes you made to the KPI/Metric configuration. The KPI/Metric value is calculated and displayed in a popup window. The window displays the new value, score, and status of the modified KPI/Metric. The result is not saved to the database.</p>  <p>Note: The button is disabled for KPI/Metric Breakdowns.</p> <p>For details on calculations, see "KPI and Metric Formula and Filter, Threshold, Value, Trend, and Score" on page 21.</p>
Save	Click to save the changes.
Discard	Click to discard the changes you have made since the last Save operation.
	Click to refresh the display.

General - KPI/Metric

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Name	<p>The name of the KPI/Metric or of the KPI/Metric template.</p> <p>Limitations:</p> <ul style="list-style-type: none"> • The characters: \ / : * ? " < > are not supported. • The maximum number of characters is 250.
Unit	The unit of the KPI/Metric value.
Description	<p>The description of the KPI/Metric.</p> <p>Limitations: The maximum number of characters is 1000.</p>



UI Element	Description
Calculation Period	The time period used to calculate the value of the KPI/Metric (using the formula specified in the Calculation details tab).
Id	<p>The ID of the KPI/Metric. It is automatically assigned.</p> <p>This information is displayed only when in debug mode. To set the debug mode, click Admin > Scorecard > XS Settings, and in Debug Mode, select the Application Debug Mode setting.</p>
Type	<p>The type of the KPI/Metric. It is automatically assigned.</p> <p>This information is displayed only when in debug mode. To set the debug mode, click Admin > Scorecard > XS Settings, and in Debug Mode, select the Application Debug Mode setting.</p>

Result Threshold

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

Note: This section is not relevant for Metrics.



UI Element	Description
Direction	<p>Select:</p> <ul style="list-style-type: none"> • Centralize. When the status of the KPI is best when it has either a specific value or its value is in a specific range, and higher or lower values are worse. • Minimize. When the status of the KPI is best when it is low. • Maximize. When the status of the KPI is best when it is high. <p>Example:</p> <ul style="list-style-type: none"> • If you are measuring the Employee Attrition rate, the lower the value the best the attrition rate, so you would select Direction=Minimize. • If you are measuring revenue, the higher the value, the best the revenue, so you would select Direction=Maximize.

UI Element	Description
Threshold	<p>Slide the arrows to select the relevant thresholds in the boxes attached to the arrows. The threshold is used to assign a status to the KPI. For details on statuses, see "KPI and Metric Formula and Filter, Threshold, Value, Trend, and Score" on page 21.</p> <p>You can also enter the value by typing text in the box. The slider adjusts automatically.</p> <p>You can leave the lowest and highest ends empty to indicate an infinite value (minus infinity and plus infinity). In such a case, the threshold uses the lowest and highest historical values of the KPI or of the KPI template.</p> <p>All the threshold values use of the lowest and highest ends uses float precision (Java Floating Point), so for example, a value of 999999 is rounded to 10000000.</p> <p>Example: As the measurement unit of the Employee Attrition rate is a percentage, the limits of the threshold are 0 and 100. You can decide that a good attrition rate for your company or group is between 0% to 5% (green), a warning rate is between 5% and 10% (yellow), and a bad rate is between 10% and 100% (red).</p>  <p>The Threshold fields are validated when you enter values. The values must increase from left to right.</p>
Include marginal status (Warning)	<p>Select when the status of the KPI can be Good, Warning, or Error.</p> <p>Clear when the status of the KPI is either Good, or Error.</p> <p>When you select Direction=Centralize and the Include marginal status (yellow) option, the thresholds include two warning areas as follows:</p>  <p>The Threshold fields are validated when you enter values. The values must increase from left to right.</p>

Additional Details

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Business Motivation	<p>Enter the business motivation of the KPI.</p> <p>This section is not relevant for Metrics.</p>

UI Element	Description
Additional Info	<p>Lists the additional information available for the KPI. It can be links to BO or Xcelsius reports, external links, or links to Dashboard pages.</p> <p>The table includes:</p> <ul style="list-style-type: none"> • Name. The name of the link or the reports. • URL. The hyperlink to access additional external information. •  Click to open the Edit Info Link dialog box where you can edit the selected additional information. For details, see "Provide Additional Information for a KPI or an Objective" on page 137. •  Click to delete the selected additional information.
Owner	<p>The owner of the active KPI.</p> <p>The list of available owners corresponds to the users that were defined in Admin > Users and Roles > User Management. For details, see "Manage Users" in the <i>Administrator Guide</i>.</p>
Add	<p>Click to open the Add Info Link dialog box where you can add additional information for the KPI. For details, see "Provide Additional Information for a KPI or an Objective" on page 137.</p>

Assign/Unassign KPIs to/from Objectives

You can assign a KPI to an Objective.

To access:

In the Configuration details tab for an Objective, click the **Add KPI** link.

Learn More

For details about KPIs and Objectives, see ["Objectives" on page 19](#)

Tasks

This section includes:


["Assign a KPI to an Objective" below](#)

["Assign/Unassign KPIs to/from Objectives" above](#)

Assign a KPI to an Objective

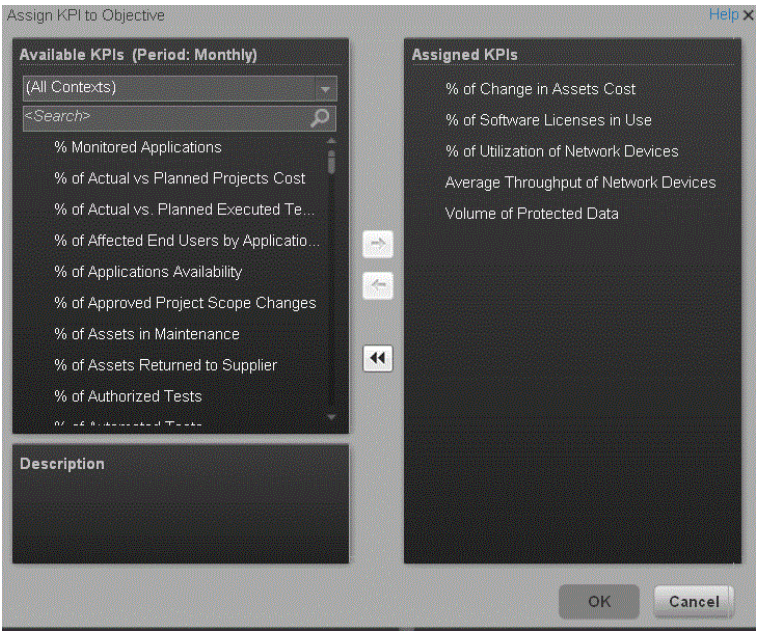
1. In the Active KPIs pane, select an Objective.
2. In the Configuration Details tab, click the **Add KPI** link.
3. In the **Assign KPI to Objective** dialog box, move the relevant KPI from the **Available KPIs** area to the **Assigned KPIs** area.
4. Click **OK**. The **Assign KPI to Objective** dialog box closes.
5. The KPI immediately appears in the Assigned KPIs list in the Configuration Details tab. The **Save** and **Discard** buttons are enabled. To save the changes click **Save**
6. The tree in the Active KPIs pane is refreshed and the changes are displayed.

Unassign a KPI from an Objective


1. In the Active KPIs pane, select an Objective.
2. In the Configuration Details tab, in the **Assigned KPIs** section, click the **Un-assign**  button for the relevant KPI. The KPI immediately disappears from the KPIs table.
3. To save the changes you must save the Objective by clicking **Save**.

UI Description

Assign KPIs to Objective Dialog Box



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Available KPIs	<p>Lists the KPIs available to be assigned to the Objective.</p> <p>You can:</p> <ul style="list-style-type: none">• Select the relevant context in the <All Contexts> list to display the KPIs relevant for the selected context. The period in the title represents the filter performed on the list of KPIs, to display only the KPIs that you can assign to the objective (since the calculation period in the objective and KPIs under it must match).• Enter a string in the <Search> box to filter for the KPIs whose name includes the string.
Assigned KPIs	<p>Lists the KPIs that you want to assign to the Objective.</p>
Description	<p>The description of the KPI selected in the Available KPIs area.</p>
	<p>Select the relevant KPI and move it to the relevant field using the buttons.</p>
OK	<p>Click to assign the selected KPIs. The list of KPIs in the Assigned KPIs area is immediately updated. The Save and Discard buttons become enabled. To save the changes you must save the Folder by clicking Save.</p>

Modify a KPI or Metric Formula

You can change the existing formula of a KPI or Metric to customize it to the end-user's needs. You can also create a formula to calculate the value of the KPI or Metric .

In addition you can restrict the range of the formula by selecting, in the filter, specific values for the variables used in the formula. For details, see ["Modify a KPI or Metric Filter" on page 100](#).

To access:

Click **Open Formula Builder** in the Calculation Details tab in the Properties pane of a KPI or Metric .

Learn More

Formulas, Filters, Thresholds, Values, Trend, and Score

The Scorecard KPI engine calculates the **value** of the KPI using the **formula** specified for the KPI and provides the KPI's **status** and **score** using the thresholds specified for the KPI. You can also build KPI filters to restrict the range of the formula by selecting specific values for the variables used in the formula. For details, see ["KPI and Metric Formula and Filter, Threshold, Value, Trend, and Score" on page 21](#)

Important Information

- The KPI or Metric Formula language is not case-sensitive.
- Field values are case-sensitive.
- Formulas include single quotes only for entity field values and string primitives (numbers, characters between double-quotes, and dates).

You can use additional variables and entities by creating business contexts using Context Designer. For details, see ["Create and Manage Contexts Using Context Designer"](#) in the *Administrator Guide*.

Tasks

This section includes the following tasks:

["Configure a KPI or a Metric formula" below](#)

Configure a KPI or a Metric formula

In this section you will learn how to configure a KPI or a Metric formula.

1. Click the **Studio** button (top right corner) to open the Studio.
2. In the **Active KPIs** pane, select the KPI or Metric whose formula you want to modify.
3. In the right pane, click the **Calculation Details** tab and click the **Open the Formula Builder** link.
4. Remove the current formula and start creating your own formula.

Example:

Let's create a formula with the COUNT function (for this example we will use Incident Management as Business Context).

1. From the **Functions** pane, double click the **COUNT** function or select the **COUNT** function and click the Add button, or select the **COUNT** function and drag it to the bottom area.

The syntax of the formula appears above in the description area.

The COUNT function returns the number of entities satisfying the given Filter Expression condition. For example, if you want to count the number of open incidents you need the following entities:

- Entity to count is Incident
- Filter expression is Incident.Status = 'Open'

2. Let's add these entities to the **COUNT** function according to its structure:
 - a. Click inside the formula brackets, go to the **Variables** pane, and locate the Incident entity (you can use the search field).
 - b. Double-click the entity or select the entity and click the **Add** button.

The Incident entity appears in the first section of the COUNT function.

3. Move to the second section of the **COUNT** function, and locate the **Status** entity in the **Variables** pane.
4. Add it to the formula.
5. You can now add the condition operator equal and select the **Open value** from the list.

The formula should be as follows: **COUNT (Incident, Incident.Status='Open')**

1. Click **Validate** to make sure that the syntax is correct.
2. Click **OK** to close the dialog and click **Save** to save the changed formula.
3. Use the **Test KPI** button to check if the result you are getting according to the configuration, meets your expectation. If not, modify it and check it again.

Movie: To display the movie, open the XS application in Internet Explorer 9 or Chrome, click **Help** in the top right corner of the application main page and select the **Movies** option. Select the relevant movie. For details, see [Movies](#).

UI Description

Formula Builder Dialog Box



Functions

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Functions	<ul style="list-style-type: none">• Aggregating. The list of aggregating functions you can use in the KPI or Metric formula. For details, see "Aggregating Functions" on next page.• Mathematical. The list of mathematical functions you can use in the KPI or Metric formula. For details, see "Mathematical Functions" on page 94.• Date Constants. The list of date constants you can use in the KPI or Metric formula. For details, see "Date constant" on page 96.
Add	<ul style="list-style-type: none">• Click the Add button under the Functions box to add the selected function to the formula box at the end of the current expression.• Click the Add button under the Variables box to add the selected variable to the formula box at the end of the current expression.

- **Aggregating Functions**

The aggregating functions are as follows:

UI Element	Description
SUM	<p>Formula: SUM(<EntityName>.<FieldName>, <Filter Expression>)</p> <p>Returns the sum of the field values of the entities that satisfy the condition specified in the Filter Expression.</p> <p>Example: SUM(Cost.Amount, Cost.CostType="Actual")</p>
MIN	<p>Formula: MIN(<EntityName>.<FieldName>, <Filter Expression>)</p> <p>Returns the lowest value of the field values of the entities that satisfy the condition specified by the Filter Expression.</p> <p>Example: MIN(Cost.Amount, Cost.CostType="Actual")</p>
MAX	<p>Formula: MAX(<EntityName>.<FieldName>, <Filter Expression>)</p> <p>Returns the highest value of the field values of the entities that satisfy the condition specified by the Filter Expression.</p> <p>Example: MAX(Cost.Amount, Cost.CostType="Actual")</p>
AVG	<p>Formula: AVG (<EntityName>.<FieldName>, <Filter Expression>)</p> <p>Returns the average of the field values of the entities that satisfy the condition specified by the Filter Expression.</p> <p>Example: AVG(Cost.Amount, Cost.CostType="Actual")</p>
COUNT	<p>Formula: COUNT (<Entity Name>, <Filter Expression>)</p> <p>Returns the number of entities that satisfy the condition specified by the Filter Expression.</p> <p>Example: COUNT(Cost, Cost.CostType ='Actual')</p>
COUNT_DISTINCT	<p>Formula: COUNT_DISTINCT (<Entity Name>.<Field Name>, <Filter Expression>)</p> <p>Returns the number of distinct values of the field in all the entities that satisfy the condition specified by the Filter Expression.</p> <p>Example: COUNT_DISTINCT(Service.Name, Service.Name <> 'UNKNOWN')</p>

UI Element	Description
PERCENTAGE	<p>Formula: PERCENTAGE ((<Entity Name>, <Filter Expression1>, <Filter Expression2>, defaultValue)</p> <p>Returns the ratio, expressed as percentage, of the number of entities that satisfy the condition specified by Filter Expression1 to the number of entities that satisfy the condition specified by Filter Expression 2.</p> <p>defaultValue is optional and can be either an integer or a float number. By default, the defaultValue is 0; this is the value that is returned if the denominator equals 0. You can change the default value.</p> <p>Example: PERCENTAGE(Cost, Cost.CostType="Actual", Cost.CostType="Planned", 0)</p>

- **Mathematical Functions**

The mathematical functions are as follows:

UI Element	Description
SUM_MATH	<p>Formula: SUM_MATH (arg1, arg2, arg3, ...)</p> <p>Returns the sum of the set of arguments.</p> <p>Example: SUM_MATH(6.36, 11.02, 51, -2.44, MAX(Cost.Amount, Cost.CostType='Actual'))</p>
MIN_MATH	<p>Formula: MIN_MATH (arg1, arg2, ...)</p> <p>Returns the lowest value of the set of arguments.</p> <p>Example: MIN_MATH(SUM(Cost.Amount, Cost.CostType ='Actual'), SUM(Cost.Amount, Cost.CostType ='Planned'))</p>
MAX_MATH	<p>Formula: MAX_MATH (arg1, arg2, ...)</p> <p>Returns the highest value of the set of arguments.</p> <p>Example: MAX_MATH(COUNT(Incident, Incident.Status='Open'), COUNT(Incident, Incident.Status='Reopened'))</p>
AVG_MATH	<p>Formula: AVG_MATH (arg1, arg2, ...)</p> <p>Returns the arithmetic average of the set of arguments.</p> <p>Example: AVG_MATH(6.36, 11.02, 51, -2.44, SUM(Cost.Amount, Cost.CostType='Actual'))</p>

UI Element	Description
PERCENTAGE_MATH	<p>Formula: PERCENTAGE_MATH(numerator,denominator, defaultValue)</p> <p>Returns the ratio, expressed as percentage of arguments: (numerator / denominator) * 100. defaultValue is optional and can be either an integer or a float number.</p> <p>By default, the defaultValue is 0; this is the value that is returned if the denominator equals 0. You can change the default value.</p> <p>Example: PERCENTAGE_MATH(Defect, Defect.severity = "High", *)</p>
RATIO_MATH	<p>Formula: RATIO_MATH(numeratorVal,denominatorVal, defaultValue)</p> <p>The function divides numerator by denominator. If denominator is 0 then the function returns defaultValue, or zero if <defaultValue> is not provided. defaultValue is optional and can be either an integer or a float number.</p> <p>By default, the defaultValue is 0; this is the value that is returned if the denominator equals 0. You can change the default value.</p> <p>Example: RATIO_MATH(SUM(Cost.Amount, Cost.CostType='Actual'), SUM(Cost.Amount, Cost.CostType='Planned'),0)</p>
DATE_CONVERT	<p>Formula: DATE_CONVERT(<sourceFormat>, <destinationFormat>, <Mathematical Date Function>)</p> <p>Converts the results of <Mathematical Date Function> from the source format into the destination format.</p> <p>Source Format can be one of the following: 'MS', 'S', 'M', 'H'.</p> <p>Destination Format can be one of the following: 'S', 'M', 'H', 'D'. 'MS' = Millisecond, 'S' = Second, 'M' = Minute, 'H' = Hour, 'D' = Day</p> <p>Example: DATE_CONVERT('MS','H', AVG(Incident.OutageEnd, PERIOD_ENTITY=OutageStartPeriod) - AVG(Incident.OutageStart, PERIOD_ENTITY=OutageStartPeriod))</p>

- **Date constant**

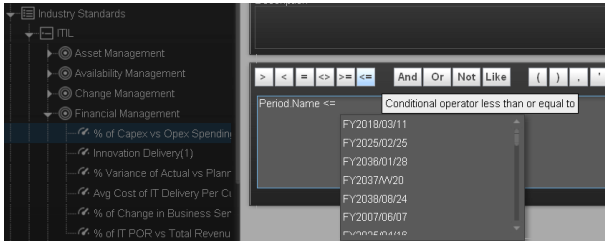
The dates are as follows:

UI Element	Description
IN_PERIOD	<p>Formula: <EntityName>.<FieldName> IN_PERIOD</p> <p>Use in Filter expressions to specify the condition relative to the start of the calculation period defined for the KPI or Metric . The condition is related to the KPI or Metric time period.</p> <p>Example: COUNT(Incident, Incident.openDate IN_PERIOD) The incidents that are counted are those that opened during the current time period. If the time frame is "weekly", the formula counts only the incidents opened per week.</p>
IN_CURRENT_YEAR	<p>Formula: <EntityName>.<FieldName> IN_CURRENT_YEAR</p> <p>Use in Filter expressions to specify the condition relative to the current year during the calculation.</p>
END_PERIOD	<p>Formula: <EntityName>.<FieldName> conditional operator END_PERIOD</p> <p>Use in Filter expressions to specify the condition relative to the end of the calculation period defined for the KPI or Metric . The condition is related to the time period.</p> <p>Example: COUNT(Incident, Incident.openDate <= END_PERIOD) The incidents that are counted are those that opened until the date the time period ends.</p>
PERIOD_ENTITY	<p>Formula: PERIOD_ENTITY=Period</p> <p>Use in Filter expressions to specify the entity that represents the PERIOD table that calculation are based on.</p> <p>Some of the Universes are built as Data Warehouses, which means that they already store aggregated values per period. You can specify in this field, the entity in the Universe that corresponds to the Period you want to use. The content of that entity determines the entries that are filtered for the calculation.</p> <p>Example: COUNT(Incident, PERIOD_ENTITY = CreateTimePeriod)</p>
KPI_PERIODICITY_TYPE	<p>Formula: KPI_PERIODICITY_TYPE=Period</p> <p>A constant that is replaced by the specific KPI or Metric Periodicity Type that is to be used for the calculation.</p> <p>Example: COUNT(Incident, CreateTimePeriod.Periodicity = KPI_PERIODICITY_TYPE)</p>

UI Element	Description
NOW	A constant that is replaced by the current calculation date during the calculation. Example: COUNT(Incident, NOW - Incident.CreateTime > 5*DAY)
HOUR	A constant that is replaced by the one hour during the calculation. Example: COUNT(Incident, NOW - Incident.CreateTime > 5*HOUR)
DAY	A constant that is replaced by the one day during the calculation. Example: COUNT(Incident, NOW - Incident.CreateTime > 5*DAY)
WEEK	A constant that is replaced by the one week during the calculation. Example: COUNT(Incident, NOW - Incident.CreateTime > 5*WEEK)

Variables

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Variables	<p>The list of variables you can use in the KPI or Metric formula.</p> <p>The list displays the entities and fields of the Universe that corresponds to the Business context you selected in the Calculation details tab for the KPI or Metric .</p> <p>Note: When a list of specific values has been assigned to a variable in SAP BusinessObjects Enterprise, the auto-complete feature is enabled for the variable, so that when you select the variable and one of the conditional operators, the list of values assigned to the variable is displayed. You can then select one of the values, or you can enter free text. The maximum number of values that are displayed is 100.</p> 
<Search>	Enter a string to filter for the entities and fields whose name includes the string.
Add	<ul style="list-style-type: none"> Click the Add button under the Functions box to add the selected function to the formula box at the end of the current expression. Click the Add button under the Variables box to add the selected variable to the formula box at the end of the current expression.





Description

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Description	A description of the function you have selected in the Functions area or a description of the variable you have selected in the Variables area.

<Formula>

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
	Use these buttons to enter the relevant regular operations into the formula.
	Use these buttons to enter the relevant conditional operators into the formula. The conditional operators are: <ul style="list-style-type: none">• = (equal) Syntax: op1 = op2• > (greater than) Syntax: op1 > op2• < (smaller than) Syntax: op1 < op2• >= (greater than or equal to) Syntax: op1 >= op2• <= (smaller than or equal to) Syntax: op1 <= op2• <> (not equal) Syntax: op1 <> op2
	Use these buttons to enter the relevant logical operators into the formula. The logical operators are: <ul style="list-style-type: none">• like Syntax: operand like char % Matches a specific pattern. % is a wildcard character meaning 'match any characters'. Applicable on string type operand.• AND. Syntax: (expr1) AND (expr2) Logical AND• OR. Syntax: (expr1) OR (expr2) Logical OR• NOT. Syntax: NOT (expr) Returns the opposite of a boolean expression.
	Use these buttons to enter the corresponding elements into the formula.
<Formula box>	The formula appears as you are building it using the variables, functions and buttons.

UI Element	Description
Validate	Click to validate the formula.
OK/Cancel	<p>Click:</p> <ul style="list-style-type: none">• OK to transfer the selected formula to the Formula box of the Calculation details tab.• Cancel to cancel the changes. <p>Note: In the Calculation details tab, the Save and Discard buttons become enabled and you can click Save to save the changes.</p>

Modify a KPI or Metric Filter

You can restrict the range of a KPI or Metric formula by selecting, in the filter, specific values for the variables used in the formula.

In addition, you can customize a KPI or Metric formula. For details, see "[Modify a KPI or Metric Formula](#)" on page 90.

To access:

Click the **Open Filter Builder** button in the Calculation Details tab in the Properties pane of a KPI or Metric .

Learn More

Formulas, Filters, Thresholds, Values, Trend, and Score

This section describes the information related to a KPI or Metric:

KPI Formula, Filter, and Value

The Scorecard KPI engine calculates the **value** of the KPI using the **formula** specified for the KPI and provides the KPI's **status** and **score** using the thresholds specified for the KPI. You can also build KPI filters to restrict the range of the formula by selecting specific values for the variables used in the formula.

KPI Threshold

The engine compares the KPI **value** to the KPI **threshold**, and calculates the KPI status.

KPI Status

The KPI **status** can be **Error**, **Warning**, or **Good**.

KPI Trend

The trend shows the tendency of a changing KPI result value relative to the previous result.

The trend is:

- **Up** if the current result is higher than the previous result.
- **Down** if the current result is lower than the previous result.
- **Neutral** if the current and previous results are the same.

KPI Score

The KPI value is translated into a score using the threshold specified for the KPI.

All the **scores** are normalized to the same scale of measurement (for example from 0 to 10) to enable the calculation of an Objective that is based on the **scores** of KPI's from different types. The **score** reflects the **status** of the business **value** and its relative distance from the **threshold**.

In addition:

- All the parent child rule calculations are based on the scores of their children.
- The KPI score represents how well the KPI is doing compared to the business Objective. For details, see ["Objectives" on page 19](#).

Example: A KPI calculates a percentage (%) and its thresholds are Good from 90% and up. When the KPI has a value of 90%-100%, the KPI's status is Good. The score for 85% is higher than the score for 65%, and the score for 97% is higher than the score for 93% even though the status is the same, this enables showing the trend of KPIs and Objectives even if the status remains the same.

The normalization process is based on the user-defined threshold for a metric. KPI thresholds have 3 sectors: good (6.6 - 10), warning (3.3 - 6.6), and error score ranges (0 - 3.3).

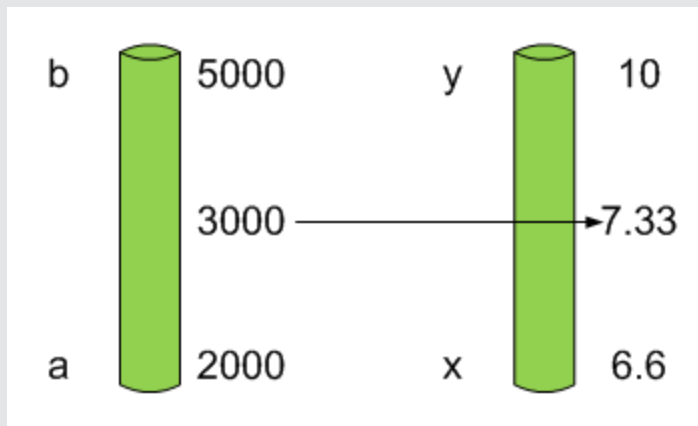
The Score calculation process is as follows:

1. Get the KPI result.
2. Get the status range as configured by the thresholds in the KPI definition.
3. Calculate the score as follows:
$$F(n) = ((n - a) / (b - a)) * (y - x) + x$$

where:

- a – minimal value of the threshold range
- b – maximal value of the threshold range
- x – minimal value of according score range
- y – maximal value of according score range
- n – result value

Example: If a=2000 and b=5000, the Score value is 7.33



Example: The threshold of a metric similar to MTTR (time to fix a problem) is 1 day for good status, and 7 days for warning status. The score scale is constant: 8-10 is good status, 7-8 is the warning status and 0-7 is error status.

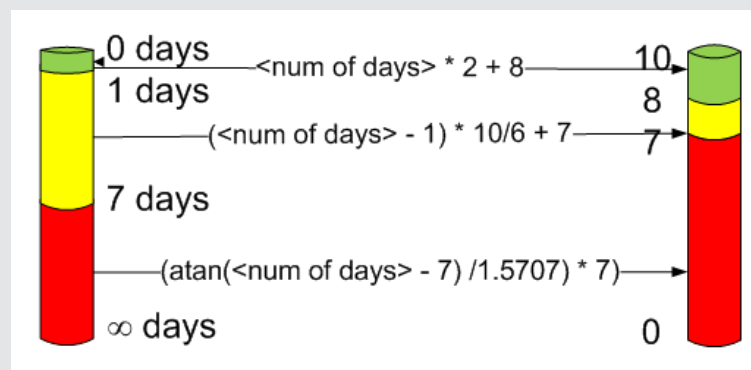
Any value on the MTTR scale needs to be transformed into the score scale by linear or exponential transform. Since the lower threshold is not set (it is equal to ∞), the formula is different:

Lets check the Score based on the following Results :

0.5 day $\rightarrow F(1) = ((0.5 - 0) / (1 - 0)) * (10 - 8) + 8 = 9$ (the score is 9)

4 days $\rightarrow F(4) = ((4 - 1) / (7 - 1)) * (8 - 7) + 7 = 7.5$ (the score is 7.5)

10 days $\rightarrow F(10) = (\text{atan}(10 - 7) / 1.5707) * (7 - 0) = 4.43$ (the score is 4.43)



Metric Formula and Value

The Scorecard KPI engine calculates the **value** of the Metric using the **formula** specified for the Metric. You can also build metric filters to restrict the range of the formula by selecting specific values for the variables used in the formula.

Additional Information

For details, see ["Modify a KPI or Metric Formula"](#) on page 90 or ["Modify a KPI or Metric Filter"](#) on page 100.

Important Information

- The KPI or Metric Filter language is not case-sensitive except for the values of the fields.
- Filters include single quotes only for string primitives (characters between double-quotes, and dates).
- Field values are case-sensitive.

You can use additional variables and entities by creating Contexts using Context Designer. For details, see ["Create and Manage Contexts Using Context Designer"](#) in the *Administrator Guide*.

Tasks

This section includes the following tasks:

["Modify a KPI or Metric filter"](#) on next page

"Test Changes Made to a KPI or Metric Configuration" below

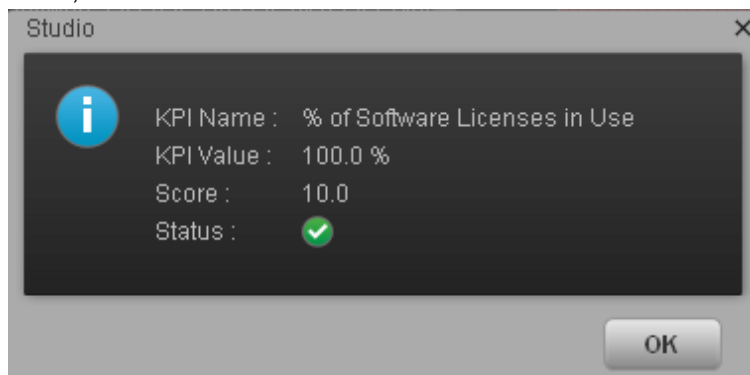
Modify a KPI or Metric filter

1. In the Active KPIs pane, select the relevant KPI or Metric. The Configuration Details and Calculation Details tabs are displayed.
2. Click the **Calculations details** tab.
3. You can, in the Filter area:
 - a. Use the Filter Builder to help you create the relevant filter; click the **Open Filter Builder** button to open the Filter Builder dialog box.
 - b. Enter the new filter or modify the existing filter directly in the Filter area.
4. Click the **Validate** button to validate the filter.
5. Click **Save** to save the change.

Test Changes Made to a KPI or Metric Configuration

When you change a KPI's formula or thresholds, you must test that the changes are valid.

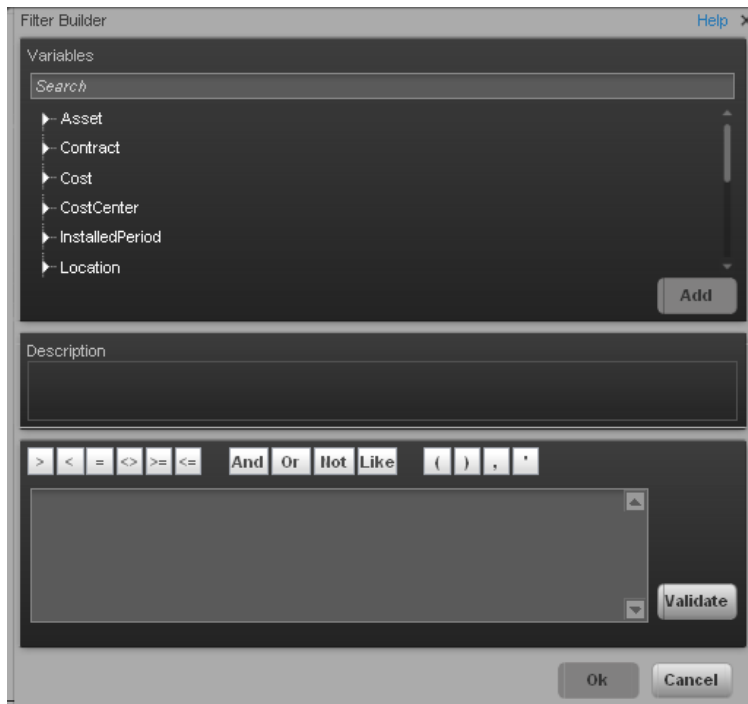
1. After you have changed the configuration of a KPI in the Calculation details tab or in the Configuration details tab, click **Save** to save your changes. The **Test KPI** button is enabled.
2. Click the **Test KPI** button to test the changes you made to the KPI configuration. The KPI value is calculated and displayed in a popup window. The window displays the new value, score, and status of the modified KPI. The result is not saved to the database.



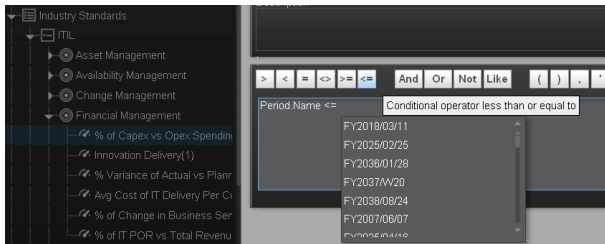

3. Click **OK** to return to the Configuration details or Calculation details tab.



UI Description

Filter Builder Dialog Box



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Variables	<p>The list of variables you can use in the KPI or Metric filter.</p> <p>The list displays the entities and fields in the Universe that corresponds to the Business context you selected in the Calculation details tab for the KPI or Metric .</p> <p>Note: When a list of specific values has been assigned to a variable in SAP BusinessObjects Enterprise, the auto-complete feature is enabled for the variable, so that when you select the variable and one of the conditional operators, the list of values assigned to the variable is displayed. You can then select one of the values, or you can enter free text. The maximum number of values that are displayed is 100.</p> 
<Search>	Enter a string to filter for the entities and fields whose name includes the string.
Description	<p>A description of the variable you have selected in the Variables area.</p>  <p>Use these buttons to enter the corresponding conditional operators in the filter. The condition operators are:</p> <ul style="list-style-type: none"> • = (equal) Syntax: op1 = op2 • > (greater than) Syntax: op1 > op2 • < (smaller than) Syntax: op1 < op2 • >= (greater than or equal to) Syntax: op1 >= op2 • <= (smaller than or equal to) Syntax: op1 <= op2 • <> (not equal) Syntax: op1 <> op2

UI Element	Description
	<p>Use these buttons to enter the corresponding logical operators into the filter. The logical operators are:</p> <ul style="list-style-type: none">• like Syntax: operand like char% Matches a specific pattern. % is a wildcard character meaning 'match any characters'. It is applicable on string type operand.• AND. Syntax: (expr1) AND (expr2) Logical AND• OR. Syntax: (expr1) OR(expr2) Logical OR• NOT. Syntax: NOT (expr) Returns the opposite of a boolean expression.
	<p>Use these buttons to enter the corresponding elements into the filters.</p>
<Filter box>	<p>The filter appears as you are building it using the variables, functions and buttons.</p>
Validate	<p>Click to validate the filter.</p>
OK/Cancel	<p>Click:</p> <ul style="list-style-type: none">• OK to transfer the selected formula to the Filter box of the Calculation details tab. <p>Note: In the Calculation details tab, the Save and Discard buttons become enabled and you can click Save to save the changes.</p> <ul style="list-style-type: none">• Cancel to cancel the changes.

Customize a KPI or a Metric Business Context

A KPI or Metric business context or universe represents a global business facet related to the aspect of business the KPI or Metric represents.

For example, the % of Assets in Maintenance KPI represents one aspect of the AssetManagement universe.

You can change the business context of a KPI or Metric when you clone the KPI or Metric, or change its formula.

You can also add a business context and attach KPIs or Metrics to the new business context. For details, see ["Add a Context to the Studio" on page 145](#).

To access:

Click **Select business context** in the Calculation details tab for a selected active KPI or for a KPI template.

Learn More

Business Contexts

A semantic layer is a business representation of corporate data that helps end-users access data autonomously using common business terms. It maps complex data into familiar business terms such as product, customer, or revenue to offer a unified, consolidated view of data across the organization. By using common business terms, rather than data language, to access, manipulate, and organize information, it simplifies the complexity of business data. These business terms are stored as objects in a Business Context (or universe), accessed through business views. Business Contexts enable business users to access and analyze data stored in a relational database and OLAP cubes. This is claimed to be core business intelligence (BI) technology that frees users from IT while ensuring correct results.

Business Views is a multi-tier system that is designed to enable companies to build comprehensive and specific business objects that help report designers and end users access the information they require. Business Views is intended to enable people to add the necessary business context to their data islands and link them into a single organized Business View for their organization.

A Context or universe is a business representation of an organization's data that helps end-users access data using common business terms. A Context is the result of a semantic layer of metadata that creates a business oriented view of the data. A Context contains a schema of the tables that make up the dimension and measurement objects. A Context is an interface between the data warehouse and the analytics that display the data.

Context are made up of objects and classes that are mapped to the source data and are accessed through queries and reports. They correspond to the business contexts used in HP IT Executive Scorecard.

Each Context includes classes (entities), objects with a dimension attribute, and relationships between the entities. The entity's values are used in the calculation of values and statuses of the Key Performance Indicators (KPIs) or Metrics that represent them. The KPIs or Metrics are the building blocks used by the HP IT Executive Scorecard engine and the Studio.

Executive Scorecard Semantic Layer may include:

- Universes created in SAP BusinessObjects. For more details on universes, see the relevant SAP BusinessObjects documentation.
- Out-of-the-box Contexts created using the Context Designer.
- User-defined Contexts created using Context Designer and populated with data uploaded from .CSV files using Context Designer. For details on the Context Designer, see [Create and Manage Contexts Using Context Designer and Upload Data Using Data Loader](#).

If you want to change the formula of a KPI or Metric, you must be aware of the relationships in the context (universe) of the KPI or Metric. For details, see [KPI and Metric Library in Excel format](#).

The contexts, entities, and dimensions that are displayed and used in the Studio are part of the universes that are located in the **XS_Studio** library.


Tasks

This section includes:

["Change the business context of a KPI" below](#)

["Test changes made to a KPI configuration" below](#)

Change the business context of a KPI

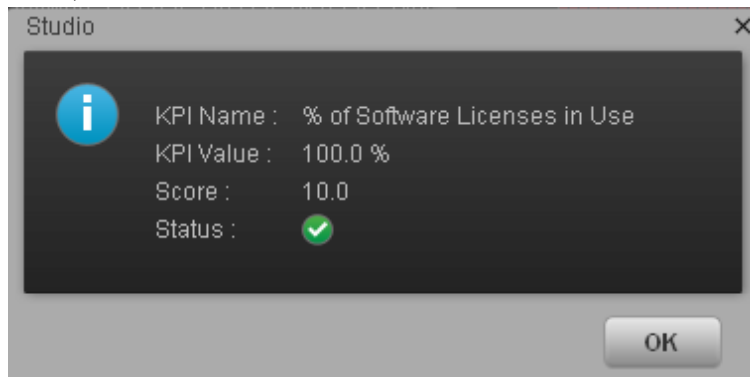
1. Select the relevant KPI in the Active KPIs pane.
2. Optionally, clone the KPI by clicking the **Create a copy of the current entity**  button. A KPI with the same name followed by an index number between parenthesis is created in the same Objective.
3. In the Calculation details tab for the KPI, click **Select business context**.
4. In the Business Context dialog box, select the new business context, in the **Select the business context** link. Click **OK**.
5. If necessary, modify the formula and/or the filter. For details, see ["Modify a KPI or Metric Formula" on page 90](#) or ["Modify a KPI or Metric Filter" on page 100](#).

Test changes made to a KPI configuration

When you change a KPI's universe (business context), you must test that the changes are valid.

1. After you have changed the configuration of a KPI in the Calculation details tab or in the Configuration details tab, click **Save** to save your changes. The **Test KPI** button is enabled.
2. Click the **Test KPI** button to test the changes you made to the KPI configuration. The KPI value is calculated and displayed in a popup window. The window displays the new value,

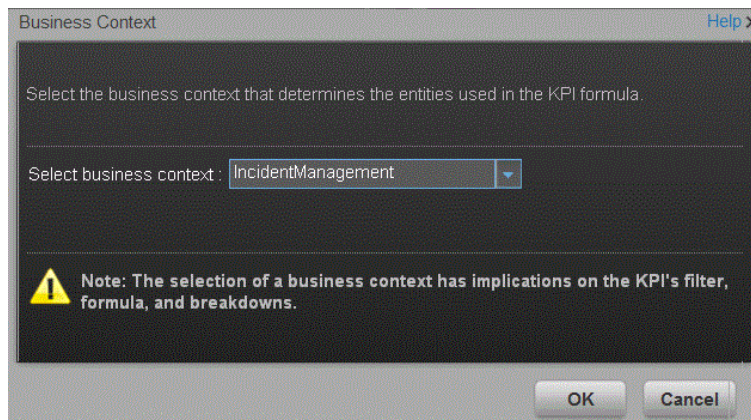
score, and status of the modified KPI. The result is not saved to the database.



3. Click **OK** to return to the Configuration details or Calculation details tab.

UI Description

Select Business Context Dialog Box



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Select business context	Select the relevant business context. The business context determines the business entities that are available to be used in the formula used to calculate the value of the KPI.

Calculate Displayed Values after Configuration Change

If you have configured an active KPI and you have modified or configured its formula, filter, or threshold, the value, status, and trend of the KPI, and of the related Objectives, Perspectives, and Scorecards, must be recalculated to display the corresponding data, in the Dashboard. You perform the calculation for the current period of each KPI within the selected business context.

To access:

Select the relevant KPI, click the **Calculation options**  button, and select the **Calculate now**  option, in the Active KPIs pane.

Tasks

Perform a Calculation After Configuration Change

This task includes the following steps:

- ["Prerequisite" below](#)
- ["Calculate for the current period" below](#)
- ["Results" on next page](#)



1. Prerequisite

You have created or modified the formula, filter, or threshold definition of a KPI. For details, see ["Modify a KPI or Metric Formula" on page 90](#) or ["Modify a KPI or Metric Filter" on page 100](#).

2. Calculate for the current period

When you change the definition of a KPI (formula or threshold), the change impacts the KPI's value and impacts the Objectives, Perspectives, and Scorecards related to the KPI. You may want to perform the calculation for each KPI in the selected business context for the period specified in the KPI configuration, so the impact of the change is felt immediately in the results displayed in the Dashboard.

To calculate the current data:

- a. In the Active KPIs pane, click the **Calculation options**  button in the Active KPIs toolbar, and select the **Calculate now**  option.
- b. In the Calculate Now dialog box that opens, select the relevant context and click **Calculate**.
- c. Select the **I understand the implications of this process and would like to proceed with the calculation** option to proceed with the calculation.

The calculation is performed for all KPIs and Objectives with the selected context (universe).

Note:

- The calculation deletes the data that was available for the same period as the period selected for the calculation.
- No backup is available.

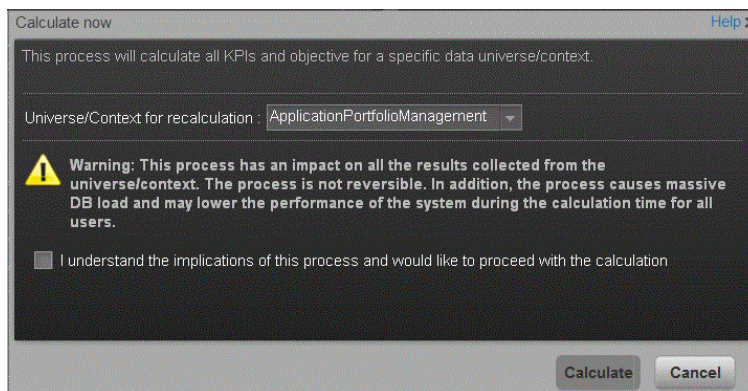
3. Results

The calculated data is displayed in the relevant components in the Dashboard.

UI Description

Calculate Now Dialog Box

This dialog box enables you to calculate all the KPIs, Objectives, Perspectives, and Scorecards values, trends, and statuses, for the selected business context and for the time period of each KPI within the same business context.



User interface elements are described below (unlabeled elements are shown in angle brackets>):

UI Element	Description
Universe/context for recalculation	Select the relevant context (data source) you want to use for the recalculation.
I understand the implications of this process and would like to proceed with the calculation	Select this option to proceed with the calculation.
Calculate	Click to start the calculation. Limitations: You perform the calculation for the current period of each KPI within the selected business context.

Recalculate Displayed Values after Configuration Change

If you have configured an active KPI and you have modified or configured its formula, filter, or threshold, the value, status, and trend of the KPI, and of the related Objectives, Perspectives, and Scorecards, must be recalculated to display the corresponding data, in the Dashboard. You perform the historical calculation (recalculation) for each KPI within the selected business context from the selected date (up to one year back) till the current date.

To access:

Select the relevant KPI, click the **Calculation options**  button, and select the **Recalculate**  option, in the Active KPI pane.

Learn More

You can recalculate all results for the selected universe/context from the selected date (up to one year back) till the current date.

Tasks

Perform a Recalculation

This task includes the following steps:

- "Prerequisite" below
- "Recalculate historical information" below
- "Results" on next page



1. Prerequisite

You have created or modified the formula, filter, or threshold definition of a KPI. For details, see ["Modify a KPI or Metric Formula" on page 90](#) or ["Modify a KPI or Metric Filter" on page 100](#).

2. Recalculate historical information

When you change the definition of a KPI (formula or threshold), the change impacts the KPI's value and impacts the Objectives, Perspectives, and Scorecards related to the KPI. You may want to recalculate the historical (past) information related to the KPI.

To recalculate the historical (past) information:

- a. In the Active KPIs pane, select the KPI you have modified.
- b. Click the **Calculation options**  button in the Active KPIs toolbar, and select the **Recalculate**  option.
- c. In the Recalculate dialog box that opens, select the relevant context and click **Calculate**.
- d. Select the **I understand the implications of this process and would like to proceed with the calculation** option to proceed with the recalculation.

The historical recalculation is performed for the KPIs configured on the relevant context for the selected context (datasource). You specify the date from which the historical calculation is performed. The calculations are performed for one year back from the selected date up to the current date.

Note:

- Recalculations cannot be performed in parallel. To perform a new recalculation you must wait until the current recalculation finishes.
- The recalculation process is CPU-heavy. It should be performed only when necessary.

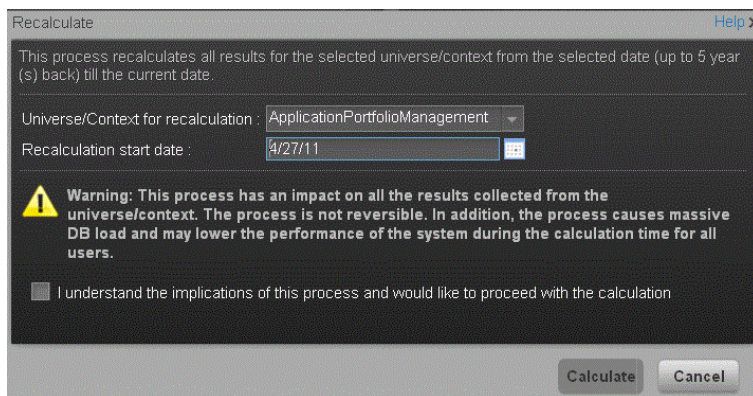
3. Results

The recalculated data is displayed in the relevant components in the Dashboard.

UI Description

Recalculate Dialog Box

This dialog box enables you to specify how to recalculate all the KPIs, Objectives, Perspectives, and Scorecards values, trends, and statuses, for the context of the KPI whose formula, filter, or threshold you have modified, from the selected date (up to one year back) till the current date.



User interface elements are described below (unlabeled elements are shown in angle brackets>):



UI Element	Description
Universe/context for recalculation	Select the relevant universe/context for which you want to recalculate all results.
Recalculation start date	Select the date from which to start the historical recalculation. The recalculation is performed for the period starting from the specified date till the current date. Limitation: The recalculation period is limited to 1 year back from the date you specified in the Recalculation Start Date .

UI Element	Description
I understand the implications of this process and would like to proceed with the calculation	Select this option to proceed with the recalculation.
Calculate	<p>Click to start the recalculation.</p> <p>Limitations: You perform the calculation for the current period of each KPI within the selected business context.</p>

Schedule Business Context Calculations

You can schedule to run the business context calculations periodically. This means that the values, statuses, trends, and scores of the KPIs associated with the business context are calculated and the Scorecards and components in the Dashboard reflect these calculations and results. You can specify how to recalculate all results for the selected universe/context from the selected date (up to one year back) till the current date.

To access:

Select the relevant KPI, click the **Calculation options**  button, and select the **Schedule context calculation**  option, in the Active KPI pane.

Learn More

At the scheduled time, the following processes take place:

- The calculations of the KPIs associated with the business context are performed for the current period.
- The Objectives including these KPIs are also calculated for the current period.
- The Scorecards and components that include these KPIs are refreshed when you open the Dashboard.

Tasks

Schedule a business context calculation

In this section, you will learn how to schedule an automatic context calculation, so the calculation runs automatically according to your configuration and the data that is presented in the Dashboard is the latest data.

The calculation engine will now run automatically according to your settings.

1. Click the **Studio** tab.
2. In the Active KPIs pane, select the relevant KPI, click the **Calculation options**  button, and select the **Schedule context calculation**  option.

Note that you schedule the calculation per Business Context.

3. In the Business Context Calculation Scheduling dialog box, select the relevant business context in the drop down **Business Context** list, and in the **Schedule details** area, enter the day and time when you want to run the scheduled calculation. Click **Save**.

You can select additional Business Contexts and schedule their calculation run in the same way.

4. Once the calculations are scheduled, click **Save** to save the configurations.

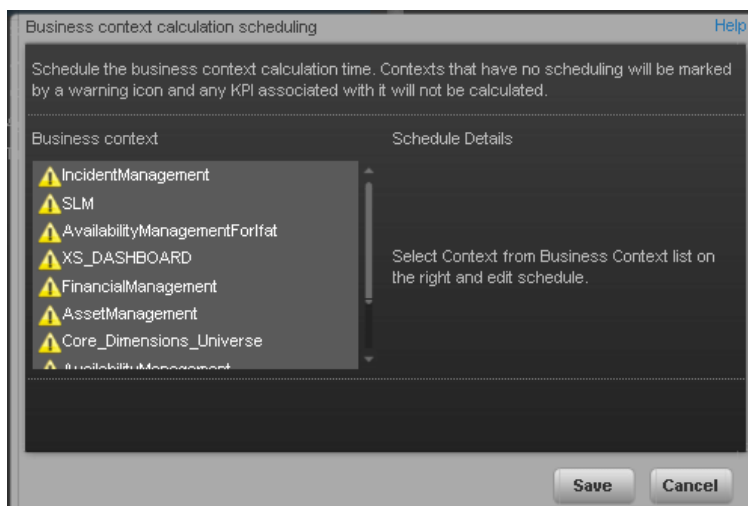
At the scheduled time, the following processes take place:

- The calculations of the KPIs associated with the business context are performed for the current period.
- The Objectives including these KPIs are also calculated for the current period.
- The Scorecards and components that include these KPIs are refreshed when you open the Dashboard.


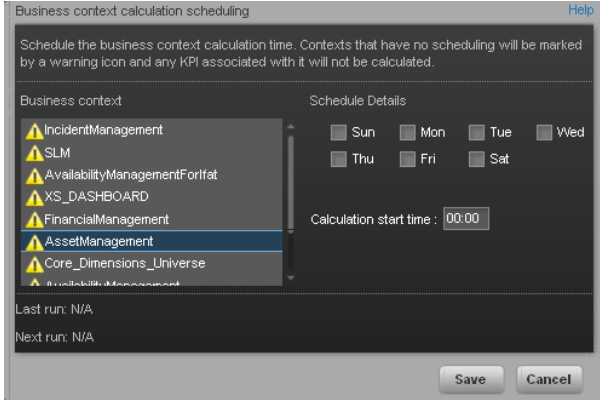
Movie: To display the movie, open the XS application in Internet Explorer 9 or Chrome, click **Help** in the top right corner of the application main page and select the **Movies** option. Select the relevant movie. For details, see [Movies](#).

UI Description

Business Context Calculation Scheduling Dialog Box



User interface elements are described below (unlabeled elements are shown in angle brackets>):

UI Element	Description
Business context	<p>In the list of business contexts, select the business context for which you want to schedule the calculations.</p> <p>Note: Contexts that have not been assigned a calculation schedule have a  icon. Their KPIs have not been calculated.</p> <p>The Schedule details area is displayed as follows:</p> 
Schedule details	Select the days of the week when you want to perform the business context calculations.
Calculation start time	Enter the time when you want to start the business context calculation.
Last run	The date and time when the last calculation was performed.
Next run	The date and time when the next calculation is to be performed.

Monitor the Calculation and Recalculation Processes

If you have configured an active KPI and you have modified or configured its formula, filter, or threshold, you perform a calculation procedure to display the corresponding data, in the Dashboard. You perform the calculation for the current period of each KPI within the selected Business Context. You can also perform a recalculation (historical calculation) for each KPI within the selected Business Context from the selected date till the current date. You can schedule to run the calculations periodically.

You can monitor the calculation or recalculation history for each Business Context (universe), or you can view the Business Contexts that are currently being calculated or recalculated.

To access:

In the Active KPI pane, click the **Calculation options**  button, and select the  **Calculation monitoring** option.



Tasks

This section includes:

["Monitor the calculation or recalculation status for a specific Business Context" below](#)



["Monitor the calculations or recalculations that are currently running" below](#)

Monitor the calculation or recalculation status for a specific Business Context

1. In the Active KPI pane, click the **Calculation options**  button, and select the  **Calculation monitoring** option.
2. In the Calculation Monitoring Dialog Box, select **Calculation status by Business Context**.
3. Select the relevant Business Context in the **Business Context** drop down list. The list displays all the Business Contexts.

The dialog box displays the status of the calculation or recalculation, the date when the calculation or recalculation started, and the date when the calculation or recalculation ended.

Monitor the calculations or recalculations that are currently running

1. In the Active KPI pane, click the **Calculation options**  button, and select the  **Calculation monitoring** option.
2. In the Calculation Monitoring Dialog Box, select **Calculations currently running**.

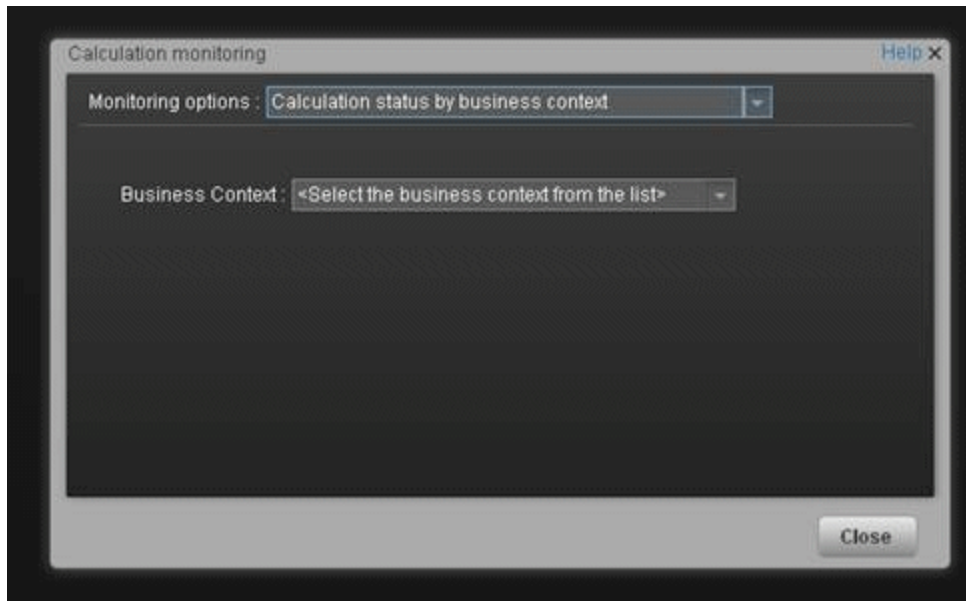
The dialog box displays the Business Contexts for which the calculation or recalculation are currently running.
3. Select the relevant Business Context. The **Current calculation periods** area displays the calculation periods (**Yearly**, **Monthly**, **Quarterly**, or **Weekly**) that are being used currently by the calculation or recalculation process. Click the Business Context to refresh the data about

the calculation or recalculation currently running. The Calculation start time field displays the date and time when the calculation or recalculation started.

UI Description

Calculation Monitoring Dialog Box

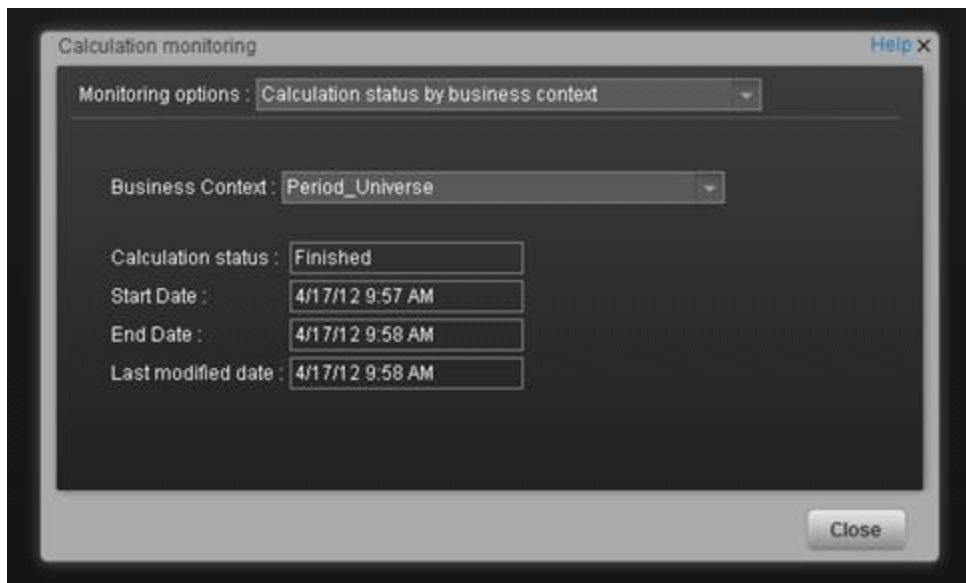
Use the dialog box to monitor the calculation or recalculation history for each Business Context, or to view the Business Contexts that are currently being calculated or recalculated.



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Monitoring options	Select: <ul style="list-style-type: none">• Calculation status by Business Context. To monitor the calculation or recalculation history of the selected Business Context. For details, see "Calculation status by Business Context" on next page.• Calculations currently running now. To view the Business Contexts that are currently being calculated or recalculated. For details, see "Calculations currently running" on page 121.
Business Context	Select the Business Context you want to monitor in the drop down list. The list displays all the Business Contexts.

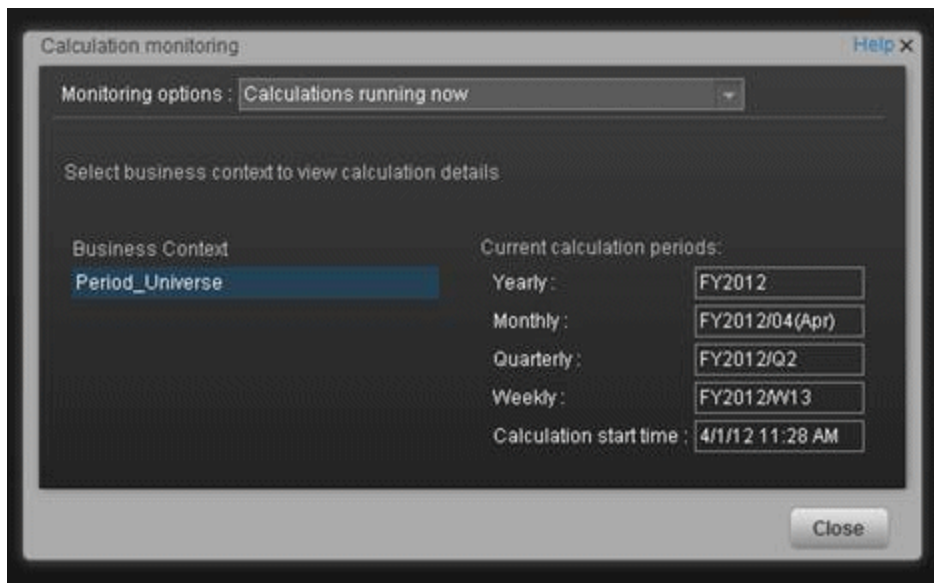
<Calculation status by Business Context>



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Business Context	Select the relevant Business Context in the drop down list. The list displays all the Business Contexts.
Status	The status of the calculation or recalculation. It can be: Running Now , Not Calculated , Error , or Finished .
Start Date	The date and time when the calculation or recalculation started.
End Date	The date and time when the calculation or recalculation ended. When the calculation or recalculation is still running, the field is empty.
Last modified date	The date and time when the last calculation was completed. If the calculation has completed the End Date and the Last modified date should be the same. If the calculation is still running, the database is updated all the time with the new calculation results and new periods that are currently calculated, and each time the database is updated with some new records related to the calculation, the last modified date will change. This information is useful for historical recalculations that may take a long time to run.

<Calculations currently running>



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Business Context	The list of the Business Contexts for which a calculation or recalculation is currently running. Click the relevant universe to display the calculation or recalculation details.
Current calculation periods	<p>This area displays the calculation periods (Yearly, Monthly, Quarterly, or Weekly) that are being used currently by the calculation or recalculation process. The numbers in the boxes change when the period changes and you click the Business Context.</p> <p>Calculation start time. The date and time when the calculation or recalculation started.</p>

Enrich the Dashboard Contents in the Studio

You can enrich the Executive Dashboard contents by:

- Creating cascading Scorecards that enable the Executive to drilldown to lower levels of the same Scorecard. For details, see ["Create Cascading Scorecards" on page 140](#).
- Creating breakdowns of KPIs or Metrics to obtain more detailed information about the KPI or Metric measurements. For details, see ["Manage KPI Breakdowns" on next page](#) or ["Manage Metric Breakdowns" on page 130](#)
- Specify owners and thresholds for specific dimension's values of Breakdown KPIs so only some users can view some of the breakdowns and some users may have different thresholds for the KPI Breakdowns. For details, see ["Manage Overrides" on page 134](#).
- Provide additional information for a KPI, such as links to other pages, BO or Xcelsius reports, or external URLs. For details, see ["Provide Additional Information for a KPI or an Objective" on page 137](#).

This section includes the following topics:

Manage KPI Breakdowns	123
Manage Metric Breakdowns	130
Manage Overrides	134
Provide Additional Information for a KPI or an Objective	137
Create Cascading Scorecards	140
Add a Context to the Studio	145

Manage KPI Breakdowns

You can create and manage Breakdowns for a KPI according to the KPI dimensions.

To access:

Select a KPI Breakdown in the Active KPIs pane.

Learn More

About KPI Breakdowns

A KPI represents a business context (universe). The value of the KPI is calculated based on the entities (facts or dimensions) that provide information on the business context. A business context can include lots of facts or dimensions.

For example, the Attrition Rate KPI for the whole company is composed of the attrition rates for each organization in the company, and those are composed of the attrition rates of each group in the organization. The Attrition rate KPI is calculated using the number of employees in the company and the number of employees who have left the company to pursue other interests or who have retired.

Another example is a ticket that includes information about the department, the subject, the location of the problem, and additional information.

The administrator creates multiple levels of KPI Breakdowns depending on the definition of the KPI and on the KPI universe. These definitions provide the different levels of breakdown that enable you to obtain very detailed information.

For example, the executive wants to know what is the attrition rate for the whole enterprise. If the dimensions of the Attrition Rate KPI are organizations in the enterprise, groups, and location, then the administrator can create KPI Breakdowns of the attrition rate per organization, and groups, and then per location. This would provide the executive with the capability to drilldown from the attrition rate for the whole enterprise, through the organizations and sub-organizations of the enterprise to the attrition rate of the smallest organization in a specific location.

In the Studio, you can configure Breakdowns according to their dimensions. For each KPI, a list of the relevant entities is provided in a menu and the dimensions of these entities in submenus. KPIs can have many levels of breakdowns (limited to 6 levels).

Note: When you configure the breakdown you are locking the context of the KPI for which you are creating the Breakdown because the Breakdown inherits the definitions of the KPIs (for example, the Period definition). You cannot specify a different definition for the Breakdown, and you cannot change the definition of the KPI for which you have created Breakdowns. To

unlock the KPI context you must remove the Breakdown.

Tasks



This section includes:

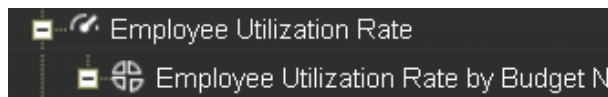
["Create a KPI Breakdown" below](#)

["Create a KPI Breakdown of a KPI Breakdown" below](#)

["Remove a Breakdown" on next page](#)




Create a KPI Breakdown

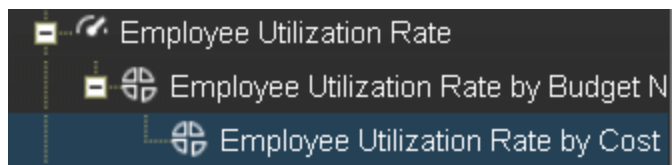
1. Click the **Studio** button (top right corner) to open the Studio.
2. In the Active KPIs pane, perform one of the following actions:
 - Select the relevant KPI, and click the **Create a breakdown for the KPI**  button in the toolbar.
 - Right-click the relevant KPI, and select **Breakdown** in the menu that opens.
3. In the list of entities that opens, select the required dimension.
4. The KPI Breakdown is inserted as a child of the KPI with the Breakdown  icon. Example of a KPI Breakdown:



5. You can add more than one breakdowns.

Create a KPI Breakdown of a KPI Breakdown



1. Click the **Studio** button (top right corner) to open the Studio.
2. In the Active KPIs pane, perform one of the following actions:
 - Select the relevant KPI Breakdown, and click the **Create a breakdown for the KPI**  button in the toolbar.
 - Right-click the relevant KPI Breakdown, and select  **Breakdown** in the menu that opens.
3. In the menu that opens, select the required entity, and if relevant select the required dimension. A new KPI Breakdown is inserted as a child of the KPI Breakdown in the relevant Scorecard tree with the **Breakdown**  icon. Example of a KPI Breakdown of a KPI Breakdown:



4. You can add more breakdown levels depending on the selected dimensions. The dimensions you selected in higher levels of the breakdown are disabled for lower levels.

Remove a Breakdown

To remove a Breakdown, proceed as follows:

1. Click the **Studio** button (top right corner) to open the Studio.
2. In the Active KPIs pane, perform one of the following actions:
 - Select the relevant KPI Breakdown, and click the **Delete the currently selected node**  button in the toolbar.
 - Right-click the relevant KPI Breakdown, and select  **Delete** option in the menu that opens. If you select a Breakdown that has child Breakdowns, these child Breakdowns are also deleted after you confirm the action.
3. Confirm the deletion when you are prompted to do so.

UI Description

Configuration Details Tab for a KPI Breakdown

Configuration details

▼ **General - KPI Breakdown**

Entity :

Dimension :

Name :

Description :

▼ **Result Threshold**

Direction : ☐ Include marginal status (Warning)

0 50 75 100

▼ **Overrides**

[Add a Breakdown](#)

[Override](#)

General Information

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Test KPI	Click to test the KPI. The button is disabled for KPI Breakdowns.
Save	Click to save the changes.
Discard	Click to discard the changes you have made since the last Save operation.

General - KPI Breakdown

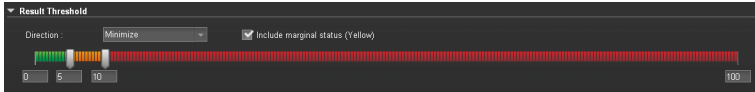
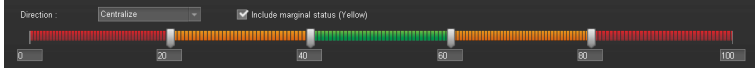
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Entity	The name of the entity you selected when creating the KPI Breakdown.
Dimension	The name of the dimension you selected when creating the KPI Breakdown.
Name	The name of the KPI Breakdown. Its format is <KPI_name> by <entity_name> <dimension_name>.
Description	The description of the KPI. Limitations: The maximum number of characters is 1000.
Id	The ID of the parent KPI. It is automatically assigned. This information is displayed only when in debug mode. To set the debug mode, click Admin > Scorecard > XS Settings , and in Debug Mode , select the Application Debug Mode setting.
Type	The type of the parent KPI. It is automatically assigned. This information is displayed only when in debug mode. To set the debug mode, click Admin > Scorecard > XS Settings , and in Debug Mode , select the Application Debug Mode setting.

Result Threshold

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):




UI Element	Description
Direction	Displays the threshold direction selected for the parent KPI. For details, see "Configure a KPI or a Metric" on page 77 . Example: <ul style="list-style-type: none">• If you are measuring the Employee Attrition rate, the lower the value the best the attrition rate, so you would select Direction=Minimize.• If you are measuring revenue, the higher the value, the best the revenue, so you would select Direction=Maximize.

UI Element	Description
Threshold	<p>Displays the threshold values selected for the parent KPI. For details, see "Configure a KPI or a Metric" on page 77.</p> <p>Enter in each of the boxes the values to be used as a threshold. The threshold is used to assign a status to the KPI. For details on statuses, see "KPI and Metric Formula and Filter, Threshold, Value, Trend, and Score" on page 21.</p> <p>Example: As the measurement unit of the Employee Attrition rate is a percentage, the limits of the threshold are 0 and 100. You can decide that a good attrition rate for your company or group is between 0% to 5% (green), a warning rate is between 5% and 10% (yellow), and a bad rate is between 10% and 100% (red).</p> 
Include marginal status (Warning)	<p>Displays whether you selected this option or not when you configured the parent KPI. For details, see "Configure a KPI or a Metric" on page 77.</p> <p>Select when the status of the KPI can be Good, Warning, or Error.</p> <p>Clear when the status of the KPI is either Good, or Error.</p> <p>When you select Direction=Centralize and the Include marginal status (yellow) option, the thresholds include two warning areas as follows:</p>  <ul style="list-style-type: none"> • The Threshold fields are validated when you enter values. • You must assign the values in increasing order from left to right.

Overrides

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Add a breakdown override	Click to open the Add a Breakdown Override dialog box. For details, see "Manage Overrides" on page 134 .

UI Element	Description
Name	<p>The name of the override you just created. Its format is: <KPI_name>: <result_kpi_to_override></p> 
	Edit. Click to edit the selected override. For details, see " Manage Overrides " on page 134.
	Remove. Click to delete the selected override.

Manage Metric Breakdowns

You can create and manage Breakdowns for a Metric according to the Metric dimensions.

To access:

Select a Metric Breakdown in the Active KPIs pane.

Learn More

About Metric Breakdown

A Metric represents a business context (universe). The value of the Metric is calculated based on the entities (facts or dimensions) that provide information on the business context. A business context can include lots of facts or dimensions.

The administrator creates multiple levels of Metric Breakdown depending on the definition of the Metric and on the Metric universe. These definitions provide the different levels of breakdown that enable you to obtain very detailed information.

In the Studio, you can configure Breakdowns according to their dimensions. For each Metric, a list of the relevant entities is provided in a menu and the dimensions of these entities in submenus. Metrics can have many levels of breakdowns (limited to 6 levels).

Note: When you configure the breakdown you are locking the context of the Metric for which you are creating the Breakdown because the Breakdown inherits the definitions of the Metrics (for example, the Period definition). You cannot specify a different definition for the Breakdown, and you cannot change the definition of the Metric for which you have created Breakdowns. To unlock the Metric context you must remove the Breakdown.

Tasks



This section includes:

["Create a Metric Breakdown " below](#)

["Create a Metric Breakdown of a Metric Breakdown " on next page](#)




["Remove a Breakdown" on next page](#)

Create a Metric Breakdown

1. Click the **Studio** button (top right corner) to open the Studio.
2. In the Active KPIs pane, perform one of the following actions:
 - Select the relevant Metric, and click the **Create a breakdown for the KPI**  button in the toolbar.
 - Right-click the relevant Metric, and select **Breakdown** in the menu that opens.
3. In the list of entities that opens, select the required dimension.
4. The Metric Breakdown is inserted as a child of the Metric with the Breakdown  icon.



5. You can add more Metric Breakdowns.

Create a Metric Breakdown of a Metric Breakdown

1. Click the **Studio** button (top right corner) to open the Studio.
2. In the Active KPIs pane, perform one of the following actions:
 - Select the relevant Metric Breakdown, and click the **Create a breakdown for the KPI**  button in the toolbar.
 - Right-click the relevant Metric Breakdown, and select  **Breakdown** in the menu that opens.
3. In the menu that opens, select the required entity, and if relevant select the required dimension. A new Metric Breakdown is inserted as a child of the Metric Breakdown in the relevant Scorecard tree with the **Breakdown**  icon.
4. You can add more breakdown levels depending on the selected dimensions. The dimensions you selected in higher levels of the breakdown are disabled for lower levels.

Remove a Breakdown

To remove a Breakdown, proceed as follows:

1. Click the **Studio** button (top right corner) to open the Studio.
2. In the Active KPIs pane, perform one of the following actions:
 - Select the relevant Metric Breakdown, and click the **Delete the currently selected node**  button in the toolbar.
 - Right-click the relevant Metric Breakdown, and select  **Delete** option in the menu that opens. If you select a Breakdown that has child Breakdowns, these child Breakdowns are also deleted after you confirm the action.
3. Confirm the deletion when you are prompted to do so.

UI Description

Configuration Details Tab for a Metric Breakdown

Configuration details

▼ General - Metric Breakdown

Entity : Period

Dimension : Quarter

Name : New Metric by Period Quarter

Description : <Description of Breakdown>

▼ Overrides

[Add a Breakdown Override](#)

General Information

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
<Areas>	"General - Metric Breakdown" below "Overrides" on next page
Test KPI	Click to test the Metric. The button is disabled for Metric Breakdowns.
Save	Click to save the changes.
Discard	Click to discard the changes you have made since the last Save operation.

General - Metric Breakdown




User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Entity	The name of the entity you selected when creating the Metric Breakdown.
Dimension	The name of the dimension you selected when creating the Metric Breakdown.

UI Element	Description
Name	The name of the Metric Breakdown. Its format is <Metric_name> by <entity_name> <dimension_name>.
Description	The description of the Metric. Limitations: The maximum number of characters is 1000.

Overrides

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):


UI Element	Description
Add a breakdown override	Click to open the Add a Breakdown Override dialog box. For details, see "Manage Overrides" on next page .
Name	The name of the override you just created. Its format is: <Metric_name>: <result_kpi_to_override> 
	Edit. Click to edit the selected override. For details, see "Manage Overrides" on next page .
	Remove. Click to delete the selected override.

Manage Overrides

You use overrides when you want to assign different thresholds or owners to KPI Breakdowns.

To access:

To create a new override: In the Configuration details tab of a KPI Breakdown click the **Add a Breakdown Override** link in the Overrides area.

To edit an existing override: In the Overrides area of the Configuration details tab of a KPI Breakdown, click the **Edit**  button.

Learn More

Overrides

When you configure a KPI Breakdown, its configuration (for example, formula, or period) is the same as the parent KPI's configuration. For details on KPI Breakdowns, see ["Manage KPI Breakdowns" on page 123](#).

You may want to have a different threshold or owner for specific "branches" of the KPI Breakdowns. In addition, you may want to change the thresholds of some of the KPI Breakdowns.

Example

For example if you define a breakdown by Incident Status for the MTTR KPI, the Dashboard displays information about:

- MTTR
 - MTTR New
 - MTTR Open
 - MTTR Fixed
 - MTTR Closed

Where **Open**, **New**, **Closed**, and **Fixed** are the values of the incident status.

If you create a breakdown of breakdown by Priority for the MTTR by Incident Status KPI Breakdown, the Dashboard displays information about:

- MTTR
- MTTR New
 - MTTR New High
 - MTTR New Medium
 - MTTR New Low
- MTTR Open
 - MTTR Open High
 - MTTR Open Medium
 - MTTR Open Low

- MTTR Fixed
 - MTTR Fixed High
 - MTTR Fixed Medium
 - MTTR Fixed Low
- MTTR Closed
 - MTTR Closed High
 - MTTR Closed Medium
 - MTTR Closed Low

Where **High**, **Medium**, and **Low** are the values of the priority.

As you can specify a different threshold or owner to KPI Breakdowns using overrides, you might want to assign MTTR New to a specific owner, and MTTR Fixed High to another owner with different thresholds to better monitor MTTR.

Important Information

Overrides work only for the dimension's value you select in the **KPI result to override**

Override configurations are not propagated to:

- The parent KPI or parent KPI Breakdown.
- Other dimension's values for the same KPI Breakdown.
- The child KPI Breakdowns.

Tasks

Manage Overrides

You can override a KPI's owners and thresholds for specific dimension's values of the KPI's KPI Breakdowns.

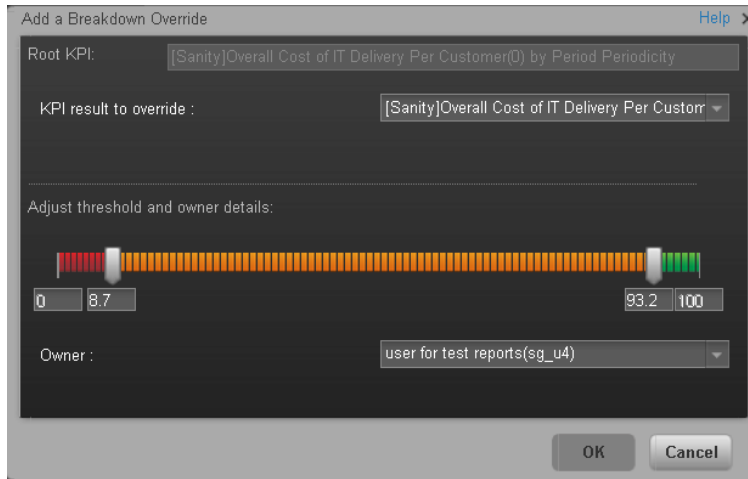
The override enables the end-user to add, in the Explorer, annotations for the owner of the KPI Breakdown instead of for the owner of the parent KPI. The parent KPI and the KPI Breakdown have the same thresholds but you can use the override so that to configure different thresholds to better fine-tune the monitoring of the objectives of an enterprise department and its different sections.

To create an override:

1. Select in the Active KPI pane, the relevant KPI Breakdown.
2. In the Configuration details pane for that KPI, click **Add a Breakdown Override** link in the Override area.
3. In the Add Breakdown Override dialog box that opens, select the relevant **KPI result to override**, enter the relevant thresholds and select the owner.
4. Click **OK**. The dialog box closes and the new override is displayed in the Override area of the Configuration details pane of the KPI Breakdown.
5. To save the change, click **Save** in the Configuration details pane.

UI Description

Add or Edit a Breakdown Override Dialog Box



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):


UI Element	Description
Root KPI	Displays the name of the parent KPI.
KPI result to Override	The field lists the values of the dimension you selected for the KPI Breakdown. You can assign a different threshold, and a different owner for each one of the dimension's values.
Adjust threshold and owner details	<p>Slide the arrows to select the relevant thresholds in the boxes attached to the arrows. The threshold is used to assign a status to the KPI Breakdown.</p> <p>Note: You can only modify the central values of the threshold. You cannot modify the lowest and highest ends. The lowest and highest ends as well as the threshold structure (minimize, maximize, centralize, or Include marginal status (yellow)) can only be configured at the level of the parent KPI.</p> <p>For details on statuses, see "KPI and Metric Formula and Filter, Threshold, Value, Trend, and Score" on page 21.</p>
Owner	Select the owner of the override.
OK	<p>Click to save the changes. The override information is added to the Overrides area in the Configuration details tab of the KPI Breakdown. The changes are saved only after you click the Save button in that tab.</p> <p>After you save the change, the KPI Breakdown appears in the Overrides area in the Configuration details tab. You can then edit or delete these overrides from that list.</p>
Cancel	Click to discard the changes you have made.

Provide Additional Information for a KPI or an Objective

You can add information to a KPI or to an Objective configuration. That information can be a link to:

- A relevant Dashboard page.
- An external URL.
- A BO reports that can provide more information about the KPI or the Objective; for example, its value over time.
- An Xcelcius report configured in the system.

To access:

In the Configuration details tab of an active KPI or Objective, click the **Add** link in the Additional Info area or click the **Edit**  button.

Learn More

KPI or Objective Additional Information

This additional information can help the Executive by providing external information related to a KPI or an Objective, or more details about the KPI or Objective's value, status, and score, in the right pane of the Explorer tab.

Description:

The number of requirements that are actually covered and completed by tests that run relative to the total number of requirements.

By default, the KPI is based on cycles; if the organization does not use cycles the default can be changed to Projects.

Business motivation:

Do my projects fulfill their promises?
Do they deliver the promised scope?

Owner:

Additional info:

It is also available by clicking the **Additional info**  icon in KPI or Objective tooltips. For details, see ["Display More Information About a Specific Objective or KPI" on page 304](#).

Tasks

Provide Additional Information for a KPI or an Objective

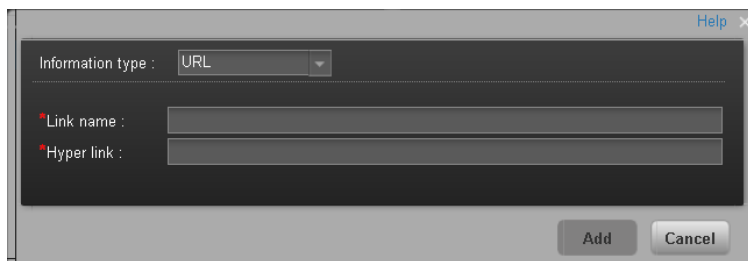
You can provide additional information for active KPIs or Objectives. That information can be links to other Dashboard pages, external pages, BO reports, or Xcelsius reports.

To add additional information for the KPI or the Objective:

1. Select in the Active KPI pane, the relevant KPI or Objective.
2. In the Configuration details pane for that KPI or Objective, click **Add** link in the **Metadata** area.
3. In the **Add** dialog box that opens, select the information type. The fields in the lower section of the dialog box change depending on the information type. Enter the relevant information.
4. Click **Add**. The dialog box closes and the new information is displayed in the **Metadata** area of the Configuration details pane of the KPI or Objective.
5. To save the change, click **Save**.
The end-user can view and access the additional information by selecting the relevant active KPI or Objective in the Explorer tab. The additional information is listed in the rightmost pane of the Explorer tab. For details, see "[View and Analyze Results in the Explorer Page](#)" on page 289.

UI Description

Add/Edit Info Link Dialog Box



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Information type	<p>Select the type of information you want to provide:</p> <ul style="list-style-type: none">• External link. When you want the user to access an external link from the KPI in the Dashboard.• BO report. When you want the user to access the selected BO report from the KPI in the Dashboard.• Dashboard page. When you want the user to open a specific page in the Dashboard.• Xcelsius report. When you want the user to access the Xcelsius report from the KPI or Objective in the Dashboard.
Link name	<p>This field appears when you select External link in the Information type list.</p> <p>Enter the name of the link as you want it to appear in the Additional Info table in the Metadata area in the Configuration details tab.</p>
Hyper link	<p>This field appears when you select External link in the Information type list.</p> <p>Enter the URL of the external page you want the user to open.</p>
Report name	<p>This field appears when you select BO report or Xcelsius report in the Information type list.</p> <p>Select the relevant report from the list of all the reports the user has permission to see.</p>
Dashboard page	<p>This field appears when you select Dashboard page in the Information type list.</p> <p>Select the relevant Dashboard page from the list of all the pages that are currently configured in the Dashboard that the user has permission to see.</p>
Add/Cancel	<p>Click Add. The dialog box closes and the new information is displayed in the Metadata area of the Configuration details pane of the KPI. You can then save the changes by clicking Save.</p>

Create Cascading Scorecards

Cascading is the ability of the Scorecard to track performance measurement in a top-down approach based on Scorecard objective ownership. This allows executives to measure their direct reports's performance by cascading from their Scorecard to the Scorecard of their direct report Scorecard objectives.

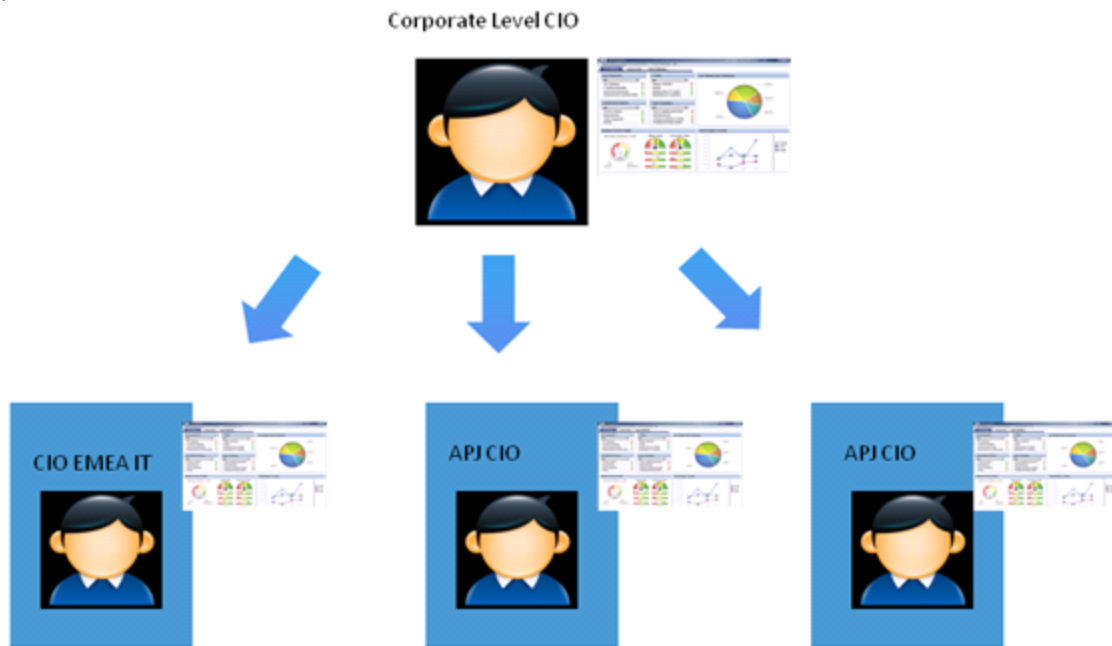
To access:

In the Configuration details tab for a Scorecard, click the **Manage Cascading Scorecards** link.

Learn More

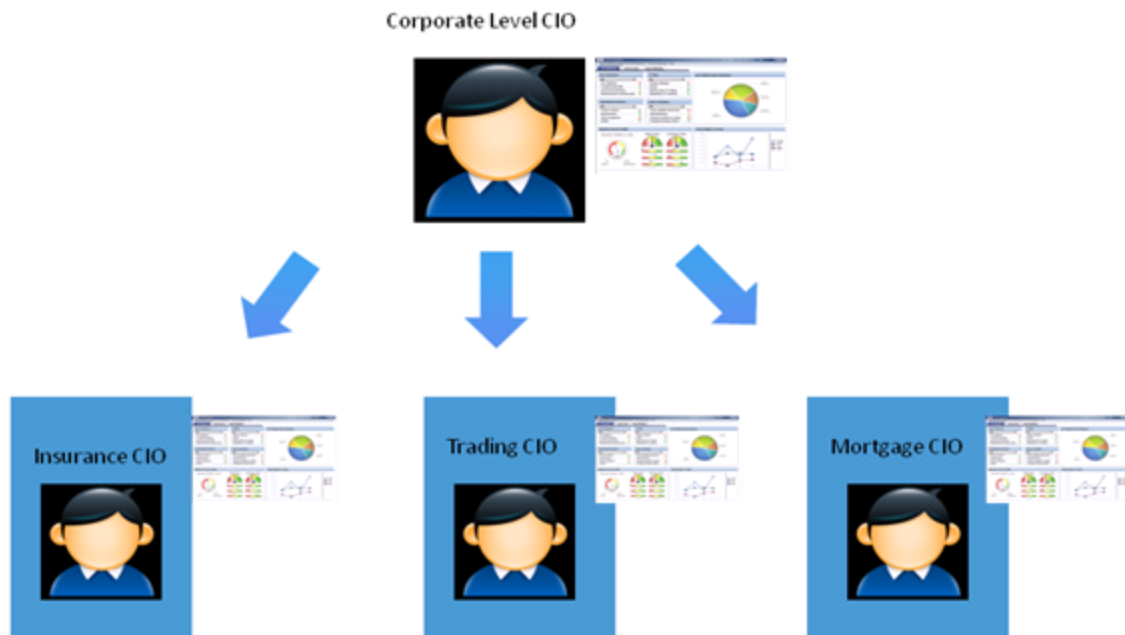
Geographical Distribution.

In large organizations, the role of the CIO is often extended across divisions or branches of the company with some centralized IT functions and some functions distributed among the departments.



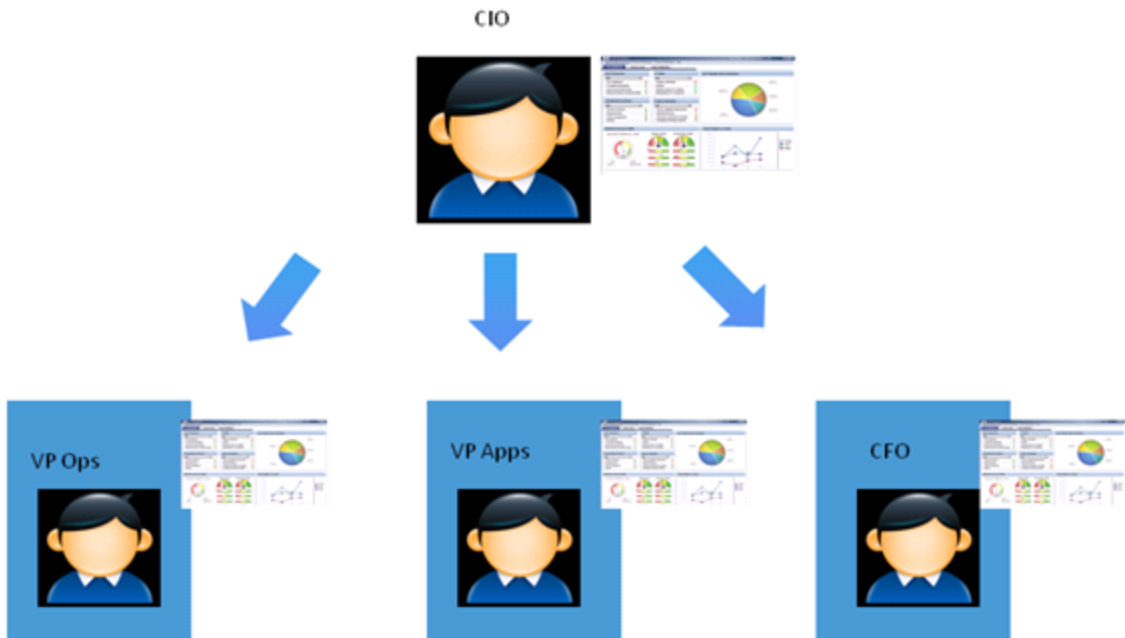
Functional Distribution of IT.

A company with many large divisions may have a single “Office of the CIO” at the corporate level coupled with “Divisional CIOs” having dual reporting responsibilities to the Business Unit GM and the Corporate CIO.



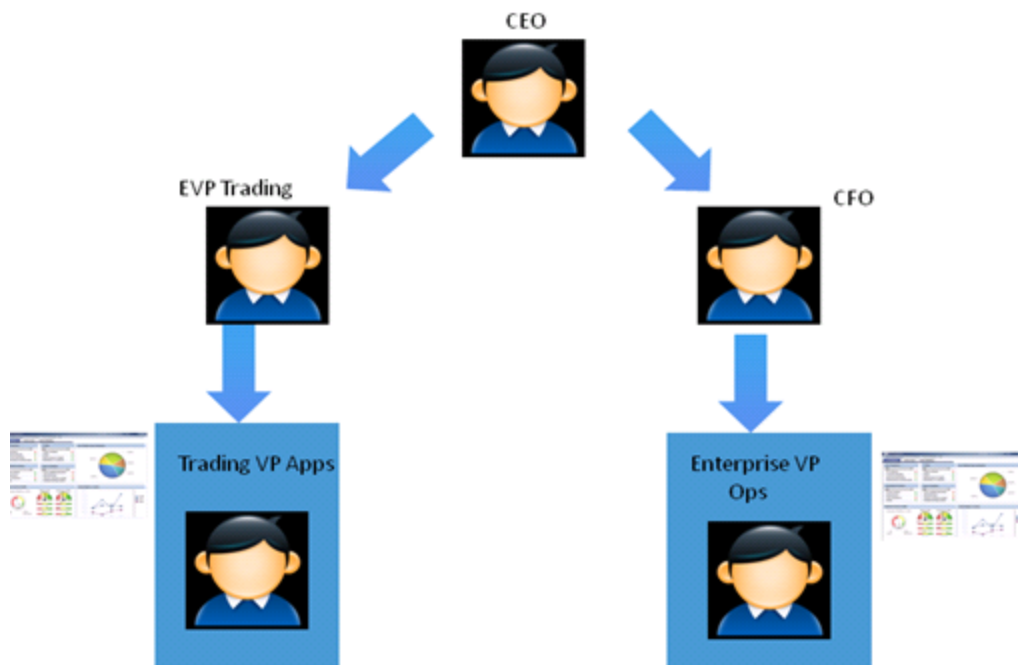
Organizational Distribution of IT.

The CIO can measure his direct reports (Head of infrastructure and operations).



Decentralized Distribution of IT.

A common model in US Financial Service and Media is decentralized IT function with Infrastructure/Operations shared services, sometimes with no Enterprise-level CIO.



Tasks

This section includes:

["Configure the Cascading Scorecards for a Scorecard" below](#)

["Remove a Cascading Scorecard" on next page](#)

Configure the Cascading Scorecards for a Scorecard

In this section, you will learn how to create Cascading Scorecards. Cascading Scorecards enable the user to view both a Scorecard and a Cascading Scorecard in a single Scorecard component in a Dashboard page.

To configure the Cascading Scorecards of a specific Scorecard, you must have more than one activated Scorecards in the Active KPIs pane.

To provide the executive with the capability of drilling down to a subordinate's Scorecard, both Scorecards have to be defined in the Studio and have to be active Scorecards.

1. Click the **Studio** button (top right corner) to open the Studio.
2. In the **Active KPIs** pane, select the parent Scorecard from which the executive can drill down. (the Scorecard for which you want to create Cascading Scorecards).
3. Click the **Manage Cascading Scorecard** link and double-click or use the arrow buttons to move the Scorecard you want to cascade to from the **Available Scorecards** pane to the **Assigned Scorecards** pane.

Note that you can select multiple Scorecards.


4. Click **OK** and then click **Save** to save the configuration.

Now, the executive will be able to move from the main Scorecard to its Cascading Scorecards and to view their data with a single click.

Movie: To display the movie, open the XS application in Internet Explorer 9 or Chrome, click **Help** in the top right corner of the application main page and select the **Movies** option. Select the relevant movie. For details, see [Movies](#).

Remove a Cascading Scorecard

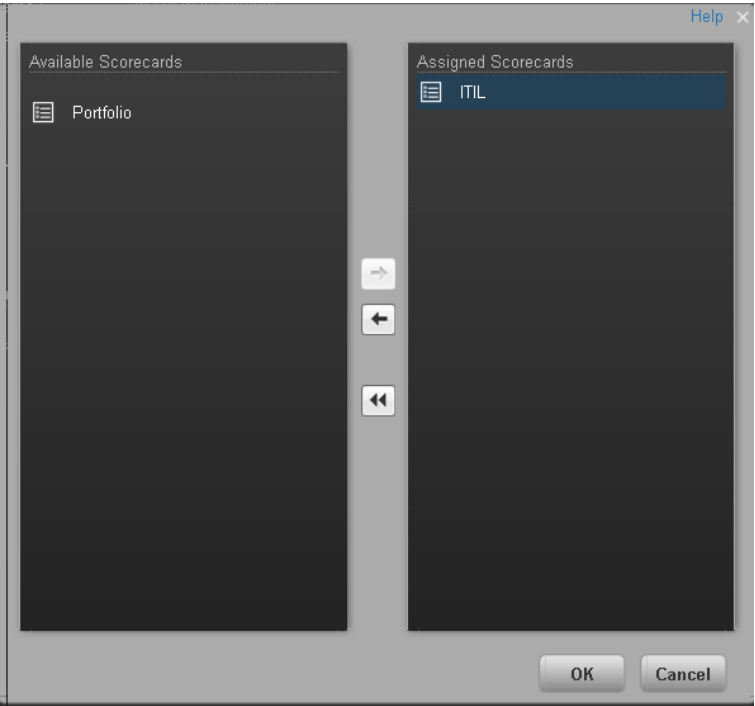
To remove a Cascading Scorecard so it is not assigned to the parent Scorecard:

1. In the Active KPIs pane, select the parent Scorecard.
2. In the corresponding **Configuration Details** pane, in the **Manage Cascading Scorecards** area, click the **Remove**  button of the relevant Cascading Scorecard. The Cascading Scorecard is immediately removed from the list in the **Manage Cascading Scorecards** area.
3. The **Save** and **Discard** buttons are enabled. To save the changes click **Save**.


Note: You can also click the **Manage Cascading Scorecards** link, and in the **Manage Cascading Scorecards** dialog box that opens, move the relevant Scorecards from the **Assigned Scorecards** to the **Available Scorecards** areas and click **OK**. The **Manage Cascading Scorecards** dialog box closes. The cascading Scorecard is immediately removed from the list in the **Manage Cascading Scorecards** area. The **Save** and **Discard** buttons are enabled. To save the changes click **Save**.

UI Description

Manage Cascading Scorecards Dialog Box



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Available Scorecards	Lists the Scorecards available to be assigned as Cascading Scorecards of the parent Scorecard.
Assigned Scorecards	Lists the Scorecards that you have selected to become the Cascading Scorecards of the parent Scorecard.
	Select the relevant Scorecard and move it to the relevant field using the buttons.
OK	Click to assign the selected Scorecards. The list of Scorecards in the Cascading Scorecards area is immediately updated. The Save and Discard buttons becomes enabled. To save the changes you must click Save in the Configuration details tab.

Add a Context to the Studio

A KPI or Metric Context (universe) represents a global business facet related to the aspect of business the KPI or Metric represents.

For example, the % of Assets in Maintenance KPI represents one aspect of the AssetManagement universe.

You can add a Context to the Studio and the XS engine and attach KPIs or Metrics to the new Context in the Studio.

Tasks

This section includes:

["Add a Context to Executive Studio" below](#)

["Add a Context to Executive Studio using Context Designer" below](#)

Add a Context to Executive Studio

1. Make sure you have modeled the data structure in your database.
2. Add the universe using the BO Designer according to the Universe Creation Guidelines. For details, see ["Reference: Universe Creation Guidelines" on next page](#).
3. Export the universe to the XS_Studio folder in your BO CMS (Central Management Server) using the BO Designer .
4. To load the universe to the Studio library you can do one of the following:
 - Run the JMX reload metadata.
 - i. Make sure you have JDK installed.
 - ii. Run **jconsole** in the **Start** menu.
 - iii. In the window that opens, select the **Remote Process** option, enter **<host_name>:<port_number>** and click **Connect**.
 - iv. After the application completes its loading, click the **MBeans** tab.
 - v. Click **com.hp.btoa.studio.jmx**.
 - vi. Click **loadMetaData**.
 - Note that if you do not click **loadMetaData**, the change will be performed by an automatic update after 24 hours or 7 days depending on your configuration. You can modify the configuration using the **Meta Data reload rate (Days)** parameter in the **XS Settings** section of the Admin Tab. For details, see ["Configure XS Settings"](#).
5. You can now design active or template entities, create the formulas and filters for the KPIs or Metrics, and more.

Add a Context to Executive Studio using Context Designer

If you do not have Data Warehouse and SAP BusinessObjects Enterprise installed, you can create

new Contexts, using Context Designer. For details, see "[Create and Manage Contexts Using Context Designer](#)" in the *Administrator Guide*.

Reference: Universe Creation Guidelines

This section explains how you can create Universes that can be used by the HP IT Executive Scorecard Studio and the XS Engine.

Guidelines

1. Folders represent the name of the entity that is presented.
2. Classes in the folder represent the attributes of that entity.
3. Classes should be of type Date, String, or Numeric.
4. Entities (represented by folders) in the same universe must have a relationship between them.
5. Hierarchical relationships should be flattened to attributes (Level1, Level2, ...). These relationships can be defined in a joined table.

Limitations

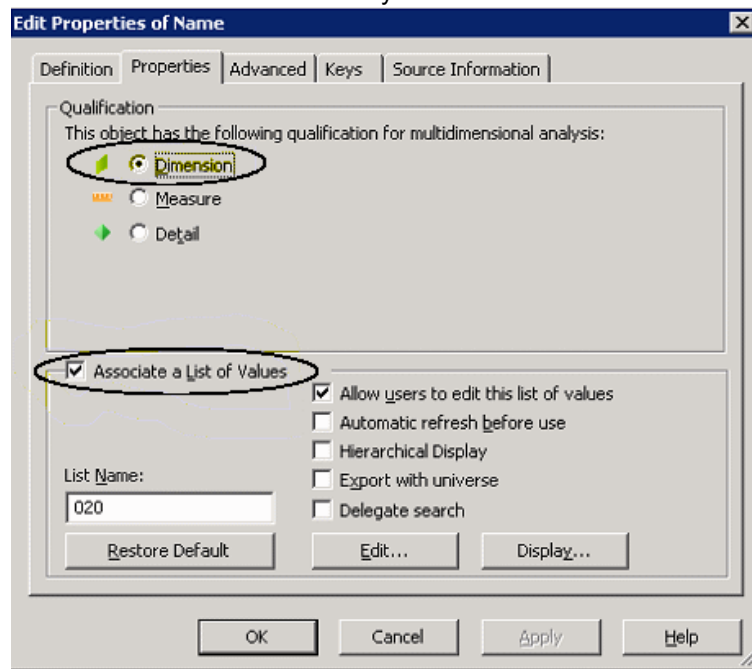
1. No current support for folders within folders or other hierarchies.
2. Ensure that there aren't multiple joins between entities represented in the Universe (This is a Universe limitation). Use aliases to copy.
3. Folder names should be unique.
4. Count, in a formula, can only be performed on Numeric and String fields.
5. Conditions on objects not supported.
6. Details on objects not supported.
7. Do not put mappings in the universe – where fields are translated from the value in the database to the value that the universe returns.

Field Types

• Dimensions

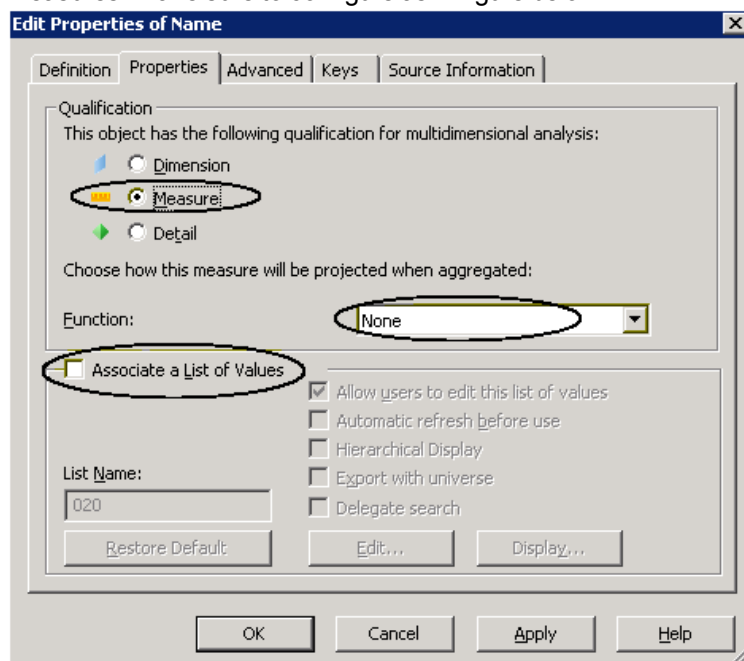
- Fields that can be broken down per KPIs or Metrics should be marked as Dimensions – see the top mark in the figure below.
- If the field can only have a limited set of values, then turn on the List of Values field below – see the second mark in the figure below. The studio will only show the first 100 values.
- Warning - this should only be turned on for fields that have a small set of values – all the

values will be loaded into memory in the studio.



- **Measures**

- Fields that are only used as measures in KPI or Metric formulas should be marked as Measures. Make sure to configure as in figure below.



Prepare the Dashboard Display

This section includes the following topics:

Prepare the Dashboard Display	149
Add a Page to the Dashboard	152
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Manage Page Categories	169
Manage Component Categories	173
Add a Historical Metric View Component to a Page	177
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Add a KPI List Component to a Page	207
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Add a Pie Chart Component to a Page	229
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Create an External Component	266
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Personalize the Dashboard	279

Prepare the Dashboard Display

Dashboard administrators can create role-based workspaces for different types of senior management users.

The Dashboard administrator sets up pages that include components that are of interest to specific users or groups of users. For each page, the administrator defines the layout of components on the page, and the interaction of the page components with one another.

Note: When configuring the layout of a page, you can repeatedly split the layout up to 4 times (to produce up to 16 boxes).

To access:

Close all tabs.

Tasks

This section includes the following tasks:

["Create Pages" below](#)

["Configure a Page Layout" on next page](#)

["Customize Pages by Adding or Removing Components" on next page](#)

["Set Up Wiring Between Components on a Page" on next page](#)

["Personalize a Page" on page 151](#)

Create Pages

Pages are collections of components that are displayed together and interact with one another. You can open existing pages from the Page Gallery. The Page Gallery displays existing pages grouped by categories.

You can add new pages to the Dashboard. For details, see ["Add a Page to the Dashboard" on page 152](#).

Note: The administrator configures the **Max number of open pages** and the **Maximum number of active pages**, so if the user opens 5 pages and the maximum number of open pages is set at 3, Dashboard deactivates the 2 least viewed pages to save on browser memory. The pages are reactivated as soon as they are selected by the viewer. The default is unlimited and the administrator configures these settings in **Admin > Foundation > Pages**. For details, [Modify the Maximum Number of Pages Displayed in the Dashboard](#) in the *Administrator Guide*.

Configure a Page Layout

The layout refers to how components are arranged on a page; components can be arranged horizontally, vertically, and in tabs. For details, see ["Configure a Page Layout" on page 155](#).

Note: When configuring the layout of a page, you can repeatedly split the layout up to 4 times (to produce up to 16 boxes).

Customize Pages by Adding or Removing Components

These are areas on a page that display information relevant to Dashboard users' business tasks. The Component Gallery contains application components that can be used within the Dashboard, grouped by their source applications.

You can:

- Add components to a page from the Component Gallery.
- Customize pages by adding or removing out-of-the-box components:
 - ["Add a Historical Metric View Component to a Page" on page 177](#)
 - ["Add a Historical View Component to a Page" on page 186](#)
 - ["Add a KPI View Component to a Page" on page 196](#)
 - ["Add a KPI List Component to a Page" on page 207](#)
 - ["Add a KPI Rolodex Component to a Page" on page 214](#)
 - ["Add a Pie Chart Component to a Page" on page 229](#)
 - ["Add a Scorecard Component to a Page" on page 237](#)
 - ["Add a Web Intelligence Report Viewer Component to a Page" on page 242](#)
 - ["Add a Web Intelligence Dynamic Report Viewer Component to a Page" on page 246](#)
 - ["Add a Web Intelligence Static Report Viewer Component to a Page" on page 250](#)
 - ["Add a SWF Report Viewer Component to a Page" on page 258](#)
 - ["Add Xcelsius Reports Viewer Component to a Page" on page 261](#)
- Create components and adding them to pages. For details, see ["Create an External Component" on page 266](#).

Note: You can add to a page, as many components as you want. The weight of the component may impact the browser performance.

Set Up Wiring Between Components on a Page

Within a page, components can pass information to one another, so that one component can react to a change in another.

For example, you can set up a page so that if you select a KPI in one component, the other components on the page focus on that KPI as well. Default pages have predefined wiring.

You can define wiring for non-out-of-the-box pages. For details, see ["Set Up Wiring Between Components" on page 273](#).

Personalize a Page

You can personalize a page by adding a picture of the page owner. For details, see ["Personalize the Dashboard" on page 279](#).

Add a Page to the Dashboard

Dashboard is provided with default pages. The default pages are located in the Page Gallery, together with any pages you have created and saved.

You can also add a new page to the Dashboard.




To access:

In Dashboard, click the **Save or Save As**  button.

Tasks

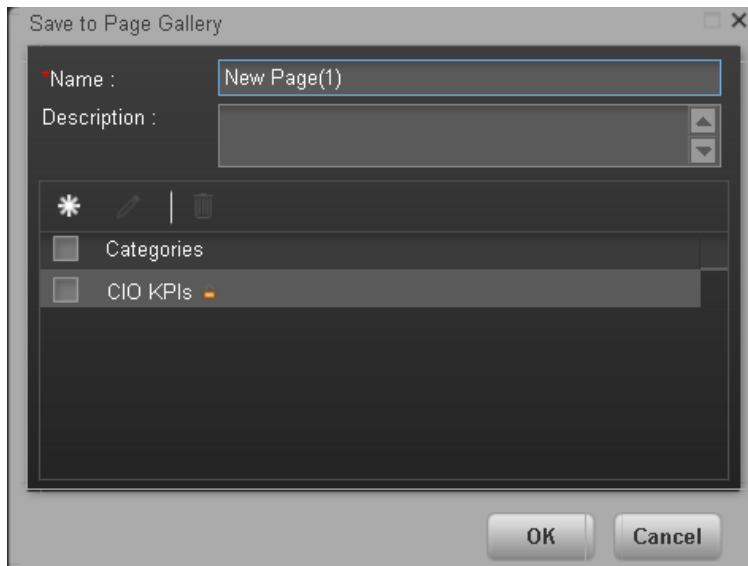
Add a Page to the Dashboard

To add a page, you can:

1. Click the **New Page**  button in the Dashboard toolbar.
2. In the New Page tab that opens, you can format the page. For details, see ["Configure a Page Layout" on page 155](#).
3. To save the page, click the **Save or Save As**  button.
4. In the Save to Page Gallery dialog box that opens, enter the name, description, and categories of the page.
The new page is now listed in the Page Gallery.
The new page also appears in the Dashboard as a new tab.
5. To display the page, in Dashboard, click the **Page Gallery**  button in the Dashboard toolbar. For details, see ["Configure a Page Layout" on page 155](#).

UI Description

Save to Page Gallery Dialog Box




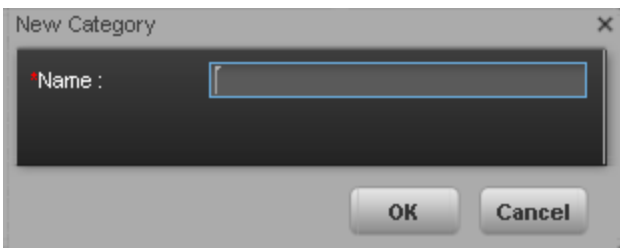
User interface elements are described below:


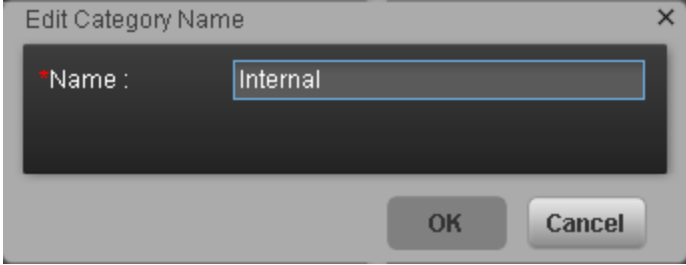


UI Element	Description
Name	Enter the name of the page as you want it to appear in the tab and in the Page Gallery.
Description	Enter the description of the page.

<Categories>

Select the categories where you want the page to appear. You can select more than one category. You can also create new categories.

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
	<p>New category. Click to create a new category. The New Category dialog box opens where you can enter the name of a new category and click OK to save it.</p> 

UI Element	Description
	<p>Edit Category Name. Select the relevant category, and click the button to edit the category. The Edit Category Name dialog box opens where you can change the name of the category and click OK to save the change.</p> 
	<p>Delete Category. Select the relevant category, and click the button to delete it.</p>
<List of categories>	<p>The area lists the available categories.</p> <p>Note:</p> <ul style="list-style-type: none"> • When you select/clear Categories all categories are selected/unselected. •  indicates that you cannot edit the corresponding category.

Configure a Page Layout

You can view default pages and create new pages containing components using the Dashboard workspace . Each page is displayed as a tab within the workspace.

To access:

Dashboard is displayed when you log in HP IT Executive Scorecard. You can also access the display by closing the other tabs.

Learn More

- For a list of default pages, see ["View and Analyze the Business Objectives" on page 282](#).
- Executive Scorecard includes default components. For a list of default components, see ["Prepare the Dashboard Display" on page 149](#).

Tasks

This section includes:

["Configure a Page Layout" below](#)

["Configure Page Layout – Configure the Layout of Components on a Page Scenario" below](#)

["Configure Page Layout – Create a Tabbed Component in a page Scenario" on page 158](#)

["Add components to a page with tabs - Scenario" on page 161](#)

Configure a Page Layout

In the Dashboard, in the relevant page tab, you can configure how the components are displayed.

You can configure the page with:

- A horizontal layout (the components are displayed side by side)
- A vertical layout (the components are displayed one above the other).
- A combination of horizontal and vertical layout.
- Tabs (the components are displayed in tabs inside the component itself).

It is recommended that you plan in advance which components you want to place on your page and how they should be arranged, and then configure your page layout accordingly.

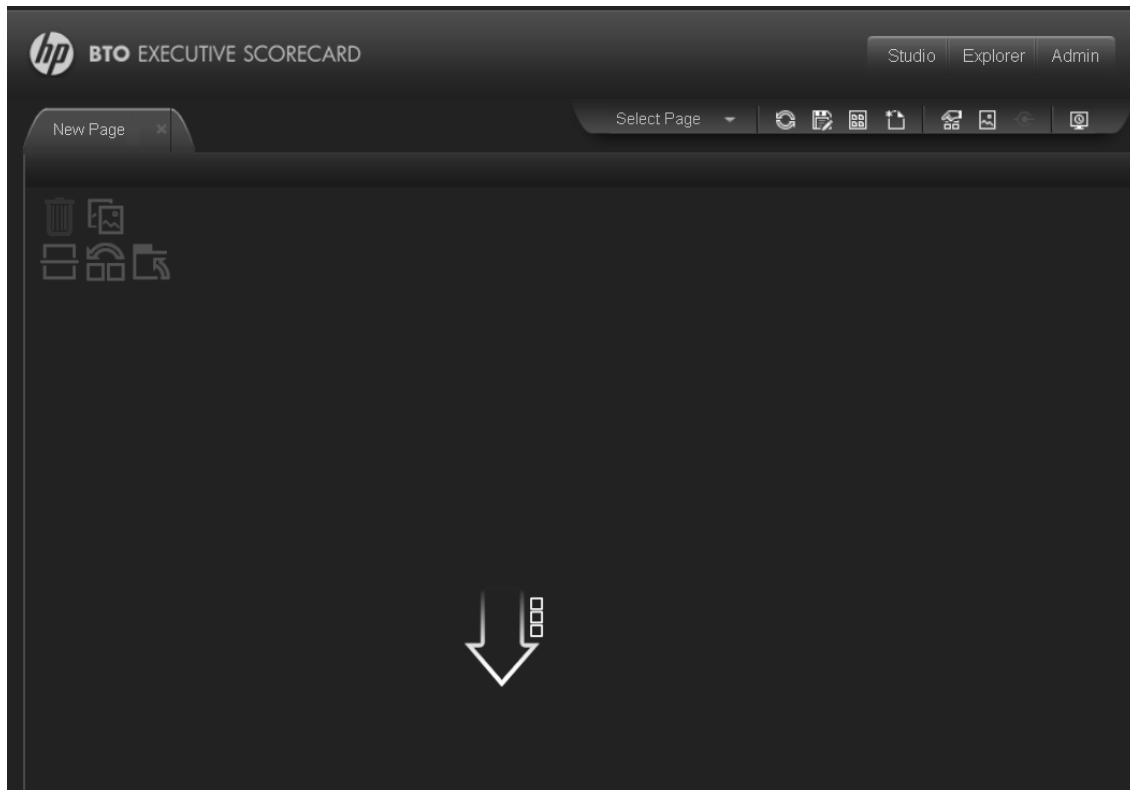
Configure Page Layout – Configure the Layout of Components on a Page Scenario

The following section provides an example of how an administrator configures the layout of components on a page.

It is recommended that you plan in advance which components you want to place on your page and how they should be arranged, and then configure your page layout accordingly.

Open a page

Adam opens a new page, which has a single vertical layout by default:



Switch the page layout to horizontal


From the layout tools in the upper left area, he clicks **Switch to Horizontal**.



The layout is now oriented horizontally:




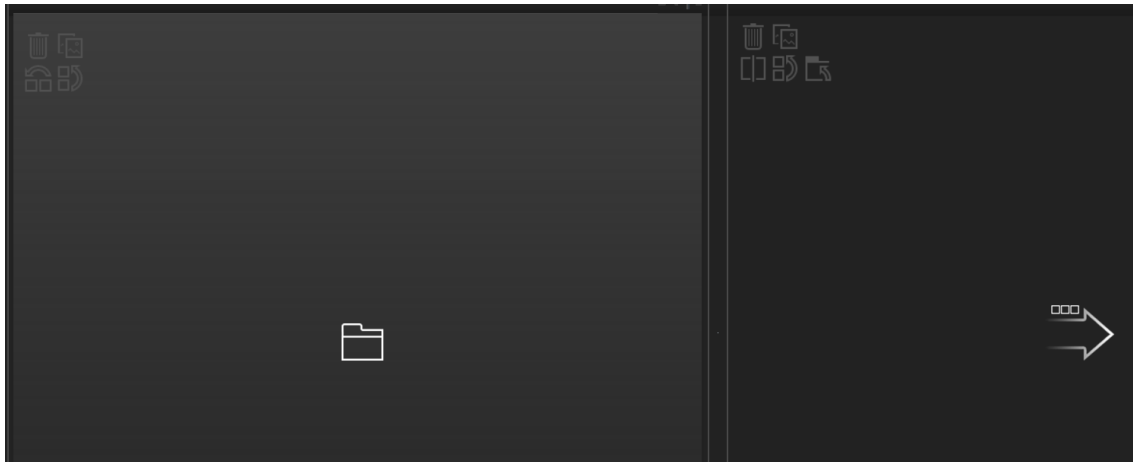
Split the page

Adam then clicks **Split**  to divide the layout into a left and right pane:



Create a tab layout in the left pane

Within the layout on the left side, he clicks **Switch to tabs**  to create a tabbed area in the left pane:



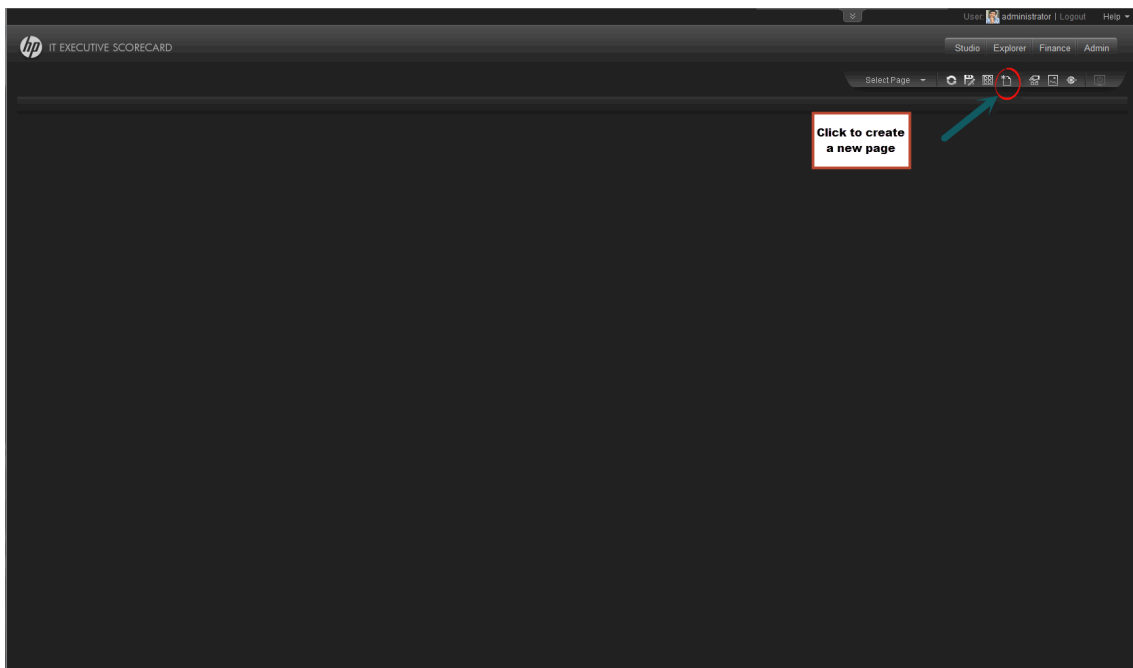
Result

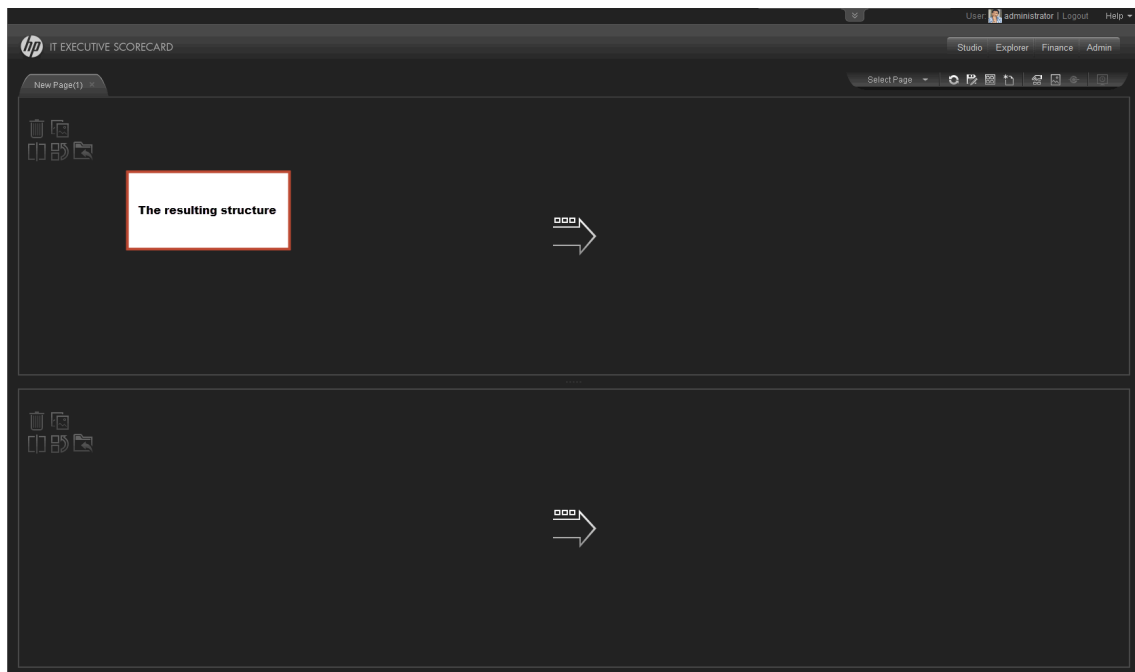
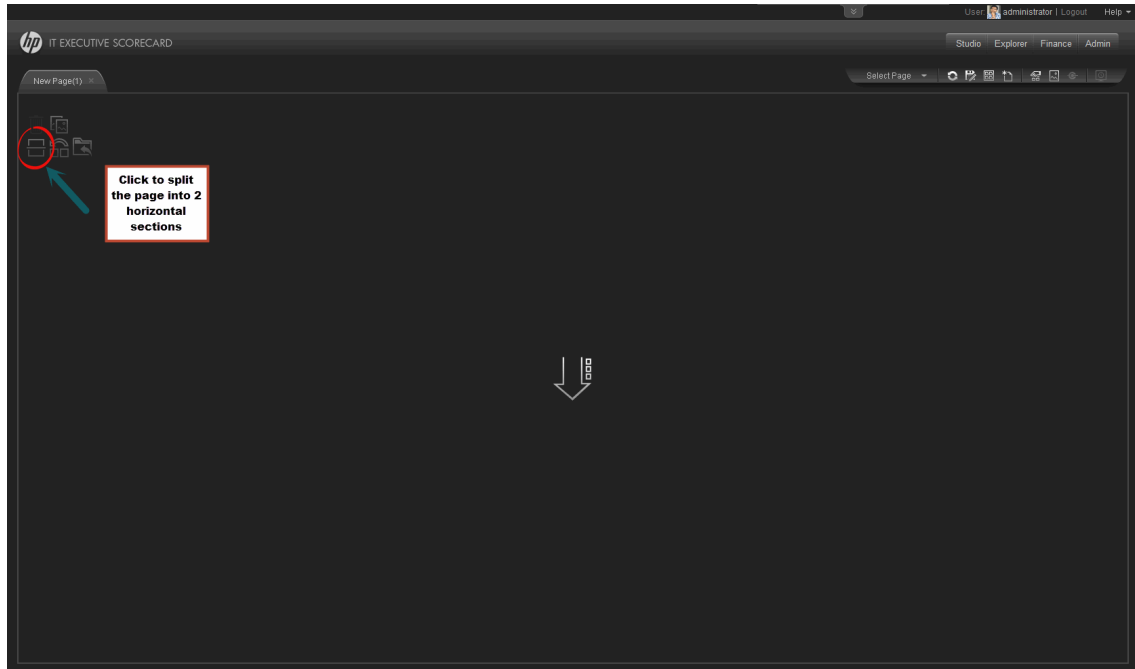
Within the layout, Adam can now add components to the two areas; the components added to the left side of the screen are displayed in tabs, and the components added to the right side are displayed vertically:

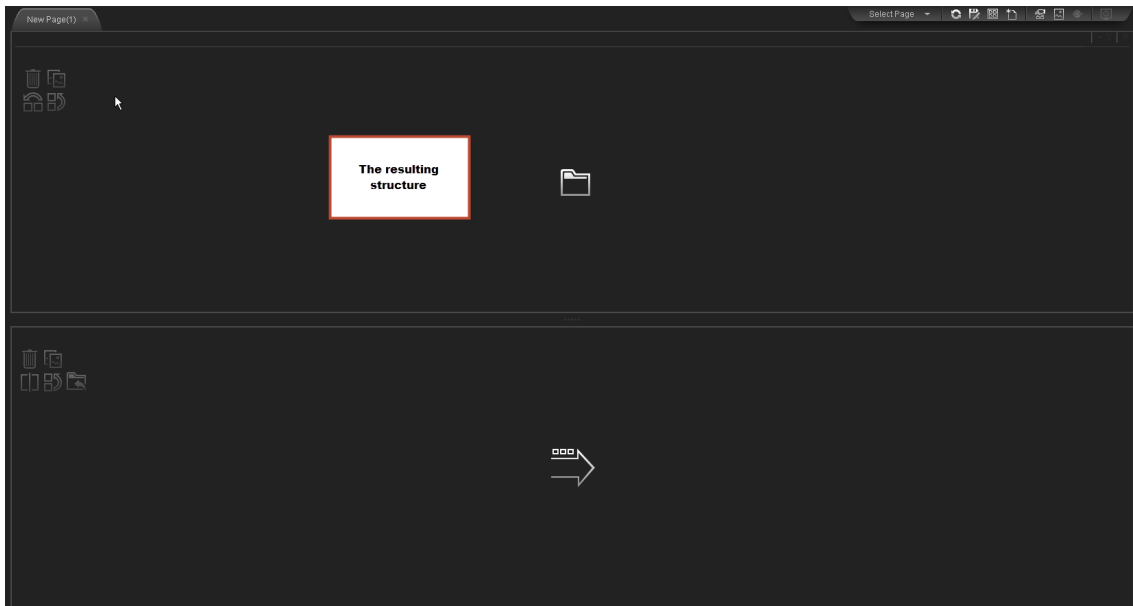
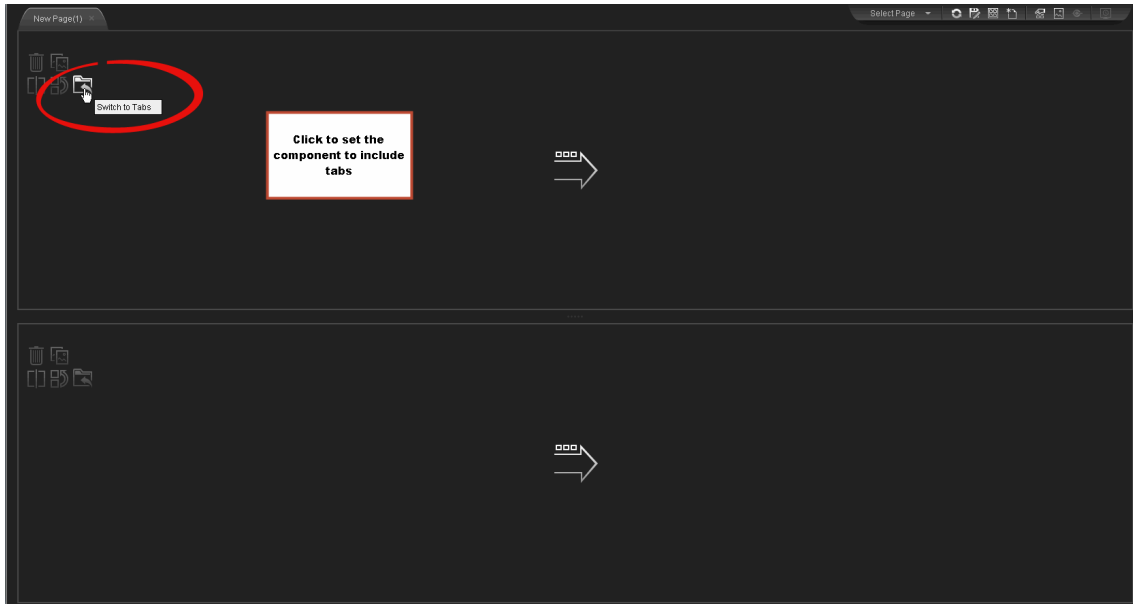
Configure Page Layout – Create a Tabbed Component in a page Scenario

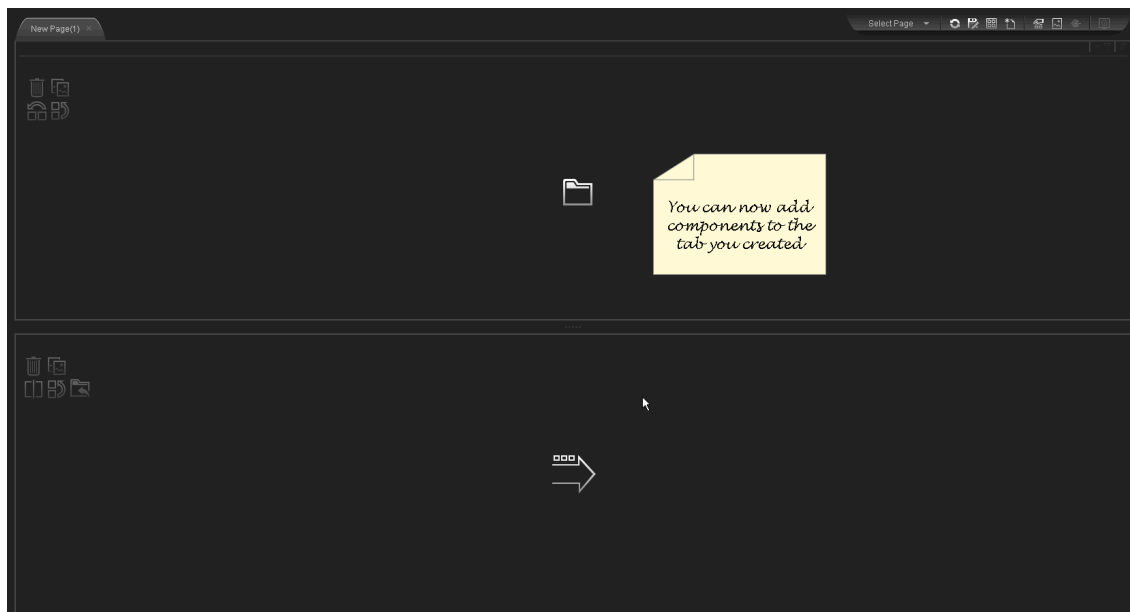
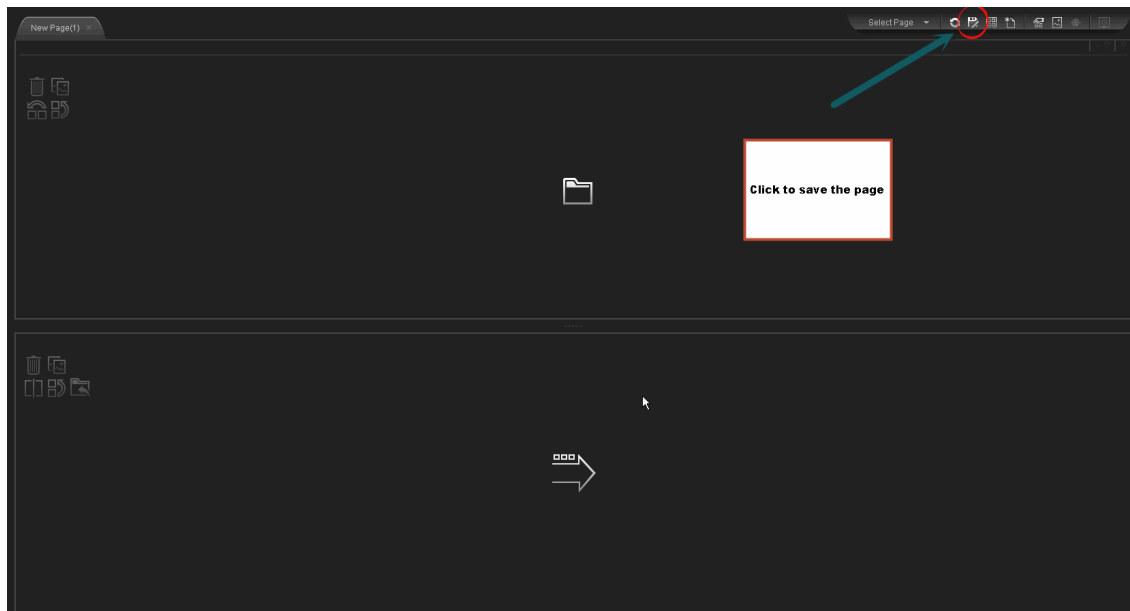
The following section provides an example of how an administrator configures a page component to include tabs.

It is recommended that you plan in advance which components you want to place on your page and how they should be arranged, and then configure your page layout accordingly.





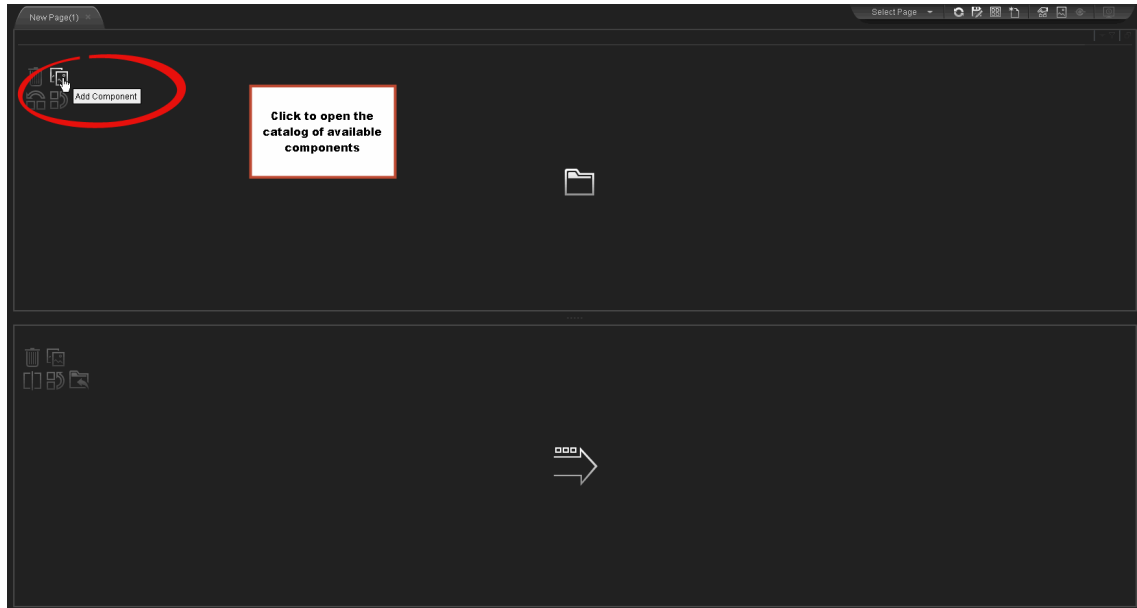




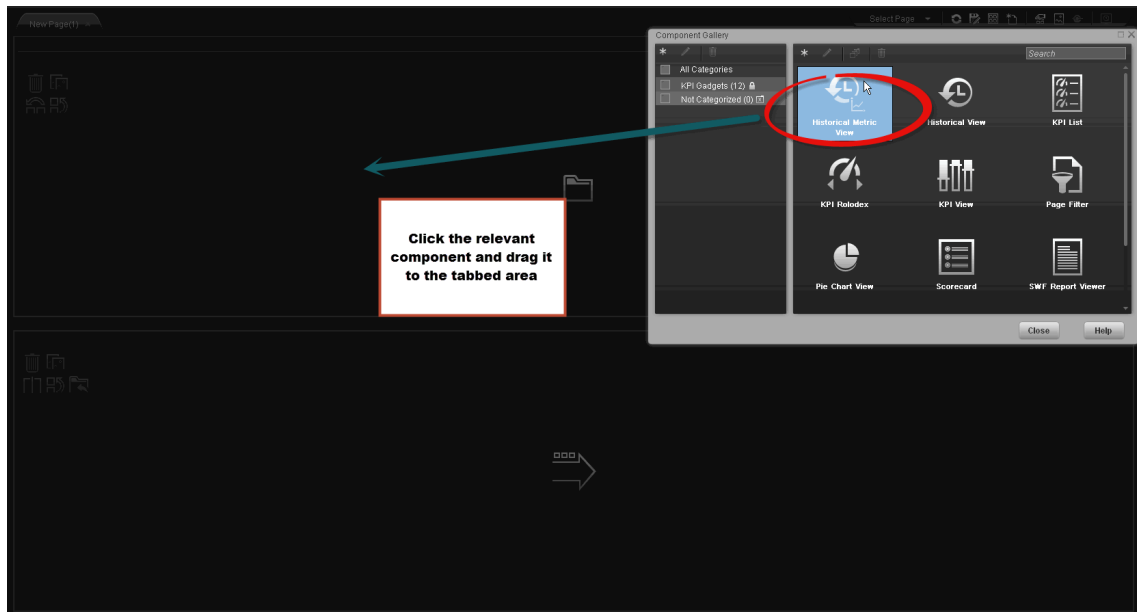
Add components to a page with tabs - Scenario

1. You have already formatted a page with tabs. For details, see ["Configure Page Layout – Configure the Layout of Components on a Page Scenario"](#) on page 155

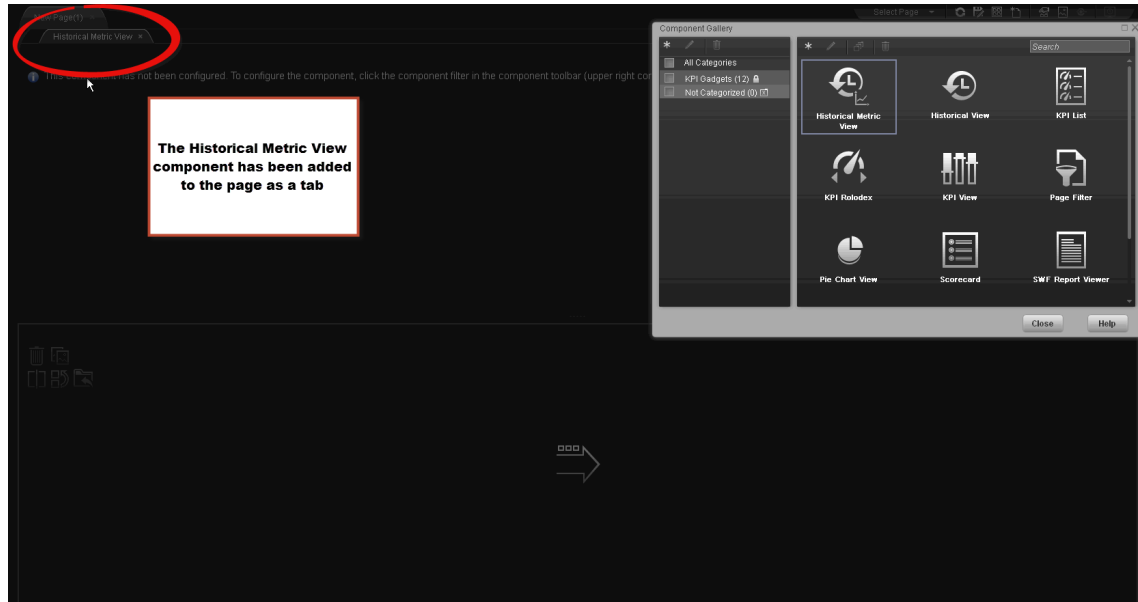
2.



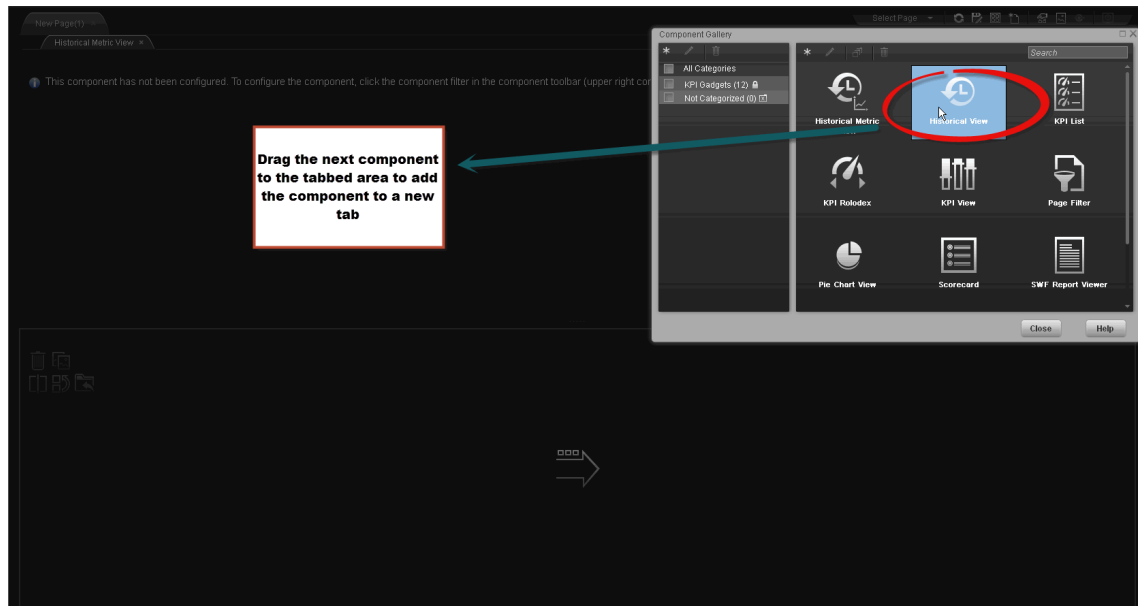
3.



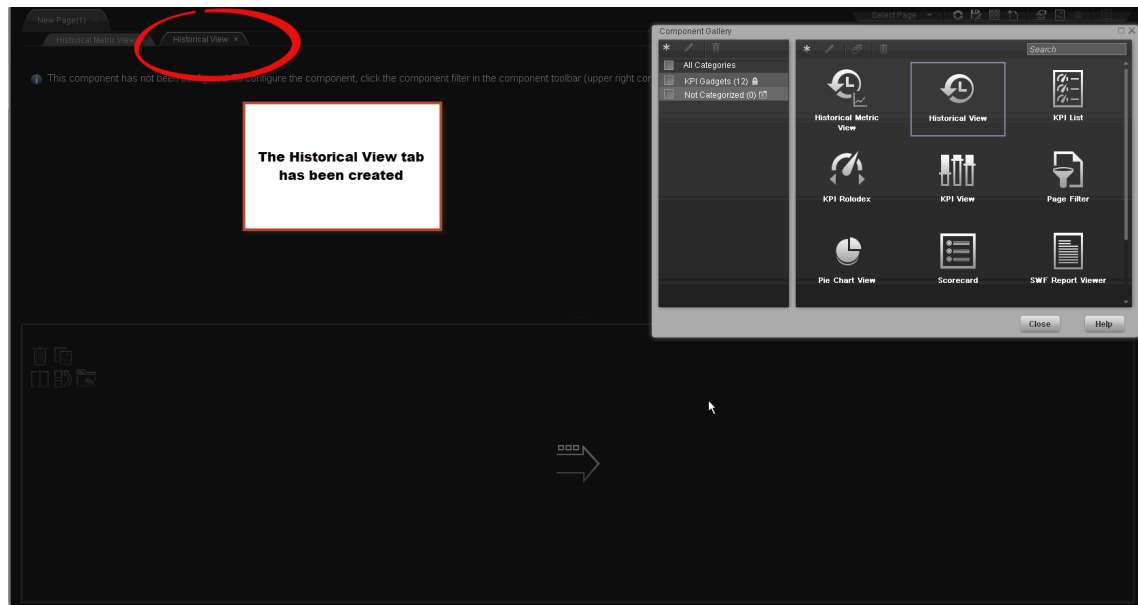
4.



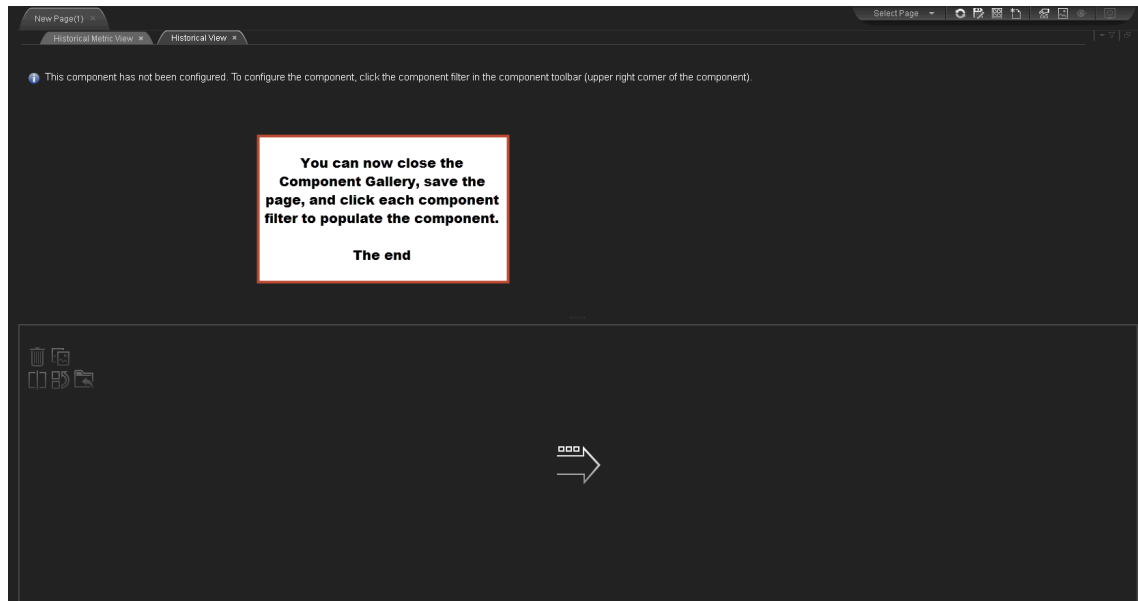
5.



6.



7.

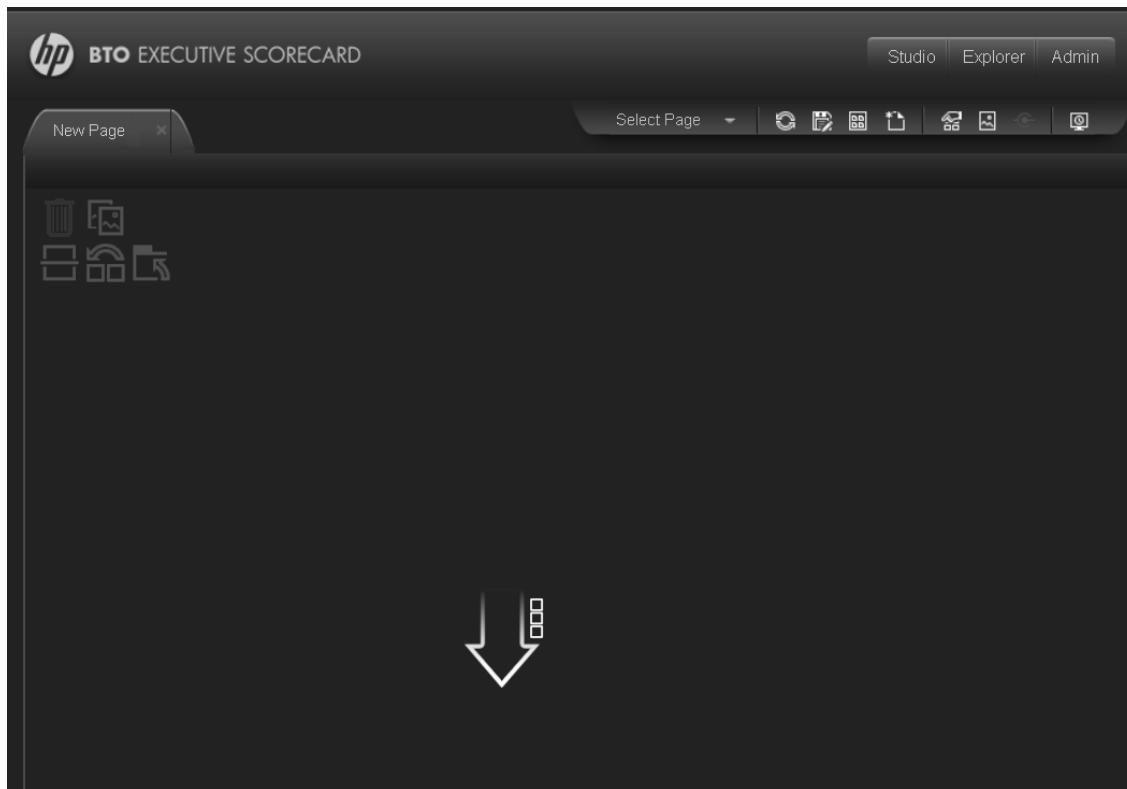


8. You can now close the Component Gallery dialog box, and save the page.

UI Description

Dashboard Workspace




The Dashboard workspace enables you to view default pages, and to create new pages containing components. Each page is displayed as a tab within the workspace.






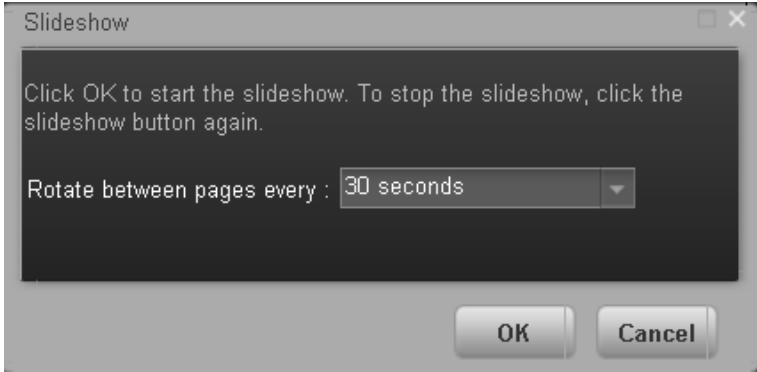


Page Management Toolbar

The Page Management toolbar on the upper right side of the workspace, enables you to create pages, add components to pages, and define how components interact between one another.

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Select Page	Select a page from this dropdown list to open the page in your workspace. The list contains the pages that are defined in the Page Gallery. If you start typing a page name in this box, the list is filtered.
	Refresh. Click to refresh the page.
	Save or Save As. Click to save the current page to the Page Gallery. A dialog box enables you to name the page, give the page a description, and select a category for the page. The description appears as a tooltip for the page, within the Page Gallery.
	Page Gallery. Click to open the Page Gallery. The Page Gallery contains default pages, as well as pages you have saved. You can then edit page definitions, or open pages. For user interface details, see "Manage Page Categories" on page 169 .











	New Page. Click to create a new page. After opening a new page you can configure its layout, add components to the page, and define wiring between the components. For task details, see "Add a Page to the Dashboard" on page 152 .
	Edit Page Layout. Click to modify the layout of an existing page. The current layout of the page is displayed. You can use the Layout tools in the top left corner of each layout to modify the layout areas. For details, see "Layout Tools" below . Exit Editing. When you are done, click this button to stop editing.
	Components. Click to open the Component Gallery. It contains default components, as well as components you have added. You can then edit component definitions, or add components to a page. For user interface details, see "Manage Component Categories" on page 173 .
	Page Wiring. Click to define the wiring between components; this determines how components interact with one another. For user interface details, see "Set Up Wiring Between Components" on page 273 .
	Start/Stop Slideshow. Click to start a slideshow of open pages. A dialog box enables you to define how often the pages are rotated.  <p>If Dashboard includes multiple pages, up to 5 of the most popular pages are immediately available for display when you switch to them. The other pages are least viewed pages, meaning that are silently deactivated in the background. When you select them, it might take a few seconds until they load and display their content.</p> <p>If a slideshow is running, click this button to stop the slideshow.</p>

Layout Tools

When a layout is empty, the layout tools on the upper left area enable you to define the layout. Icons in the center of the layout indicate the type of layout: horizontal, vertical, or tabbed.

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):







UI Element	Description
Layout Tools:	

	Remove Layout. Click to remove a layout from the page.
	Add Component. Click to open the Component Gallery. You can then double-click a component to place it in the layout area. For user interface details, see "Manage Component Categories" on page 173 .
	Split. Click to divide a vertical layout into two layouts, one above the other. When configuring the layout of a page, you can repeatedly split the layout up to 4 times (to produce up to 16 boxes).
	Split. Click to divide a horizontal layout into two layouts, side by side. When configuring the layout of a page, you can repeatedly split the layout up to 4 times (to produce up to 16 boxes).
	Switch to Vertical. Click to change the layout from vertical or tabbed to horizontal. Components placed in this area will be added one above the other.
	Switch to Horizontal. Click to change the layout from horizontal or tabbed to vertical. Components placed in this area will be added side by side.
	Switch to Tabs. Click to change the layout from vertical or horizontal, to a tab layout. Components placed in this area will be added as tabs.
Layout Icons:	
	<Horizontal layout>. This icon in the center of a layout indicates that the layout is horizontal. Components placed in this area will be added side by side.
	<Vertical layout>. This icon in the center of a layout indicates that the layout is vertical. Components placed in this area will be added one above the other.
	<Tabbed layout>. This icon in the center of a layout indicates that the layout is horizontal. Components placed in this area will be added as tabs.

Component Toolbar

The component toolbar on the upper right of each component enables you to administer the component.

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
	<p>Click to open one of the following:</p> <ul style="list-style-type: none"> • Preferences. Enables you to rename a component, and customize refresh rates. • Wiring. Enables you to customize how this component interacts with the other components on the page. For details, see "Set Up Wiring Between Components" on page 273. • Refresh. Click to manually refresh the component. • Help. Click to access help on the component. <p>: Depending on the component, some of these options may not be available.</p>
	<p>Click to define filtering for the component, when a component supports internal filtering.</p>
	<p>Click to display the component in a separate popup window.</p> <p>: The popup window that opens supports wiring, and data refresh.</p>
	<p>Click to temporarily collapse a component (the button on the left is for horizontal components; the button on the right is for vertical components).</p>
	<p>Click to restore a collapsed component (the button on the left is for horizontal components; the button on the right is for vertical components).</p> <p>: When you collapse a horizontal layout, it collapses into a narrow stripe. Click the stripe to restore the component.</p>
	<p>In a vertical or horizontal layout, click to close a component and remove it from the page. In a tabbed layout each tab has a button which closes the tab; the main close button removes the layout.</p>

Manage Page Categories

Dashboard provides out-of-the-box pages and components. You can customize a Dashboard display by customizing these pages and components. You can also create your own pages and components and combine them to create a customized Dashboard. To help you manage pages you can use page categories.

To access:

In Dashboard, click the Page Gallery  button.

Tasks

This section includes:

["Open a Page" below](#)

["Close a Page or Delete a Page" below](#)

["Modify Page Categories" on next page](#)

["Create a New Page Category" on next page](#)

["Rename a User-Defined Page Category" on next page](#)

["Delete a User-Defined Page Category" on next page](#)




["Assign a Page to a Category" on next page](#)

["Modify the Category Assignments of a Page" on next page](#)


Open a Page

Dashboard is provided with default pages. The default pages are located in the Page Gallery, together with any pages you have created and saved. For details, see ["View and Analyze the Business Objectives" on page 282](#).

To open a page, you can:

- Click the relevant tab.
- Click  in the Dashboard toolbar, and in the Page Gallery that opens, right-click the page and select  **Open page** option. You can also double-click the relevant page or click the page thumbnail and then the **Open page**  button in the Page Gallery toolbar.

Close a Page or Delete a Page

To close a page, click the close  button in the page tab. The page is closed in your workspace, but it is not removed from the Page Gallery.

To delete a page from the page gallery, click the **Page Gallery**  button, select the page, and delete it.

Modify Page Categories

Dashboard contains default categories within the Page Gallery to help you organize pages.

This section describes how to work with categories within the Page Gallery to help you organize pages.


You can add categories, edit or delete user-defined categories, and add or remove pages from categories.

Note: Categories are not mutually exclusive; you can assign a page to more than one category.

Create a New Page Category

Dashboard is provided with categories to which pages are assigned.


To add a new page category:

1. Click the Page Gallery button on the Page Management toolbar, then click the **New Category**  button (on the left section of the dialog box).
2. In the New Category dialog box, enter the name of the new category.
3. Click **OK**.

You can then assign existing pages to the category, or add new external components to the category.


Rename a User-Defined Page Category

To rename a user-defined page category:

1. Select the category and click the **Edit Category Name**  button.
2. In the Edit Category dialog box, change the name of the category.
3. Click **OK**.


Note that default categories (marked with a  icon) cannot be renamed.

Delete a User-Defined Page Category


To delete a user-defined page category, select the category and click the **Delete Category**  button.

Note that default categories (marked with a  icon) cannot be deleted.

Assign a Page to a Category

To assign a page to a category, right-click the page and select the  **Categorize** (page or component) option. In the Categorize Page dialog box that opens, select one or more categories to which you want to assign the page or component, and click **OK**.

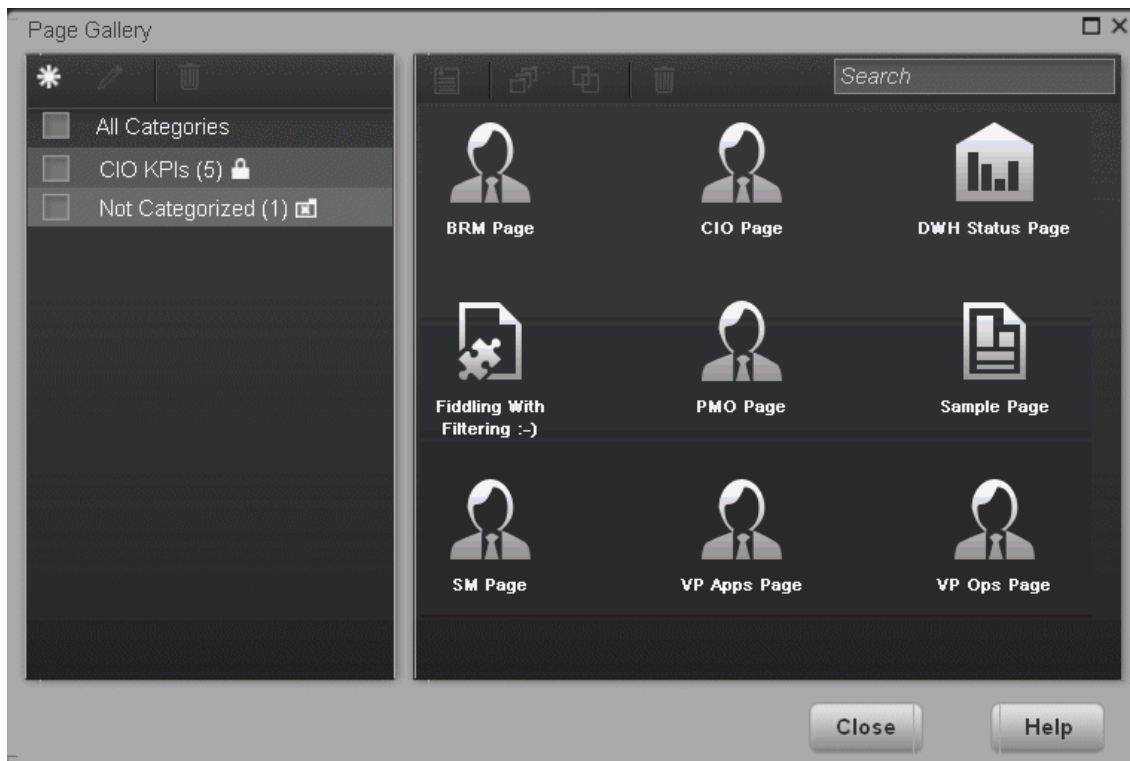
Modify the Category Assignments of a Page

To change the category assignments of a page, right-click it and select the  **Categorize** (page

or component) option. In the Categorize Page dialog box that opens, modify the selection of categories, and click **OK**.




UI Description



Page Gallery Dialog Box



Categories (left side)





User interface elements are described below:

UI Element	Description
	New Category. Click to create a new category; you can then assign pages to this category. For details see " Manage Component Categories " on page 173.
	Edit Category Name. Select a user-defined category and click to rename (default categories cannot be renamed).
	Delete Category. Select a user-defined category and click to delete (default categories cannot be deleted).

Categories	<p>This contains a list of categories to which pages are assigned. A category can have the following indications after its name:</p> <ul style="list-style-type: none"> • A number following the category name shows how many pages are in the category. •  indicates that the category is a default category, and cannot be renamed or deleted. •  indicates that this category groups all the pages that are not assigned to a category. <p>You can use the toolbar to manage a category, or select a category to display its pages on the right side of the dialog box.</p> <p>Note that categories are not mutually exclusive; you can assign a page to more than one category.</p>
-------------------	--

Pages (right side)

User interface elements are described below:

UI Element	Description
	<p>Open Page. Select a page and click to open it in the Dashboard workspace.</p> <p>You can also double-click a page within the Page Gallery .</p>
	<p>Categorize Page. Select a page and click to assign it to a category.</p>
	<p>Clone Page. Select a page and click to create a copy of the page. You can then make changes to the page and save it with a new name.</p> <p>A dialog box enables you to name the new page, give the page a description, and select a category for the page. The description appears as a tooltip for the page within the Page Gallery.</p>
	<p>Delete Page. Select a page and click to delete it from the gallery.</p>
Pages	<p>This shows the default pages available for display in Dashboard, as well as custom pages that you have saved. You can select a page and use the toolbar to edit page definitions, or double-click a page to open it in the Dashboard workspace.</p>
Search box	<p>Enter a text string to search for a specific page.</p>

Manage Component Categories

Dashboard contains default categories within the Components Gallery to help you organize components.

This section describes how to work with categories within the Components Gallery to help you organize components.

You can add categories, edit or delete user-defined categories, and add or remove components from categories.

Note: Categories are not mutually exclusive; you can assign a component to more than one category.

To access:

In the Executive Dashboard, click the **Components**  button.

Tasks

This section includes:

["Create a New Category" below](#)

["Rename a User-Defined Category" below](#)


["Delete a User-Defined Category" on next page](#)

["Assign a Component to a Category" on next page](#)

["Modify Category Assignments of a Component" on next page](#)

Create a New Category


Dashboard is provided with categories to which components are assigned. To add a new category:

1. Click the ComponentsGallery button on the Page Management toolbar, then click the **New Category**  button (on the left section of the dialog box).
2. In the New Category dialog box, enter the name of the new category.
3. Click **OK**.

You can then assign existing components to the category, or add new external components to the category.

Rename a User-Defined Category

To rename a user-defined category:

1. Select the category and click the **Edit Category Name**  button.
2. In the Edit Category dialog box, change the name of the category.
3. Click **OK**.


Note that default categories (marked with a  icon) cannot be renamed.

Delete a User-Defined Category


To delete a user-defined category, select the category and click the **Delete Category**  button.

Note that default categories (marked with a  icon) cannot be deleted.

Assign a Component to a Category

To assign a component to a category, select it and select the **Categorize**  button in the toolbar (right side). In the Categorize Component dialog box that opens, select one or more categories to which you want to assign the page or component, and click **OK**.

Modify Category Assignments of a Component

To change the category assignments of a component, select it and select the **Categorize**  button in the toolbar (right side). In the Categorize Component dialog box that opens, modify the selection of categories, and click **OK**.


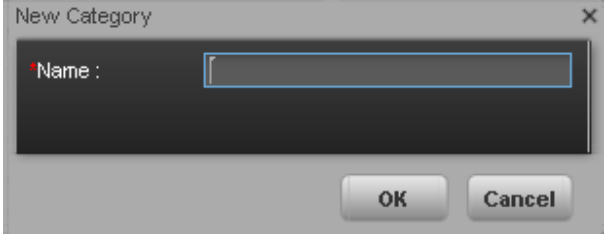

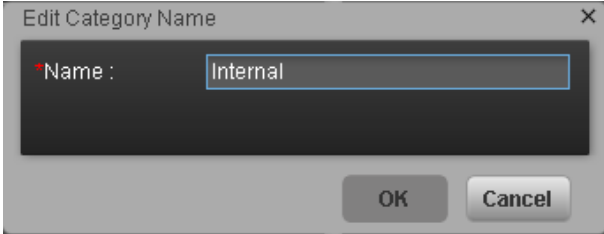



UI Description

Component Gallery Dialog Box





Left Pane



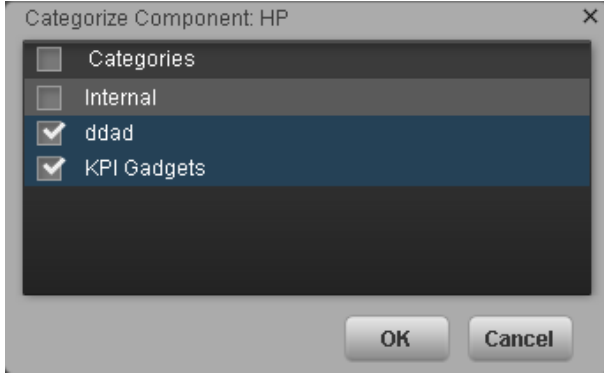
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
	<p>New category. Click to create a new category. The New Category dialog box opens where you can enter the name of a new category and click OK to save it.</p> 
	<p>Edit Category Name. Select the relevant category, and click the button to edit the category. The Edit Category Name dialog box opens where you can change the name of the category and click OK to save the change.</p> 
	<p>Delete Category. Select the relevant category, and click the button to delete it.</p>
<List of categories>	<p>The pane lists the categories.</p> <ul style="list-style-type: none"> • When you select/clear Categories all categories are selected/unselected. •  indicates that you cannot edit the corresponding category. •  indicates that this category groups all the components that are not assigned to a category.

Right Pane

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
	<p>Add External Component. Click to add an external component to the gallery of components. The New Component dialog box opens. For details, see "Create an External Component" on page 266.</p>
	<p>Edit Component Properties. Select the relevant component, and click the button to edit the component. The Edit Component dialog box opens where you can change the selected component configuration. For details, see "Create an External Component" on page 266.</p>

UI Element	Description
	Delete Component. Select the relevant component, and click the button to delete it.
	<p>Categorize Component. Select the relevant component, and click the button to specify the component's category. The Categorize Component dialog box opens where you can select one or more categories.</p> 
Search	Enter a string to display all the components whose name includes the string.
Component	The dialog box displays a list of the available default and customized components.


Add a Historical Metric View Component to a Page

Dashboard is provided with default components. The default components are located in the Component Gallery, together with any external components you have added.

The Historical Metric View component displays the over time value, trend, status of the Metrics you selected in the Historical Metric View Component Filter.

To access:

You can view the report in the relevant page in the Dashboard.

Click the **Configure Component**  button in the component to display the relevant Configure Component dialog box.




Learn More

All the time periods used in the component are periods of the fiscal year (For example, the end of the fiscal year depends on the fiscal year you have set at the system level).

Tasks

Add a Component to a Dashboard Page

To add a component to a page that is already formatted:

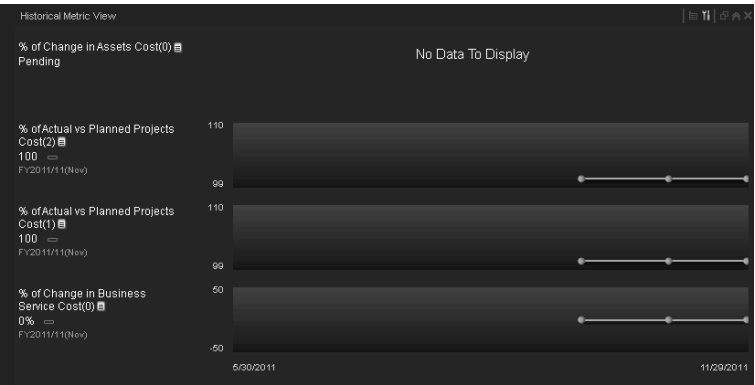
1. In the Executive Dashboard, select the relevant page (click the **Page Gallery**  button if the page you want does not already appear in the Dashboard).
2. Click the **Components**  button.
3. In the Component Gallery page that opens, double-click the component to place it in the layout area, or select the component and drag it to an area on the page, and close the Component Gallery page. For user interface details, see ["Manage Component Categories" on page 173](#).
 - If the target area is hidden by the Component Gallery dialog box, click the Component Gallery dialog box title bar and drag it to another location on your screen.
 - If you are dragging a new component to a target area that already has a component defined, drag the new component to the title bar of the target area, and not to the part of the component that is colored white.
4. In the component, click the **Configure Component**  button:
5. In the component Filter dialog box that opens, select the information you want to display and click **OK**.
6. The component displays the required information.

For more information, see ["Configure a Page Layout" on page 155](#).

UI Description










Historical Metric View Component (Display) Dialog Box

The component displays the over time value, trend, status of the KPIs or metrics you selected in the Historical Metric View Component Filter.






Component Toolbar


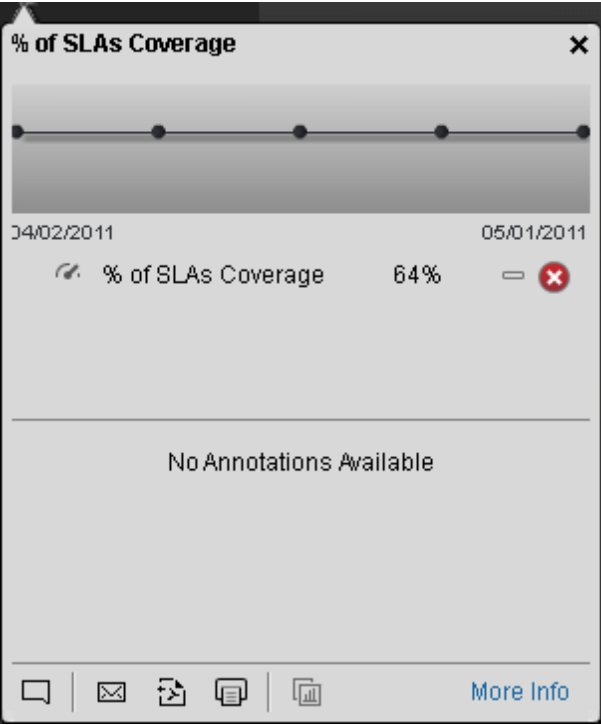


User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

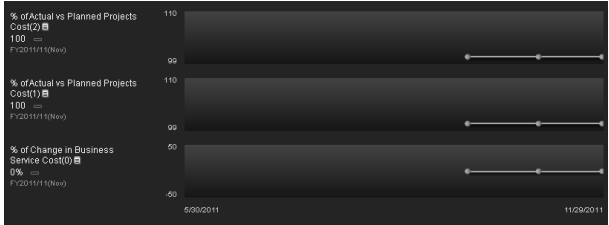
UI Element	Description
	Component Menu. Opens a menu where you can select:  Preferences. Depending on the component you are current configuring, opens the <component_name> Preferences dialog box where you can change the name of the component in the page by changing the name in the Name field and clicking OK .  Wiring. Depending on the component you are currently configuring, opens the Wiring dialog box where you can wire the current component to other components. For details, see "Set Up Wiring Between Components" on page 273 .  Help. Opens the online documentation page relevant to the component you are currently configuring.
	Configure Component. Opens the Configure Component dialog box for the relevant component. For details, see "Historical Metric View - Configure Component Filter Dialog Box" on page 181 .
	Open in a new window. Opens the component in a new window.
	Collapse component. Collapses the component. To expand the collapsed component, click the  button on the collapsed component.
	Remove Component. Removes the component from the page.

Component Contents

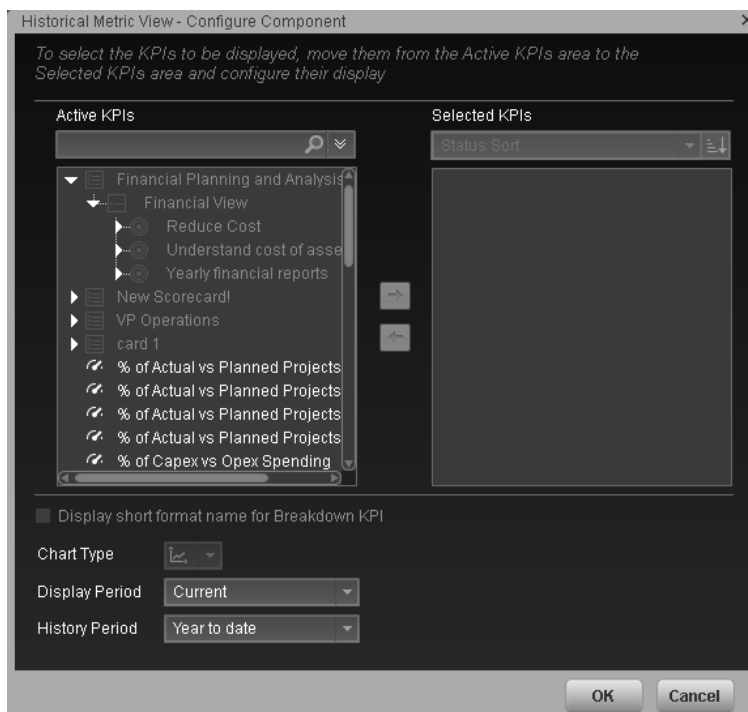
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
<Legend>	<p>The legend displays for each selected KPI or metric:</p> <ul style="list-style-type: none"> • The color used to represent the KPI or metric in the graph to enable you to recognize which line represents which KPI or metric. • The name of the KPI or metric. Double-click the name to open the Explorer tab filtered for the selected element. •  (or  when a new annotation has been added to the KPI) Move the cursor above the icon to display the KPI tooltip that provides detailed information about the KPI and access to the Explorer in the context of the KPI. For details, see "Display More Information About a Specific Objective or KPI" on page 304. • The value of the KPI or metric with its unit. • The trend  is calculated over the period currently displayed.





UI Element	Description
	<p>Indicates that this KPI or metric value has an annotation.</p> <p>When you move the mouse over such a point, a tooltip displays the annotation information related to the point. For details, see "Display More Information About a Specific Objective or KPI" on page 304</p>  <p>The tooltip displays a maximum of three annotations. If there are more than 3 annotations, the first 2 are displayed followed by Show More.... Click Show More... open the Explorer tab in context, to view the whole list of annotations. For details, see "View and Analyze Results in the Explorer Page" on page 289.</p>
	<p>Indicates a regular "point" corresponding to a division of the time period selected for the report.</p> <p>Double-click the "point" to display the KPI or metric detailed information in the Explorer tab for the period of time defined by the "point". For details, see "View and Analyze Results in the Explorer Page" on page 289.</p>
	<p>(yellow point) Indicates that there is no calculated data for the selected KPI or metric for the selected period. This can be due to an incorrect formula (for example: division by zero), an arithmetic error, or other reasons.</p> <p>Double-click the problematic point to open the Explorer page and to display at the top of the page, a short description of the reason why there is no data for that point.</p>

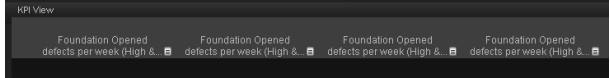
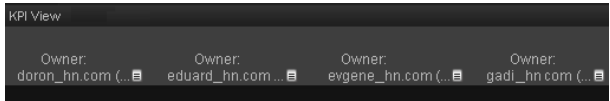


UI Element	Description
<Y-axis>	<p>The Y-axis displays the values of the KPI or metric in the relevant unit.</p> <p>If the report includes more than one KPI or metric and:</p> <ul style="list-style-type: none"> The KPIs or metrics all have the same unit, the graph has one Y-axis. The KPIs or metrics have two different units, the graph shows one Y-axis showing one unit on the left, and one Y-axis showing the values in the other unit on the right. The KPIs or metrics have more than three units, the report displays one graph per KPI or metrics. 
<X-axis>	<p>The X-axis displays the time frame selected for the report, split into equal segments, depending on the Display Period. For details, see "Historical Metric View - Configure Component Filter Dialog Box" below.</p>

Historical Metric View - Configure Component Filter Dialog Box



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
<Search>	<p>Enter the relevant string to display, in the tree, only the KPIs or metrics whose name includes the string.</p> <p>In addition, the child KPIs of the filtered KPIs are also listed even when the child KPIs names do not include the string.</p>
	<p>Advanced search. Opens additional fields to help you refine the component's filter:</p> <ul style="list-style-type: none"> • Status: Select one of the All, Good, Warning, or Error values to display only the KPIs or metrics with the selected status, in the Active KPIs area. • Type: Select either KPI or Metric to display: <ul style="list-style-type: none"> ▪ Only the KPIs or metrics with the selected status. ▪ The Objectives and those of their KPIs or metrics that have the selected status.
Active KPIs	<p>The left-side box lists all the active Scorecards, Perspectives, Objectives, KPIs, metrics, and KPI Breakdowns listed in the Active KPIs pane in the Studio. The KPIs and metrics are highlighted.</p> <p>To select/unselect the elements you want to display in the report, use the right and left arrows  to move the elements from the Available KPIs to the Selected KPIs and back. You can also double-click the element to move it from one box to the other.</p>
Selected KPIs	<p>The right-side box lists all the selected KPIs or metrics that you want to display in the component.</p> <p>To select/unselect the elements you want to display in the report, use the right and left arrows  to move the elements from the Available KPIs to the Selected KPIs and back. You can also double-click the element to move it from one box to the other.</p>
<Status sort>	<p>Select :</p> <ul style="list-style-type: none"> • Alphabetical sort to sort the selected elements in ascending alphabetical order. You can then click  to select the ascending or descending order. • Status sort to sort the selected elements according to their status (for example: KPIs with the Error status, followed by KPIs with a Warning status, and then KPIs with a Good status).

UI Element	Description
Display short format name for KPI Breakdown	<p>Note:</p> <ul style="list-style-type: none"> You can select this option only when KPI Breakdowns have been defined and you have moved at least one of them to the Selected KPIs list. The name of a KPI Breakdown can be long because it is composed of the name of the KPI followed by the names of the entity and dimension you selected when you created it. <p>In the Dashboard components, this can cause problems because the complete name of the KPI Breakdown is not displayed.</p>  <p>To display, in the component, only the name of the entity and dimension instead of the complete name of the KPI Breakdown:</p> <ol style="list-style-type: none"> Move the relevant KPI Breakdown to the Selected KPIs area. The Display short format name for KPI Breakdown option is enabled. Select the Display short format name for KPI Breakdown option and click OK. <p>The component display shows the short names of the KPI Breakdowns. A tooltip displays the full name of the KPI Breakdowns.</p>  <p>For details on KPI Breakdowns, see "Manage KPI Breakdowns" on page 123.</p>
Chart Type	<p>You can select one of the following options:</p> <p> When you want to display the history of each selected KPI in a separate chart. This option is automatically selected when you select more than two KPIs that do not have the same unit.</p> <p> When you want to display the history of all the selected KPIs in one chart. These KPIs must have the same unit. If more than two of the KPIs you selected do not have the same unit, this option is disabled. You may select this option for up to two KPIs with different units (in this case the chart includes two Y-axis, one on the left and one on the right, each one representing a different unit).</p>

UI Element	Description
Display Period	<p>Select the time period to be displayed in the component:</p> <ul style="list-style-type: none">• Current. The values of the KPIs or metrics whose calculation period has completed as well as, for KPIs whose calculations are still proceeding, the values from the previous period, depending on the time period selected in the History Period list.• Last Closed. The values of only the KPIs whose calculation period has completed for the time period selected in the History Period list.• Yearly/Monthly/Quarterly/Weekly. The list of time periods represents the longest periodicity configured for the selected metrics or KPIs. The longest periodicity corresponds to the shortest selectable periodicity on the list (for example, if the longest periodicity is Quarterly, then both Quarterly and Yearly become selectable). When you select Yearly/Monthly/Quarterly/Weekly, another field opens on the right. It lists only the years/months/quarters/weeks/days when the engine performed calculations. The values displayed in the pie chart are the values of the metrics or KPIs that have completed for the selected periods.

UI Element	Description
History Period	<p>Select one of the following options:</p> <ul style="list-style-type: none">• Half a year to date. The report's display period starts 6 months prior to the current date.• Year to date. The report's display period starts 1 year prior to the current date.• 2 years to date. The report's display period starts 2 years prior to the current date.• 3 years to date. The report's display period starts 3 years prior to the current date. <p>Note:</p> <ul style="list-style-type: none">• The leftmost point on the X-axis (beginning of the report's time frame) corresponds to the first day of the History Period from the last date of the period selected in the History Period field. <p>For example, if you select the 4th Quarter of 2010 in the Display Period field, and 2 years to date in the History Period field, the rightmost point in the X-axis is the end of the 4th Quarter of 2010 (December 31st, 2010), and the leftmost point is the last day of the 4th Quarter of 2008 (December 31st, 2008).</p> <p>Note:</p> <ul style="list-style-type: none">• Each point in the chart between the two end points represents the end of a Quarter between December 31st, 2008, and December 31st, 2010.• The rightmost point on the X-axis (end of the report's time frame) corresponds to the last day of the period selected in the Display Period field.• If you are displaying the Historical View component for only one KPI or metric and that element has no data at the beginning of the selected time frame, the leftmost point on the X-axis corresponds to the first day the element has data.• If the report includes more than one chart, the X-axis spans the whole selected time frame.


Add a Historical View Component to a Page

Dashboard is provided with default components. The default components are located in the Component Gallery, together with any external components you have added.

The Historical View component displays the over time value, trend, status of the KPIs you selected in the Historical View Component Filter .

To access:

You can view the report in the relevant page in the Dashboard.

Click the **Configure Component**  button in the component to display the component filter.




Learn More

All the time periods used in the component are periods of the fiscal year (For example, the end of the fiscal year depends on the fiscal year you have set at the system level).

Tasks

Add a Component to a Dashboard Page

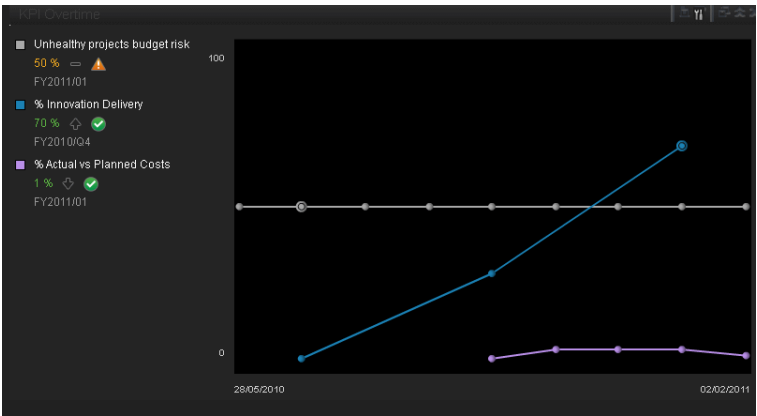
To add a component to a page that is already formatted:

1. In the Executive Dashboard, select the relevant page (click the **Page Gallery**  button if the page you want does not already appear in the Dashboard).
2. Click the **Components**  button.
3. In the Component Gallery page that opens, double-click the component to place it in the layout area, or select the component and drag it to an area on the page, and close the Component Gallery page. For user interface details, see "[Manage Component Categories](#)" on page 173.
 - If the target area is hidden by the Component Gallery dialog box, click the Component Gallery dialog box title bar and drag it to another location on your screen.
 - If you are dragging a new component to a target area that already has a component defined, drag the new component to the title bar of the target area, and not to the part of the component that is colored white.
4. In the component, click the **Configure Component**  button:
5. In the component Filter dialog box that opens, select the information you want to display and click **OK**.
6. The component displays the required information.

For more information, see "[Configure a Page Layout](#)" on page 155.










UI Description

Historical View Component








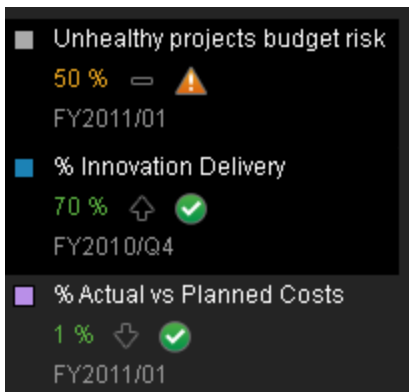
Component Toolbar


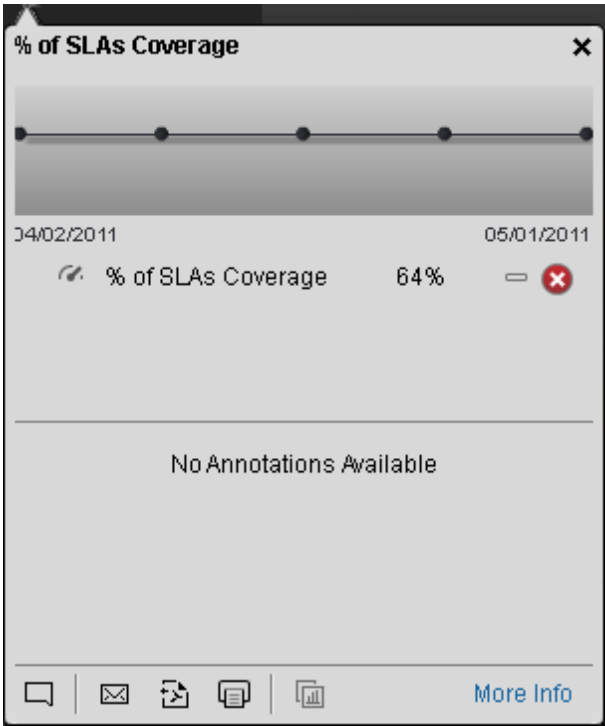


User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

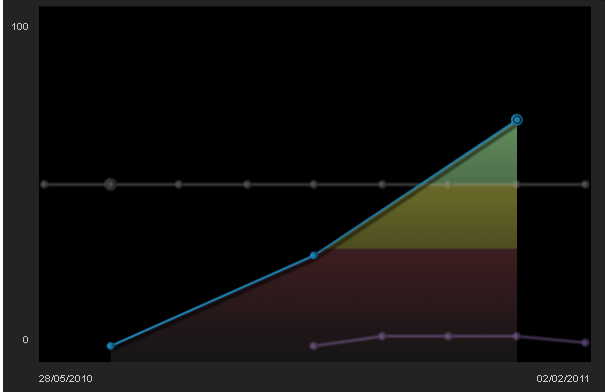
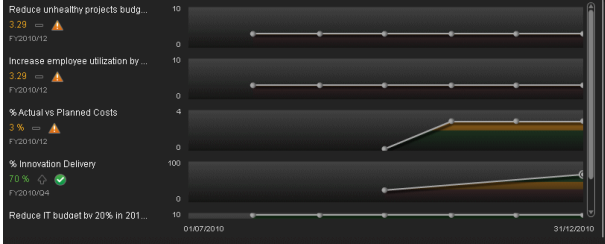
UI Element	Description
	Component Menu. Opens a menu where you can select:  Preferences. Depending on the component you are current configuring, opens the <component_name> Preferences dialog box where you can change the name of the component in the page by changing the name in the Name field and clicking OK .  Wiring. Depending on the component you are currently configuring, opens the Wiring dialog box where you can wire the current component to other components. For details, see "Set Up Wiring Between Components" on page 273 .  Help. Opens the online documentation page relevant to the component you are currently configuring.
	Configure Component. Opens the Configure Component dialog box for the relevant component. For details, see "Historical View Component Filter Dialog Box" on page 191 .
	Open in a new window. Opens the component in a new window.
	Collapse component. Collapses the component. To expand the collapsed component, click the  button on the collapsed component.
	Remove Component. Removes the component from the page.

Component Contents

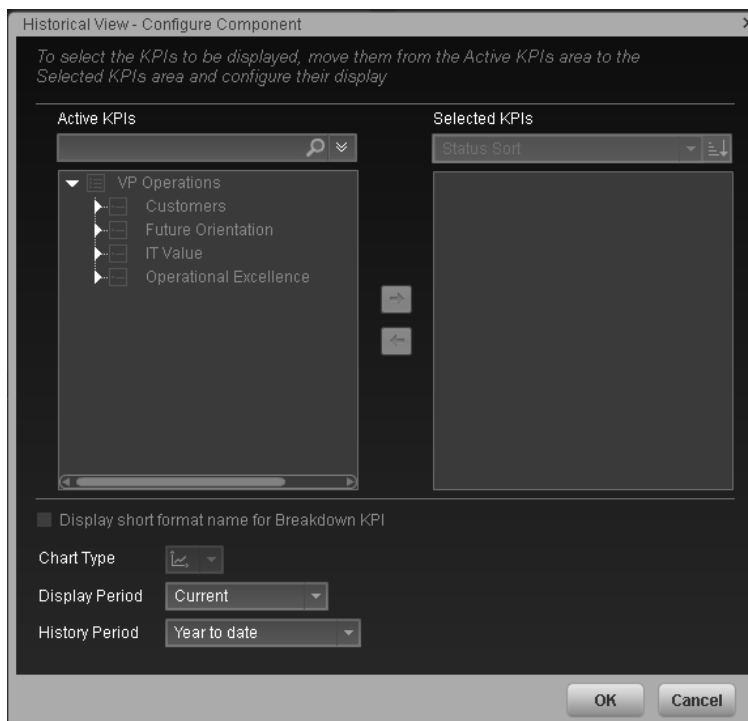
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
<Legend>	<p>The legend displays for each selected KPI:</p> <ul style="list-style-type: none">• The color used to represent the KPI in the graph.• The name of the KPI. Double-click the name to open the Explorer tab filtered for the selected element.• The value of the KPI with its unit.• The trend  is calculated over the period currently displayed.• The status of the KPI during the period currently displayed:<ul style="list-style-type: none">▪  indicates that the status is Good.▪  indicates that the status is Warning.▪  indicates that the status is Error.▪  indicates that the status was not calculated or that there was an error in the calculation. 

UI Element	Description
	<p>Indicates that this KPI value has an annotation.</p> <p>When you move the mouse over such a point, a tooltip displays the annotation information related to the point. For details, see "Display More Information About a Specific Objective or KPI" on page 304</p>  <p>The tooltip displays a maximum of three annotations. If there are more than 3 annotations, the first 2 are displayed followed by Show More.... Click Show More... open the Explorer tab in context, to view the whole list of annotations. For details, see "View and Analyze Results in the Explorer Page" on page 289.</p>
	<p>Indicates a regular "point" corresponding to a division of the time period selected for the report.</p> <p>Double-click the "point" to display the KPI's detailed information in the Explorer tab for the period of time defined by the "point". For details, see "View and Analyze Results in the Explorer Page" on page 289.</p>
	<p>(yellow point) Indicates that there is no calculated data for the selected KPI for the selected period. This can be due to an incorrect formula (for example: division by zero), an arithmetic error, or other reasons.</p> <p>Double-click the problematic point to open the Explorer page and to display at the top of the page, a short description of the reason why there is no data for that point.</p>





UI Element	Description
<Threshold>	<p>Click the relevant KPI in the legend to bring the KPI chart into focus and to display the thresholds of the KPI.</p> 
<Y-axis>	<p>The Y-axis displays the values of the KPI in the relevant unit.</p> <p>If the report includes more than one KPI and:</p> <ul style="list-style-type: none"> • The KPIs all have the same unit, the graph has one Y-axis. • The KPIs have two different units, the graph shows one Y-axis showing one unit on the left, and one Y-axis showing the values in the other unit on the right. • The KPIs have more than three units, the report displays one graph per KPI. 
<X-axis>	<p>The X-axis displays the time frame selected for the report, split into equal segments, depending on the Display Period. For details, see "Historical View Component Filter Dialog Box" on next page.</p>

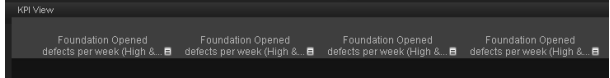
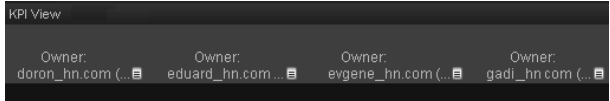


Historical View Component Filter Dialog Box



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
<Search>	<p>Enter the relevant string to display, in the tree, only the KPIs whose name includes the string.</p> <p>In addition, the child KPIs of the filtered KPIs are also listed even when the child KPIs names do not include the string.</p>
	<p>Advanced search. Opens additional fields to help you refine the component's filter:</p> <ul style="list-style-type: none"> • Status: Select one of the All, Good, Warning, or Error values to display only the KPIs with the selected status, in the Active KPIs area. • Type: Select either KPIs or Objectives to display: <ul style="list-style-type: none"> ■ Only the KPIs with the selected status. ■ The Objectives and those of their KPIs that have the selected status.

UI Element	Description
Active KPIs	<p>The left-side box lists all the active Scorecards, Perspectives, Objectives, and their KPIs, and KPI Breakdowns listed in the Active KPIs pane in the Studio. The KPIs are highlighted.</p> <p>To select/unselect the elements you want to display in the report, use the right and left arrows  to move the elements from the Available KPIs to the Selected KPIs and back. You can also double-click the element to move it from one box to the other.</p>
Selected KPIs	<p>The right-side box lists all the selected KPIs that you want to display in the component.</p> <p>To select/unselect the elements you want to display in the report, use the right and left arrows  to move the elements from the Available KPIs to the Selected KPIs and back. You can also double-click the element to move it from one box to the other.</p>
<Status sort>	<p>Select :</p> <ul style="list-style-type: none"> • Alphabetical sort to sort the selected KPIs in ascending alphabetical order. You can then click  to select the ascending or descending order. • Status sort to sort the selected KPIs according to their status (KPIs with the Error status, followed by KPIs with a Warning status, and then KPIs with a Good status).
	Click to display the KPIs in ascending or descending alphabetical order.

UI Element	Description
Display short format name for KPI Breakdown	<p>Note:</p> <ul style="list-style-type: none"> You can select this option only when KPI Breakdowns have been defined and you have moved at least one of them to the Selected KPIs list. The name of a KPI Breakdown can be long because it is composed of the name of the KPI followed by the names of the entity and dimension you selected when you created it. <p>In the Dashboard components, this can cause problems because the complete name of the KPI Breakdown is not displayed.</p>  <p>To display, in the component, only the name of the entity and dimension instead of the complete name of the KPI Breakdown:</p> <ol style="list-style-type: none"> Move the relevant KPI Breakdown to the Selected KPIs area. The Display short format name for KPI Breakdown option is enabled. Select the Display short format name for KPI Breakdown option and click OK. <p>The component display shows the short names of the KPI Breakdowns. A tooltip displays the full name of the KPI Breakdowns.</p>  <p>For details on KPI Breakdowns, see "Manage KPI Breakdowns" on page 123.</p>
Chart Type	<p>You can select one of the following options:</p> <p> When you want to display the history of each selected KPI in a separate chart. This option is automatically selected when you select more than two KPIs that do not have the same unit.</p> <p> When you want to display the history of all the selected KPIs in one chart. These KPIs must have the same unit. If more than two of the KPIs you selected do not have the same unit, this option is disabled. You may select this option for up to two KPIs with different units (in this case the chart includes two Y-axis, one on the left and one on the right, each one representing a different unit).</p>

UI Element	Description
Display Period	<p>Select the time period to be displayed in the component:</p> <ul style="list-style-type: none">• Current. The values of the KPIs whose calculation period has completed as well as, for KPIs whose calculations are still proceeding, the values from the previous period, depending on the time period selected in the Overtime Period list.• <Longest_period>. Each KPI has its own period (as configured in the Configuration details tab in the Studio). When you move KPIs from the Available KPIs to the Selected KPIs area in the filter, the longest period for all the selected KPIs is displayed as an additional option near the Display Period field. <p>For example if one of the selected KPI's period is Weekly and another is Yearly, the Display Period field lists: Current, Yearly, and Last Closed.</p> <p>When you select the <Longest_period> another field opens on the right. It lists only the corresponding periods when KPI's values, statuses, and scores were calculated by the engine. For example, if you select Quarterly, and the engine did not calculate the value of any KPI with the Quarterly period during the first and second quarters of 2008, these periods are not listed in the second field of the Display Period field. This list is independent from the selected KPIs.</p> <ul style="list-style-type: none">• Last Closed. The values of only the KPIs whose calculation period has completed for the time period selected in the Overtime Period list.

UI Element	Description
Overtime Period	<p>Select one of the following options:</p> <ul style="list-style-type: none">• Half a year to date. The report's display period starts 6 months prior to the current date.• Year to date. The report's display period starts 1 year prior to the current date.• 2 years to date. The report's display period starts 2 years prior to the current date.• 3 years to date. The report's display period starts 3 years prior to the current date. <p>Note:</p> <ul style="list-style-type: none">• The leftmost point on the X-axis (beginning of the report's time frame) corresponds to the first day of the Overtime Period from the last date of the period selected in the Display Period field. For example, if you select the 4th Quarter of 2010 in the Display Period field, and 2 years to date in the Overtime Period field, the rightmost point in the X-axis is the end of the 4th Quarter of 2010 (December 31st, 2010), and the leftmost point is the last day of the 4th Quarter of 2008 (December 31st, 2008).• Each point in the chart between the two end points represents the end of a Quarter between December 31st, 2008, and December 31st, 2010.• The rightmost point on the X-axis (end of the report's time frame) corresponds to the last day of the period selected in the Display Period field.• If you are displaying the Historical View component for one KPI only and that KPI has no data at the beginning of the selected time frame, the leftmost point on the X-axis corresponds to the first day the KPI has data.• If the report includes more than one chart, the X-axis spans the whole selected time frame.


Add a KPI View Component to a Page

Dashboard is provided with default components. The default components are located in the Component Gallery, together with any external components you have added.

The KPI View component displays the list of selected KPIs and their value, trend, and status for the measurement period in bar or gauge format.

To access:

You can view the report in the relevant page in the Dashboard.

Click the **Configure Component**  button in the component to display the component filter.




Learn More

All the time periods used in the component are periods of the fiscal year (For example, the end of the fiscal year depends on the fiscal year you have set at the system level).

Tasks

Add a Component to a Dashboard Page

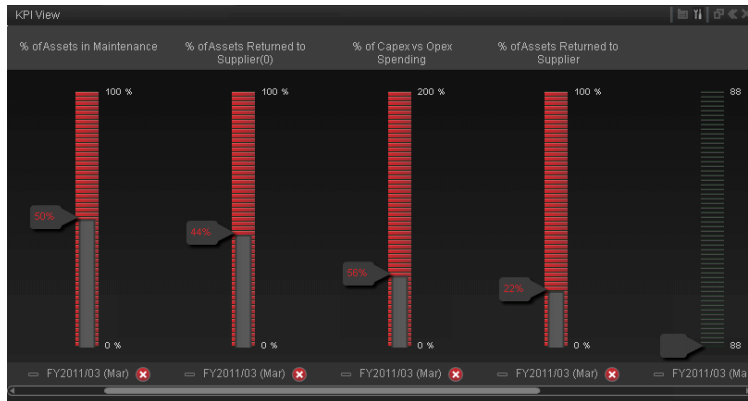
To add a component to a page that is already formatted:

1. In the Executive Dashboard, select the relevant page (click the **Page Gallery**  button if the page you want does not already appear in the Dashboard).
2. Click the **Components**  button.
3. In the Component Gallery page that opens, double-click the component to place it in the layout area, or select the component and drag it to an area on the page, and close the Component Gallery page. For user interface details, see ["Manage Component Categories" on page 173](#).
 - If the target area is hidden by the Component Gallery dialog box, click the Component Gallery dialog box title bar and drag it to another location on your screen.
 - If you are dragging a new component to a target area that already has a component defined, drag the new component to the title bar of the target area, and not to the part of the component that is colored white.
4. In the component, click the **Configure Component**  button:
5. In the component Filter dialog box that opens, select the information you want to display and click **OK**.
6. The component displays the required information.

For more information, see ["Configure a Page Layout" on page 155](#).

UI Description

KPI View Component



Component Toolbar








User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

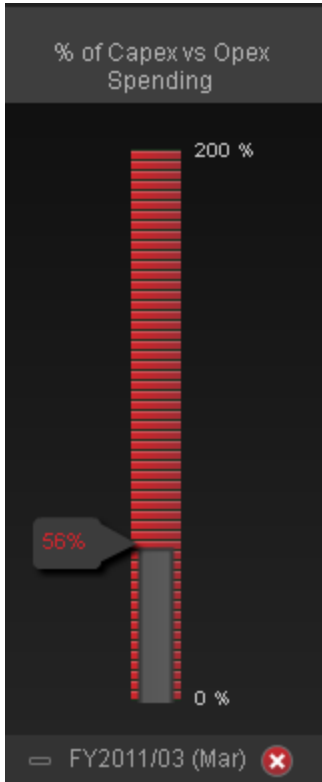
UI Element	Description
	Component Menu. Opens a menu where you can select: <ul style="list-style-type: none"> Preferences. Depending on the component you are currently configuring, opens the <component_name> Preferences dialog box where you can change the name of the component in the page by changing the name in the Name field and clicking OK. Wiring. Depending on the component you are currently configuring, opens the Wiring dialog box where you can wire the current component to other components. For details, see "Set Up Wiring Between Components" on page 273. Help. Opens the online documentation page relevant to the component you are currently configuring.
	Configure Component. Opens the Configure Component dialog box for the relevant component. For details, see "KPI View - Configure Component Dialog Box" on page 202 .
	Open in a new window. Opens the component in a new window.
	Collapse component. Collapses the component. To expand the collapsed component, click the button on the collapsed component.
	Remove Component. Removes the component from the page.








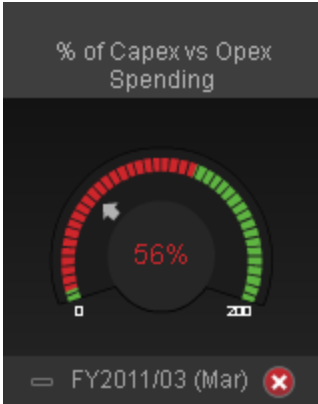
Component Contents

Depending on the configuration you selected in the KPI View - Configure Component dialog box, the KPI View displays a bar or a gauge for each selected KPI.

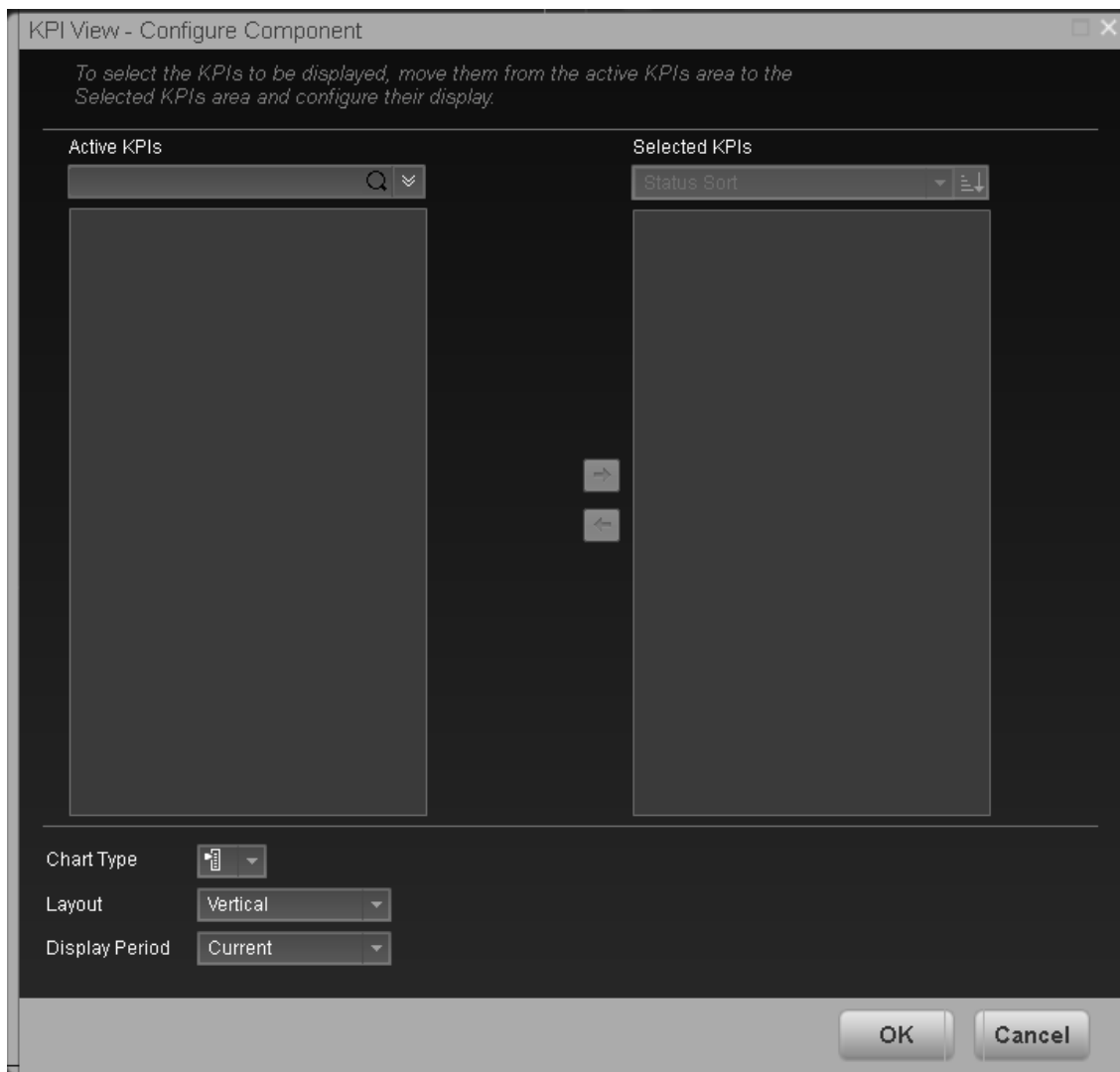
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
<bars>	<p>The bar displays for each KPI:</p> <ul style="list-style-type: none"> • The title (above the bar for vertical layout or to the left of the bar for a horizontal layout) is the name of the KPI. Double-click the title to open the Explorer tab filtered for the selected KPI. •  (or  when a new annotation has been added to the KPI) Move the cursor above the icon to display the KPI tooltip that provides detailed information about the KPI and access to the Explorer in the context of the KPI. For details, see "Display More Information About a Specific Objective or KPI" on page 304. • The value (at the top of the colored bar for vertical layout or to the right of the bar for a horizontal layout) represent the highest threshold value. • The value (at the bottom of the colored bar for vertical layout or to the left of the bar for a horizontal layout) represent the lowest threshold value. • The colors of the small bars represent the thresholds defined for the KPI. • The arrow indicates the value of the KPI with its unit. The color of the text corresponds to the KPI status. • The text (at the bottom of the bar for vertical layout or under the KPI name on the left of the bar for a horizontal layout) indicates the display period of the KPI. • The icon to the left of the display period indicates the trend  calculated over the display period. • The icon to the left of the display period indicates the status of the KPI during the display period: <ul style="list-style-type: none"> ▪  indicates that the status is Good. ▪  indicates that the status is Warning. ▪  indicates that the status is Error. ▪  indicates that the status was not calculated or that there was an error in the calculation.

UI Element	Description						
	 <p>The chart displays the percentage of Capital Expenditure (Capex) versus Operating Expenditure (Opex) spending. The red bar represents the total spending at 200%, while the grey bar represents a specific category at 56%. The chart includes a filter for the period 'FY2011/03 (Mar)'.</p> <table border="1"><thead><tr><th>Category</th><th>Percentage</th></tr></thead><tbody><tr><td>Capex</td><td>200 %</td></tr><tr><td>Opex</td><td>56 %</td></tr></tbody></table>	Category	Percentage	Capex	200 %	Opex	56 %
Category	Percentage						
Capex	200 %						
Opex	56 %						






UI Element	Description
<Gauge>	<p>The bar displays for each KPI:</p> <ul style="list-style-type: none"> The title (above the gauge for vertical layout or to the left of the gauge for a horizontal layout) is the name of the KPI. Double-click the title to open the Explorer tab filtered for the selected KPI.  (or  when a new annotation has been added to the KPI) Move the cursor above the icon to display the KPI tooltip that provides detailed information about the KPI and access to the Explorer in the context of the KPI. For details, see "Display More Information About a Specific Objective or KPI" on page 304. The value (to the right of the gauge) represent the highest threshold value. The value (to the left of the gauge) represent the lowest threshold value. The colors of the small bars represent the thresholds defined for the KPI. The arrow indicates the value. The value in the center of the gauge displays the value of the KPI with its unit. The color of the text corresponds to the KPI status. The text (at the bottom of the gauge for vertical layout or under the KPI name on the left of the gauge for a horizontal layout) indicates the display period of the KPI. The icon to the left of the display period indicates the trend   calculated over the display period. The icon to the left of the display period indicates the status of the KPI during the display period: <ul style="list-style-type: none">  indicates that the status is Good.  indicates that the status is Warning.  indicates that the status is Error. 

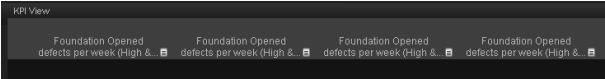
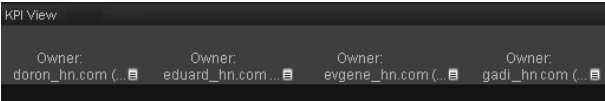
KPI View - Configure Component Dialog Box


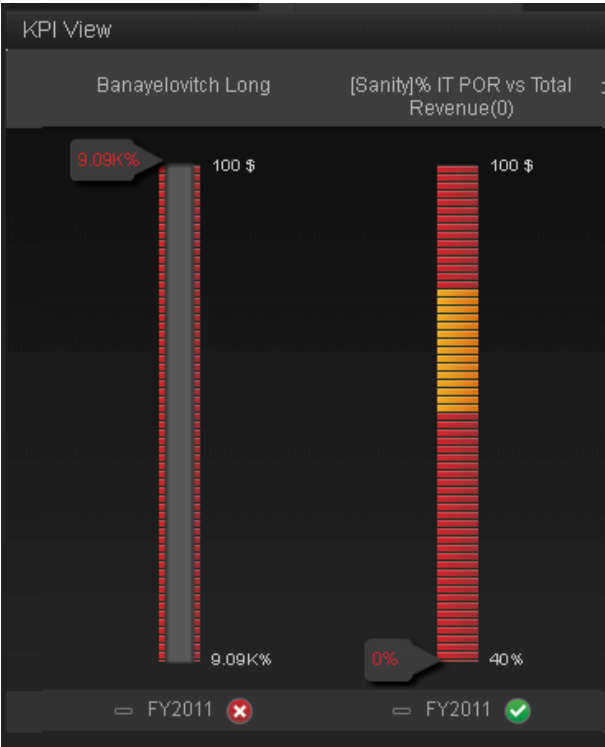

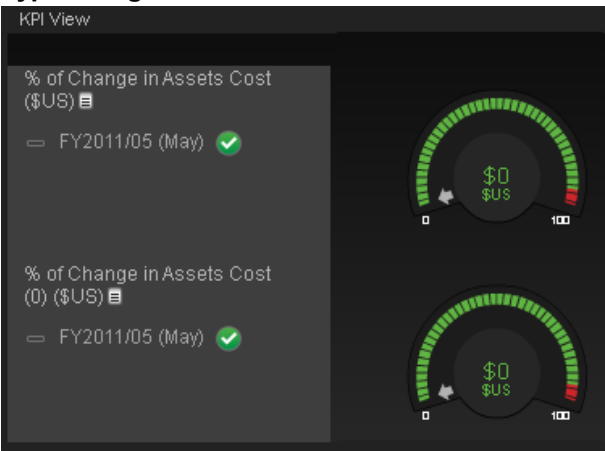


User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
<Search>	<p>Enter the relevant string to display, in the tree in the Active KPIs box, only the KPIs whose name includes the string.</p> <p>In addition, the child KPIs of the filtered KPIs are also listed even when the child KPIs names do not include the string.</p>

UI Element	Description
	<p>Advanced search. Opens additional fields to help you refine the component's filter:</p> <ul style="list-style-type: none"> • Status: Select one of the All, Good, Warning, or Error values to display only the KPIs with the selected status, in the Active KPIs area. • Type: Select: <ul style="list-style-type: none"> ▪ KPIs. To display Only the KPIs with the selected status. ▪ Objectives. The Objectives and those of their KPIs that have the selected status.
Active KPIs	<p>The left-side box lists all the active Scorecards, Perspectives, Objectives, and their KPIs, and KPI Breakdowns listed in the Active KPIs pane in the Studio. The KPIs are highlighted.</p> <p>To select/unselect the elements you want to display in the report, use the right and left arrows  to move the elements from the Available KPIs to the Selected KPIs and back. You can also double-click the element to move it from one box to the other.</p>
Selected KPIs	<p>The right-side box lists all the selected KPIs that you want to display in the KPI Overtime report.</p> <p>To select/unselect the elements you want to display in the report, use the right and left arrows  to move the elements from the Available KPIs to the Selected KPIs and back. You can also double-click the element to move it from one box to the other.</p>
<Status sort>	<p>Select :</p> <ul style="list-style-type: none"> • Alphabetical sort to sort the selected KPIs in ascending alphabetical order. You can then click  to select the ascending or descending order. • Status sort to sort the selected KPIs according to their status (KPIs with the Error status, followed by KPIs with a Warning status, and then KPIs with a Good status).
	<p>Click to display the KPIs in ascending or descending alphabetical order.</p>

UI Element	Description
Display short format name for KPI Breakdown	<p>Note:</p> <ul style="list-style-type: none">You can select this option only when KPI Breakdowns have been defined and you have moved at least one of them to the Selected KPIs list.The name of a KPI Breakdown can be long because it is composed of the name of the KPI followed by the names of the entity and dimension you selected when you created it. <p>In the Dashboard components, this can cause problems because the complete name of the KPI Breakdown is not displayed.</p>  <p>To display, in the component, only the name of the entity and dimension instead of the complete name of the KPI Breakdown:</p> <ol style="list-style-type: none">Move the relevant KPI Breakdown to the Selected KPIs area. The Display short format name for KPI Breakdown option is enabled.Select the Display short format name for KPI Breakdown option and click OK. <p>The component display shows the short names of the KPI Breakdowns. A tooltip displays the full name of the KPI Breakdowns.</p>  <p>For details on KPI Breakdowns, see "Manage KPI Breakdowns" on page 123.</p>

UI Element	Description
Chart Type	<p>Select one of the following options:</p> <ul style="list-style-type: none">  Bar. The display is a bar, layed out horizontally, or vertically, depending on your selection in the Layout field. <p>For example, when you select Layout=Vertical and Chart Type=Bar, the result is as follows:</p>   Gauge. The display is a set of gauges, layed out horizontally, or vertically, depending on your selection in the Layout field. <p>For example, when you select Layout=Horizontal and Chart Type=Gauge, the result is as follows:</p> 

UI Element	Description
Layout	<p>Select:</p> <ul style="list-style-type: none">• Vertical. The layout of the results is vertical (KPI name above graph).• Horizontal. The layout of the results is horizontal (KPI name on the left of the graph).
Display Period	<p>Select the time period to be displayed in the component:</p> <ul style="list-style-type: none">• Current. The values of the KPIs whose calculation period has completed as well as, for KPIs whose calculations are still proceeding, the values from the previous period, depending on the time period selected in the Overtime Period list.• <Longest_period>. Each KPI has its own period (as configured in the Configuration details tab in the Studio). When you move KPIs from the Available KPIs to the Selected KPIs area in the filter, the longest period for all the selected KPIs is displayed as an additional option near the Display Period field. For example if one of the selected KPI's period is Weekly and another is Yearly, the Display Period field lists: Current, Yearly, and Last Closed. When you select the <Longest_period> another field opens on the right. It lists only the periods when the engine performed calculations.. For example, if you select Quarterly, and the engine did not calculate the value of any KPI with the Quarterly period during the first and second quarters of 2008, these periods are not listed in the second field of the Display Period field.• Last Closed. The values of only the KPIs whose calculation period has completed for the time period selected in the Overtime Period list.


Add a KPI List Component to a Page

Dashboard is provided with default components. The default components are located in the Component Gallery, together with any external components you have added.

The KPI List component displays the list of selected KPIs and their value, trend, and status for the measurement period.

To access:

You can view the report in the relevant page in the Dashboard.

Click the **Configure Component**  button in the component to display the component filter.




Learn More

All the time periods used in the component are periods of the fiscal year (For example, the end of the fiscal year depends on the fiscal year you have set at the system level).

Tasks

Add a Component to a Dashboard Page

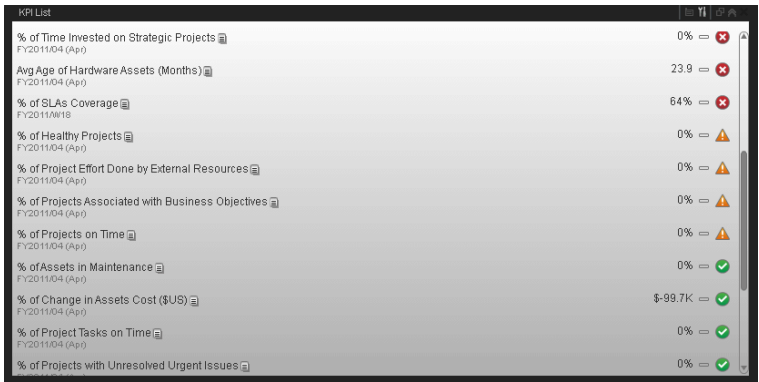
To add a component to a page that is already formatted:

1. In the Executive Dashboard, select the relevant page (click the **Page Gallery**  button if the page you want does not already appear in the Dashboard).
2. Click the **Components**  button.
3. In the Component Gallery page that opens, double-click the component to place it in the layout area, or select the component and drag it to an area on the page, and close the Component Gallery page. For user interface details, see "[Manage Component Categories](#)" on page 173.
 - If the target area is hidden by the Component Gallery dialog box, click the Component Gallery dialog box title bar and drag it to another location on your screen.
 - If you are dragging a new component to a target area that already has a component defined, drag the new component to the title bar of the target area, and not to the part of the component that is colored white.
4. In the component, click the **Configure Component**  button:
5. In the component Filter dialog box that opens, select the information you want to display and click **OK**.
6. The component displays the required information.

For more information, see "[Configure a Page Layout](#)" on page 155.










UI Description

KPI List Component











Component Toolbar

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

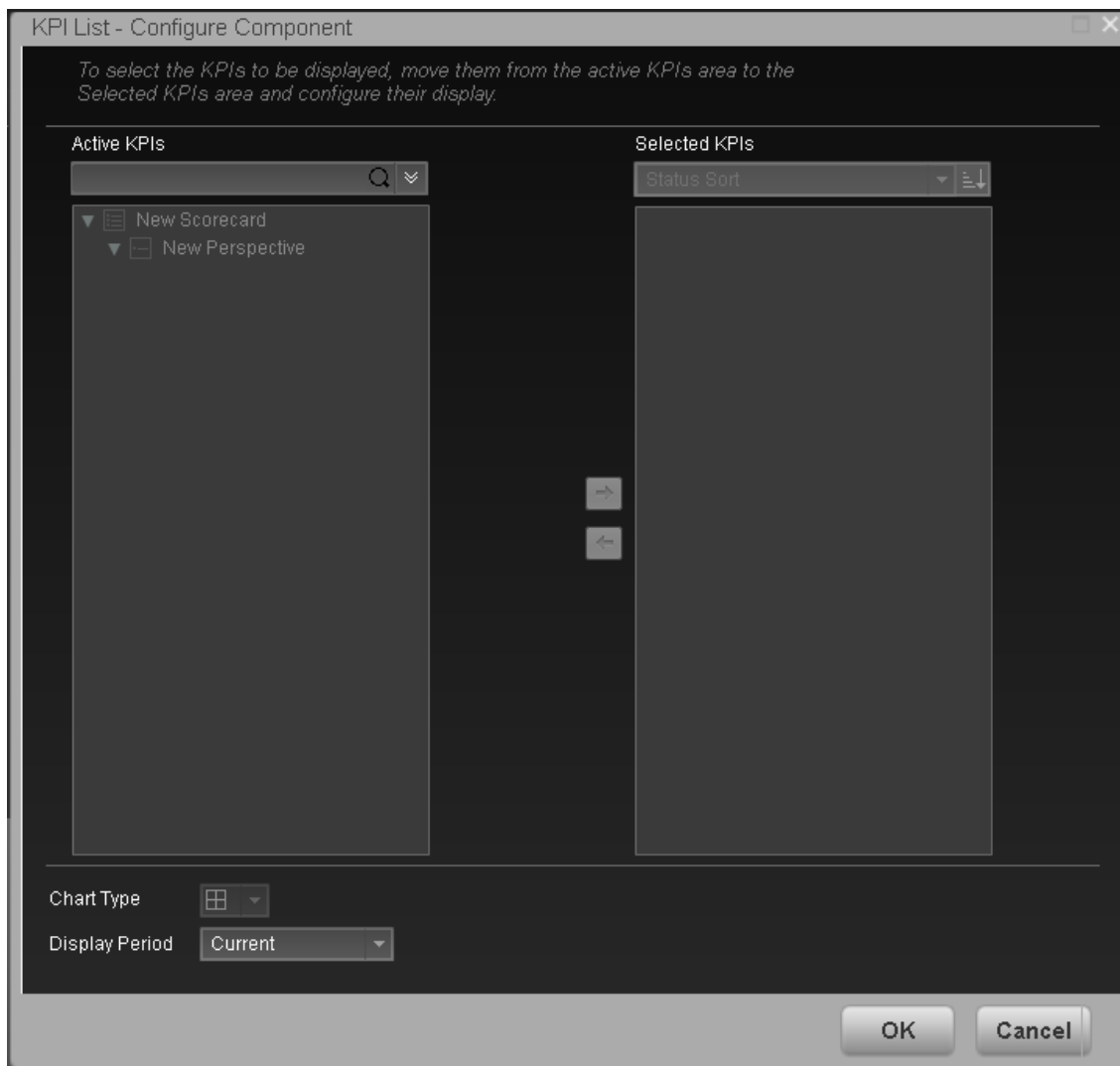
UI Element	Description
	Component Menu. Opens a menu where you can select:  Preferences. Depending on the component you are current configuring, opens the <component_name> Preferences dialog box where you can change the name of the component in the page by changing the name in the Name field and clicking OK .  Wiring. Depending on the component you are currently configuring, opens the Wiring dialog box where you can wire the current component to other components. For details, see "Set Up Wiring Between Components" on page 273 .  Help. Opens the online documentation page relevant to the component you are currently configuring.
	Configure Component. Opens the Configure Component dialog box for the relevant component. For details, see "KPI List - Configure Component Dialog Box" on page 210 .
	Open in a new window. Opens the component in a new window.
	Collapse. Collapses the component. To expand the collapsed component, click the Expand  button on the collapsed component.
	Remove Component. Removes the component from the page.

<Component Contents>

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):









UI Element	Description
<Component contents>	<p>The following information is displayed for each KPI, from left to right:</p>  <ul style="list-style-type: none"> The name of the KPI. Double-click the name to open the Explorer tab filtered for the selected element.  (or  when a new annotation has been added to the KPI) Move the cursor above the icon to display the KPI tooltip that provides detailed information about the KPI and access to the Explorer in the context of the KPI. For details, see "Display More Information About a Specific Objective or KPI" on page 304. The value of the KPI.  The trend icon indicates the trend of the KPI value calculated over the display period. The current period or the last period depending on your selection in Display Period in the KPI List - Configure Component Dialog Box. For details, see "KPI List Component" on previous page. The status of the KPI during the display period. It can be: <ul style="list-style-type: none">  indicates that the status is Good.  indicates that the status is Warning.  indicates that the status is Error.  indicates that the status is No data, meaning that the status was not calculated or that there was an error in the calculation. <p>Note: Move the mouse over the status icon to display the score.</p>
<Tooltip>	<p>Move the mouse over the name of a KPI in the list to display a tooltip that include detailed information about the KPI. For details, see "Display More Information About a Specific Objective or KPI" on page 304.</p>

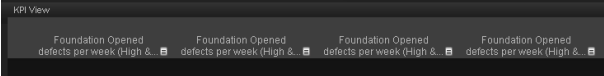
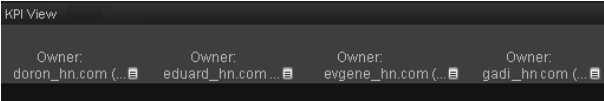

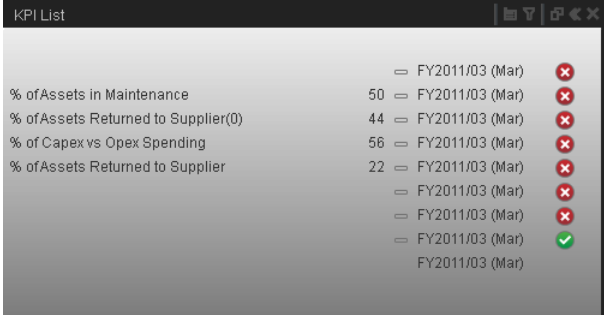
KPI List - Configure Component Dialog Box



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
<Search>	<p>Enter the relevant string to display, in the tree, only the KPIs whose name includes the string.</p> <p>In addition, the child KPIs of the filtered KPIs are also listed even when the child KPIs names do not include the string.</p>

UI Element	Description
	<p>Advanced search. Opens additional fields to help you refine the component's filter:</p> <ul style="list-style-type: none"> • Status: Select one of the All, Good, Warning, or Error values to display only the KPIs with the selected status, in the Active KPIs area. • Type: Select: <ul style="list-style-type: none"> ▪ KPIs. To display only the KPIs with the selected status. ▪ Objectives. To display only the Objectives and those of their KPIs that have the selected status.
Active KPIs	<p>The left-side box lists all the active Scorecards, Perspectives, Objectives, and their KPIs, and KPI Breakdowns listed in the Active KPIs pane in the Studio. The KPIs are highlighted.</p> <p>To select/unselect the elements you want to display in the report, use the right and left arrows   to move the elements from the Available KPIs to the Selected KPIs and back. You can also double-click the element to move it from one box to the other.</p>
Selected KPIs	<p>The right-side box lists all the selected KPIs that you want to display in the component.</p> <p>To select/unselect the elements you want to display in the report, use the right and left arrows   to move the elements from the Available KPIs to the Selected KPIs and back. You can also double-click the element to move it from one box to the other.</p>
<Status sort>	<p>Select :</p> <ul style="list-style-type: none"> • Alphabetical sort to sort the selected KPIs in ascending alphabetical order. You can then click   to select the ascending or descending order. • Status sort to sort the selected KPIs according to their status (KPIs with the Error status, followed by KPIs with a Warning status, and then KPIs with a Good status).
	Click to display the KPIs in ascending or descending alphabetical order.

UI Element	Description
Display short format name for KPI Breakdown	<p>Note:</p> <ul style="list-style-type: none">You can select this option only when KPI Breakdowns have been defined and you have moved at least one of them to the Selected KPIs list.The name of a KPI Breakdown can be long because it is composed of the name of the KPI followed by the names of the entity and dimension you selected when you created it. <p>In the Dashboard components, this can cause problems because the complete name of the KPI Breakdown is not displayed.</p>  <p>To display, in the component, only the name of the entity and dimension instead of the complete name of the KPI Breakdown:</p> <ol style="list-style-type: none">Move the relevant KPI Breakdown to the Selected KPIs area. The Display short format name for KPI Breakdown option is enabled.Select the Display short format name for KPI Breakdown option and click OK. <p>The component display shows the short names of the KPI Breakdowns. A tooltip displays the full name of the KPI Breakdowns.</p>  <p>For details on KPI Breakdowns, see "Manage KPI Breakdowns" on page 123.</p>
Chart Type	<p>One option is available</p> <ul style="list-style-type: none"> List. The display is list of selected KPIs with their data, as follows: 

UI Element	Description
Display Period	<p>Select the time period to be displayed in the component:</p> <ul style="list-style-type: none">• Current. The values of the KPIs whose calculation period has completed as well as, for KPIs whose calculations are still proceeding, the values from the previous period, depending on the time period selected in the Overtime Period list.• <Longest_period>. Each KPI has its own period (as configured in the Configuration details tab in the Studio). When you move KPIs from the Available KPIs to the Selected KPIs area in the filter, the longest period for all the selected KPIs is displayed as an additional option near the Display Period field. For example if one of the selected KPI's period is Weekly and another is Yearly, the Display Period field lists: Current, Yearly, and Last Closed. When you select the <Longest_period> another field opens on the right. It lists only the corresponding periods when the engine performed calculations. For example, if you select Quarterly, and the engine did not calculate the value of any KPI with the Quarterly period during the first and second quarters of 2008, these periods are not listed in the second field of the Display Period field.• Last Closed. The values of only the KPIs whose calculation period has completed for the time period selected in the Overtime Period list.


Add a KPI Rolodex Component to a Page

Dashboard is provided with default components. The default components are located in the Component Gallery, together with any external components you have added.

The KPI Rolodex component displays the selected KPIs and their value, trend, and status for the measurement period in gauge format.

To access:

You can view the report in the relevant page in the Dashboard.

Click the **Configure Component**  button in the component to display the component filter.




Learn More

All the time periods used in the component are periods of the fiscal year (For example, the end of the fiscal year depends on the fiscal year you have set at the system level).

Tasks

Add a Component to a Dashboard Page

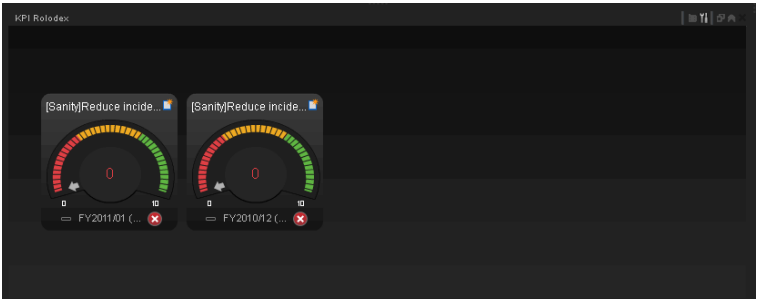
To add a component to a page that is already formatted:

1. In the Executive Dashboard, select the relevant page (click the **Page Gallery**  button if the page you want does not already appear in the Dashboard).
2. Click the **Components**  button.
3. In the Component Gallery page that opens, double-click the component to place it in the layout area, or select the component and drag it to an area on the page, and close the Component Gallery page. For user interface details, see "[Manage Component Categories](#)" on page 173.
 - If the target area is hidden by the Component Gallery dialog box, click the Component Gallery dialog box title bar and drag it to another location on your screen.
 - If you are dragging a new component to a target area that already has a component defined, drag the new component to the title bar of the target area, and not to the part of the component that is colored white.
4. In the component, click the **Configure Component**  button:
5. In the component Filter dialog box that opens, select the information you want to display and click **OK**.
6. The component displays the required information.

For more information, see "[Configure a Page Layout](#)" on page 155.










UI Description

KPI Rolodex Component



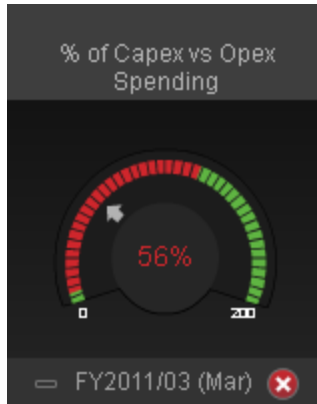
Component Toolbar

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):









UI Element	Description
	<p>Component Menu. Opens a menu where you can select:</p> <ul style="list-style-type: none"> Preferences. Depending on the component you are current configuring, opens the <component_name> Preferences dialog box where you can change the name of the component in the page by changing the name in the Name field and clicking OK. Wiring. Depending on the component you are currently configuring, opens the Wiring dialog box where you can wire the current component to other components. For details, see "Set Up Wiring Between Components" on page 273. Help. Opens the online documentation page relevant to the component you are currently configuring.
	<p>Configure Component. Opens the Configure Component dialog box for the relevant component. For details, see "KPI Rolodex - Configure Component Dialog Box" on page 218.</p>
	<p>Open in a new window. Opens the component in a new window.</p>
	<p>Collapse component. Collapses the component.</p> <p>To expand the collapsed component, click the  button on the collapsed component.</p>
	<p>Remove Component. Removes the component from the page.</p>

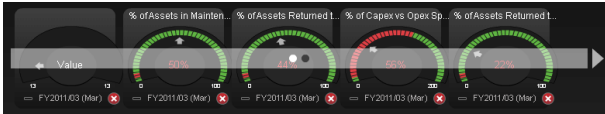
<Component Contents>

The component displays a gauge for each selected KPI. The order of the gauges in the component, correspond to the order of the KPIs in the Selected KPIs area in the KPI Rolodex - Configure Component dialog box. For details, see "[KPI Rolodex - Configure Component Dialog Box](#)" on page 218.

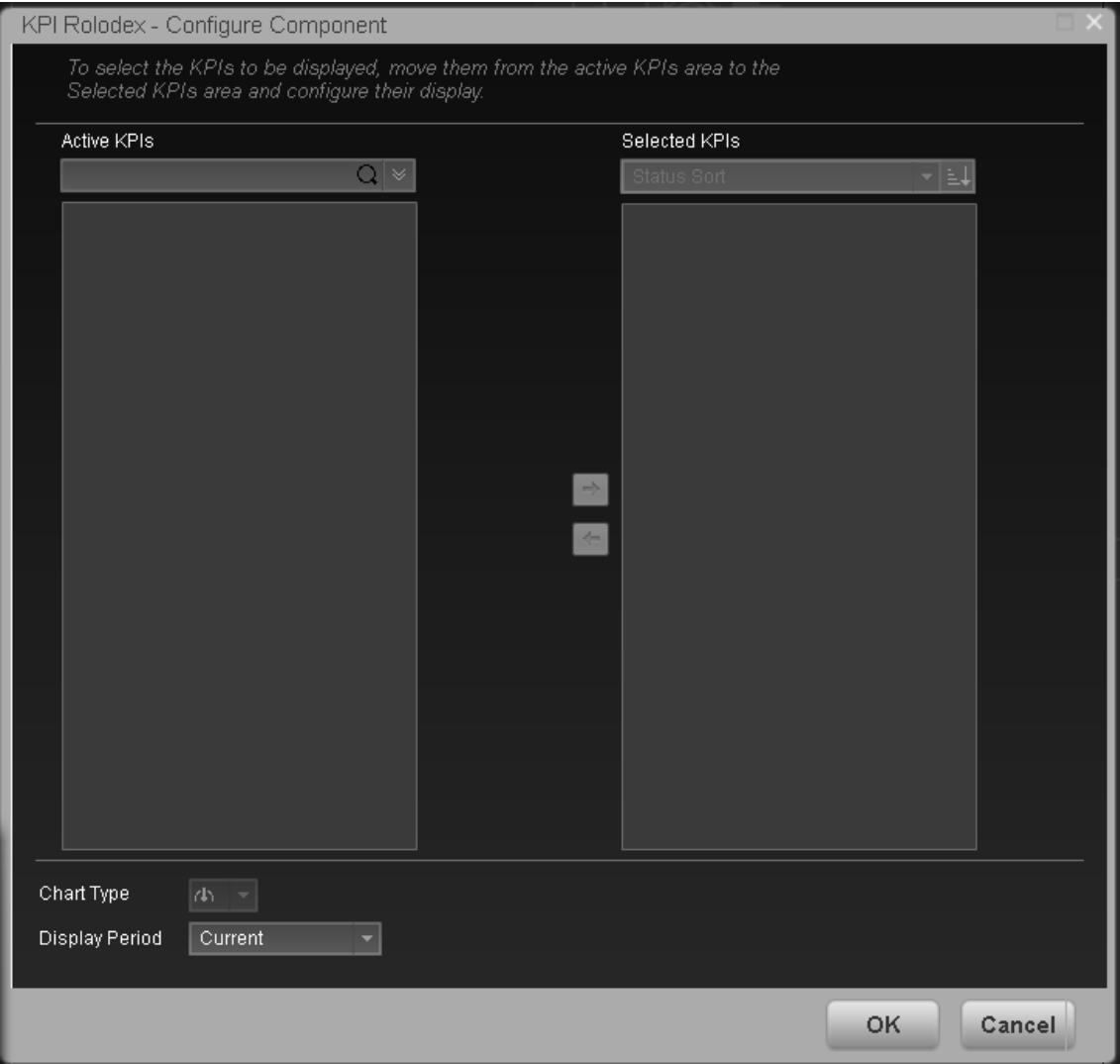


User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):







UI Element	Description
<Component contents>	<p>The component displays the following information:</p> <ul style="list-style-type: none"> The name of the KPI above the gauge. Double-click the name to open the Explorer tab filtered for the selected element.  (or  when a new annotation has been added to the KPI) Move the cursor above the icon to display the KPI tooltip that provides detailed information about the KPI and access to the Explorer in the context of the KPI. For details, see "Display More Information About a Specific Objective or KPI" on page 304. The value (to the right of the gauge) represent the highest threshold value. The value (to the left of the gauge) represent the lowest threshold value. The value in the center of the gauge displays the value of the KPI with its unit. The color of the text corresponds to the KPI status. The colors of the small bars represent the thresholds defined for the KPI. The arrow indicates the KPI value. The text at the bottom of the gauge indicates the display period of the KPI. The icon to the left of the display period indicates the trend  calculated over the display period. The icon to the left of the display period indicates the status of the KPI during the display period: <ul style="list-style-type: none">  indicates that the status is Good.  indicates that the status is Warning.  indicates that the status is Error.  indicates that status was not calculated or that there was an error in the calculation.
<Tooltip>	<p>Move the mouse over the name of a KPI to display a tooltip that include additional information about the KPI. For details, see "Display More Information About a Specific Objective or KPI" on page 304.</p>
	<p>Use the arrows to scroll between the "pages" of gauges. The width of the "page" or the number of gauges displayed on a "page" depend on the width of the component in the Dashboard.</p> <p>When you get to the leftmost page, the left arrow disappears. When you get to the rightmost page, the right arrow disappears.</p>

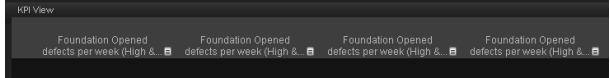
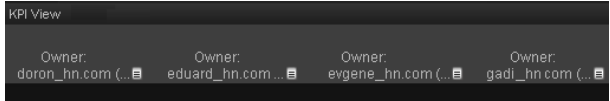

UI Element	Description
<Screen dot slider>	<p>When the Rolodex component includes more than one page, to see what screen or page is currently displayed, move the mouse over the arrow (right or left) to display the screen dot slider (a white ribbon with dots). The white dot indicates the page that is currently displayed (in the example, the first page) and the black dots indicate the number of other pages in the component (one black dot per page). The order of black and white dots indicates the location of the current page in the component.</p> 

KPI Rolodex - Configure Component Dialog Box



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
	<p>Enter the relevant string to display, in the tree, only the KPIs whose name includes the string.</p> <p>In addition, the child KPIs of the filtered KPIs are also listed even when the child KPIs names do not include the string.</p>
	<p>Advanced search. Opens additional fields to help you refine the component's filter:</p> <ul style="list-style-type: none"> • Status: Select one of the All, Good, Warning, or Error values to display only the KPIs with the selected status, in the Active KPIs area. • Type: Select either KPIs or Objectives to display: <ul style="list-style-type: none"> ▪ Only the KPIs with the selected status. ▪ The Objectives and those of their KPIs that have the selected status.
Active KPIs	<p>The left-side box lists all the active Scorecards, Perspectives, Objectives, and their KPIs, and KPI Breakdowns listed in the Active KPIs pane in the Studio. The KPIs are highlighted.</p> <p>To select/unselect the elements you want to display in the report, use the right and left arrows  to move the elements from the Available KPIs to the Selected KPIs and back. You can also double-click the element to move it from one box to the other.</p>
Selected KPIs	<p>The right-side box lists all the selected KPIs that you want to display in the KPI Overtime report.</p> <p>To select/unselect the elements you want to display in the report, use the right and left arrows  to move the elements from the Available KPIs to the Selected KPIs and back. You can also double-click the element to move it from one box to the other.</p>
<Status sort>	<p>Select :</p> <ul style="list-style-type: none"> • Alphabetical sort to sort the selected KPIs in ascending alphabetical order. You can then click  to select the ascending or descending order. • Status sort to sort the selected KPIs according to their status (KPIs with the Error status, followed by KPIs with a Warning status, and then KPIs with a Good status).
	Click to display the KPIs in ascending or descending alphabetical order.

UI Element	Description
Display short format name for KPI Breakdown	<p>Note:</p> <ul style="list-style-type: none"> You can select this option only when KPI Breakdowns have been defined and you have moved at least one of them to the Selected KPIs list. The name of a KPI Breakdown can be long because it is composed of the name of the KPI followed by the names of the entity and dimension you selected when you created it. <p>In the Dashboard components, this can cause problems because the complete name of the KPI Breakdown is not displayed.</p>  <p>To display, in the component, only the name of the entity and dimension instead of the complete name of the KPI Breakdown:</p> <ol style="list-style-type: none"> 1. Move the relevant KPI Breakdown to the Selected KPIs area. The Display short format name for KPI Breakdown option is enabled. 2. Select the Display short format name for KPI Breakdown option and click OK. <p>The component display shows the short names of the KPI Breakdowns. A tooltip displays the full name of the KPI Breakdowns.</p>  <p>For details on KPI Breakdowns, see "Manage KPI Breakdowns" on page 123.</p>
Chart Type	 Gauge. The display is a set of gauges, layed out horizontally.

UI Element	Description
Display Period	<p>Select the time period to be displayed in the component:</p> <ul style="list-style-type: none">• Current. The values of the KPIs whose calculation period has completed as well as, for KPIs whose calculations are still proceeding, the values from the previous period, depending on the time period selected in the Overtime Period list.• <Longest_period>. Each KPI has its own period (as configured in the Configuration details tab in the Studio). When you move KPIs from the Available KPIs to the Selected KPIs area in the filter, the longest period for all the selected KPIs is displayed as an additional option near the Display Period field. For example if one of the selected KPI's period is Weekly and another is Yearly, the Display Period field lists: Current, Yearly, and Last Closed. When you select the <Longest_period> another field opens on the right. It lists only the corresponding periods when the engine performed calculations. For example, if you select Quarterly, and the engine did not calculate the value of any KPI with the Quarterly period during the first and second quarters of 2008, these periods are not listed in the second field of the Display Period field.• Last Closed. The values of only the KPIs whose calculation period has completed for the time period selected in the Overtime Period list.


Add a Page Filter Component to a Page

Dashboard is provided with default components. The default components are located in the Component Gallery, together with any external components you have added.

The Page Filter component enables the Executive User to filter the KPI/Metric Breakdowns displayed in the components of the page.

To access:

You can view the component in the relevant page in the Dashboard.

Click the **Configure Component**  button in the component to display the relevant Component Configuration dialog box.

Learn More

Wiring

The Page Filter component is automatically wired with the Dimension Scoring, Historical Metric View, Historical View, KPI View, KPI List, KPI Rolodex, and Pie Chart components when these components are on the same Dashboard page. For additional information about wiring, see ["Set Up Wiring Between Components" on page 273](#).

Important Information

All the time periods used in the component are periods of the fiscal year (For example, the end of the fiscal year depends on the fiscal year you have set at the system level).

Tip: If you want to view a page filtered by specific dimensions every time you open it, even if other users have viewed the page and selected other dimensions, proceed as follows:

1. Create the page and include a Page Filter component with the relevant Breakdowns.
2. Save the page.

Each user opens the page for the first time, selects the relevant dimensions, and collapse the component. The user leaves the page without saving it.


When the user reopens the page, the selected dimensions are restored for that user even if other users entered the page and selected different dimensions.



If needed, the user can then expand the component and change the selection.

Tasks

Add a Component to a Dashboard Page

To add a component to a page that is already formatted:

1. In the Executive Dashboard, select the relevant page (click the **Page Gallery**  button if the page you want does not already appear in the Dashboard).

2. Click the **Components**  button.
3. In the Component Gallery page that opens, double-click the component to place it in the layout area, or select the component and drag it to an area on the page, and close the Component Gallery page. For user interface details, see ["Manage Component Categories" on page 173](#).
 - If the target area is hidden by the Component Gallery dialog box, click the Component Gallery dialog box title bar and drag it to another location on your screen.
 - If you are dragging a new component to a target area that already has a component defined, drag the new component to the title bar of the target area, and not to the part of the component that is colored white.
4. In the component, click the **Configure Component**  button:
5. In the component Filter dialog box that opens, select the information you want to display and click **OK**.
6. The component displays the required information.

For more information, see ["Configure a Page Layout" on page 155](#).



Add the Component to a Dashboard Page


In this section, you will learn how to filter the different Dashboard components and how to present the filtered data in a Dashboard page.

You have 2 main options to filter the data presented in the components:

- You can filter each component separately by clicking the Configure Component icon and setting the component configuration according to the support settings.
- You can use the Page Filter component. When you use this component, each selection you make in the Page filter, impacts all the other components in the page.

To filter using the Page Filter component:

1. In the Executive Dashboard, select the relevant page (click the **Page Gallery**  button if the page you want does not already appear in the Dashboard).
2. Click the **Components**  button.
3. In the Component Gallery dialog box that opens, double-click the Page Filter component to place it in the layout area, or select the component and drag it to an area on the page, and close the Component Gallery page. For details, see ["Component Gallery Dialog Box" on page 174](#).
 - If the target area is hidden by the Component Gallery dialog box, click the Component Gallery dialog box title bar and drag it to another location on your screen.
 - If you are dragging a new component to a target area that already has a component defined, drag the new component to the title bar of the target area, and not to the part of the component that is colored white.
4. Close the Component Gallery dialog box.
5. The basic configuration of the Page Filter component includes the **Period** filter. Select a time period and click the **Filter** button and all the data of the components located on the same page, is filtered automatically based on the selection you made.

6. You can add additional fields to the component and filter the page according to them. To do so, click the **Configure Component**  icon. A list of available dimensions appears in the Available dimensions pane. Those dimensions are created based on the KPI or Metric Breakdown configurations you set earlier in the Studio.
7. Select one or more dimensions and move them to the **Selected dimensions** area.
8. Click **OK**. The new dimensions appear in the Page Filter and you or the Executive user can use them to refine, in addition to the time period, the filtering of the other components of the page.
9. To clean the filter selection, click the **Clean filter** option.
10. Once you filter the page according to your needs, click **Save**.

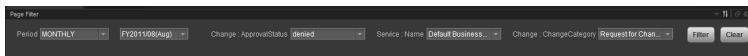
Movie: To display the movie, open the XS application in Internet Explorer 9 or Chrome, click **Help** in the top right corner of the application main page and select the **Movies** option. Select the relevant movie. For details, see [Movies](#).

UI Description

Page Filter Component (Display) Dialog Box





The component displays the period you can select, and the KPI/Metric Breakdowns you can select to filter the other components of the page.






Tip: It is important to have configured KPI Breakdowns or Metric Breakdowns before you add the Page Filter component to a Dashboard page. For details, see ["Manage KPI Breakdowns" on page 123](#) or ["Manage Metric Breakdowns" on page 130](#).



Component Toolbar

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
	<p>Component Menu. Opens a menu where you can select:</p> <ul style="list-style-type: none">  Preferences. Depending on the component you are currently configuring, opens the <component_name> Preferences dialog box where you can change the name of the component in the page by changing the name in the Name field and clicking OK.  Wiring. The wiring is automatically set up between the Page Filter component and KPI or Metric-related components. For details, see "Learn More" on page 222.  Help. Opens the online documentation page relevant to the component you are currently configuring.

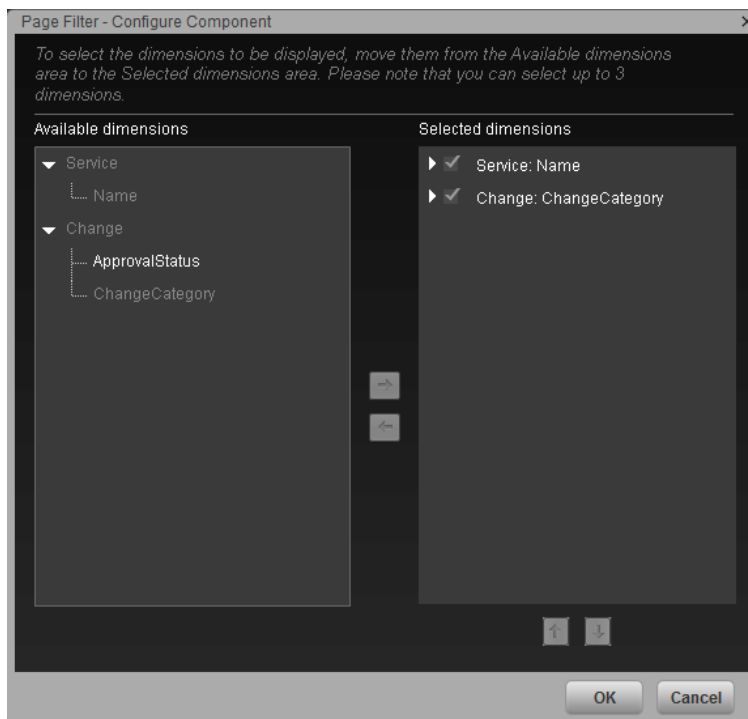
UI Element	Description
	Configure Component. Opens the Configure Component dialog box for the relevant component.
	Open in a new window. Opens the component in a new window.
	Collapse component. Collapses the component. To expand the collapsed component, click the  button on the collapsed component.
	Remove Component. Removes the component from the page.

Component Contents

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

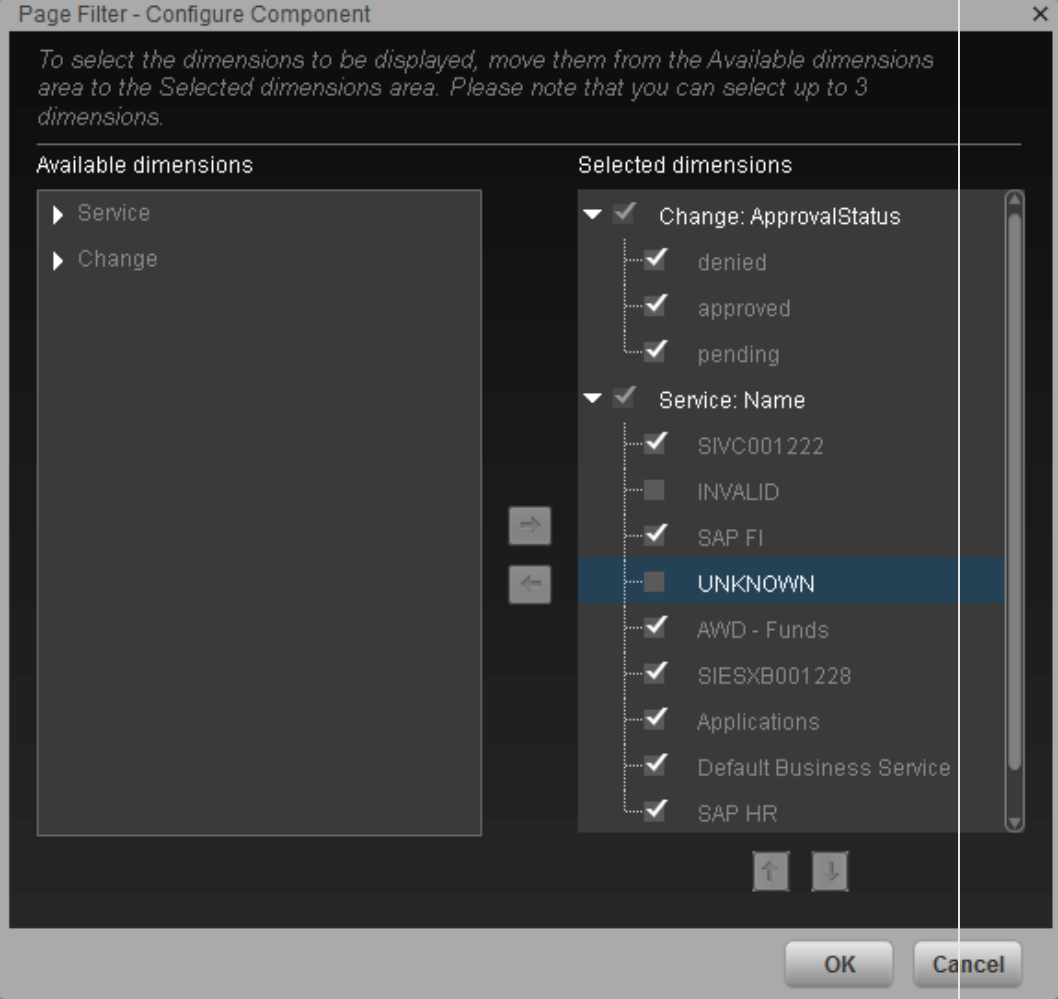
UI Element	Description
Period	<p>Select the display period type. It can be Last Closed, Current, Weekly, Quarterly, Monthly, or Yearly.</p> <p>The values that are displayed correspond to the periods used when the engine runs calculations. If the engine has not yet run calculations this field is empty.</p> <p>Once you select one of the Weekly, Quarterly, Monthly, or Yearly display period types, another field opens where you can select the specific period corresponding to that type.</p> <p>For example: if you select Quarterly, you can select FY2011/Q1, FY2011/Q2, FY2011/Q3, or FY2011/Q4.</p> <p>The period you select replaces the display period of all the Dashboard page components wired to the Page Filter component and causes a refresh of the relevant components on the page when you click Filter.</p>
<entity:dimension>	<p>Each entity and dimension that you selected in the Page Filter - Configure Component Dialog Box is displayed in the Page Filter and the dropdown box displays the list of values that you selected for each entity and dimension.</p> <p>When a large number of entity:dimensions are selected, a scrollbar is automatically displayed.</p> <p>The values of the entity:dimension you select replace the entity and dimensions you selected for all the Dashboard page components wired to the Page Filter component and causes a refresh for the relevant elements in the components when you click Filter.</p>
Filter	Click to filter the page wired components with the selections you made in the Page Filter.
Clear	Click to clear the selections you made.


Page Filter - Configure Component Dialog Box



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Available Dimensions	The list of entities and dimensions corresponding to the KPI Breakdowns or Metric Breakdowns that were defined in the Studio.

UI Element	Description
Selected Dimensions	<p>The list of entities and dimensions you selected using the arrows.</p> <p>You can then select the values of the dimensions you want to include in the filter. You can also exclude a specific value from the filter by not selecting it.</p> <p>For example, UNKNOWN and INVALID are two values of the Service entity and Name dimension that are not selected.</p> 

UI Element	Description
	<p>Select an entity and dimension in the Selected dimensions tree to move it up or down in the tree.</p> <p>The order of the selected entities and dimensions is the order displayed in the Page Filter.</p> <p>To view the information, you must have defined the correct KPI/Metric Breakdowns. If for example, the tree of KPIs and KPI Breakdowns is:</p> <ul style="list-style-type: none">• % Attrition<ul style="list-style-type: none">■ % Attrition by Organization<ul style="list-style-type: none">○ % Attrition by Location <p>If, in the Page Filter - Configure Component dialog box, you select Organization and then Location, the Page filter shows two drop downs: Organization and Location. If you select a value in Organization and a value in Location, the wired components are filtered according to the values you selected. If you do not select a value in Organization but select a value in Location, the KPI Breakdowns in the wired components display No data.</p> <p>To prevent this problem, it is recommended to also define the other combination of entities and dimensions as follows:</p> <ul style="list-style-type: none">• % Attrition<ul style="list-style-type: none">■ % Attrition by Organization<ul style="list-style-type: none">○ % Attrition by Location■ % Attrition by Location


Add a Pie Chart Component to a Page

Dashboard is provided with default components. The default components are located in the Component Gallery, together with any external components you have added.

The Pie Chart component displays the selected KPIs and their value, trend, and status for the measurement period in gauge format.

To access:

You can view the report in the relevant page in the Dashboard.

Click the **Configure Component**  button in the component to display the component filter.




Learn More

- All the time periods used in the component are periods of the fiscal year (For example, the end of the fiscal year depends on the fiscal year you have set at the system level).
- The component presents KPIs as if they were Metrics (that is, without statuses or thresholds).

Tasks

Add a Component to a Dashboard Page

To add a component to a page that is already formatted:

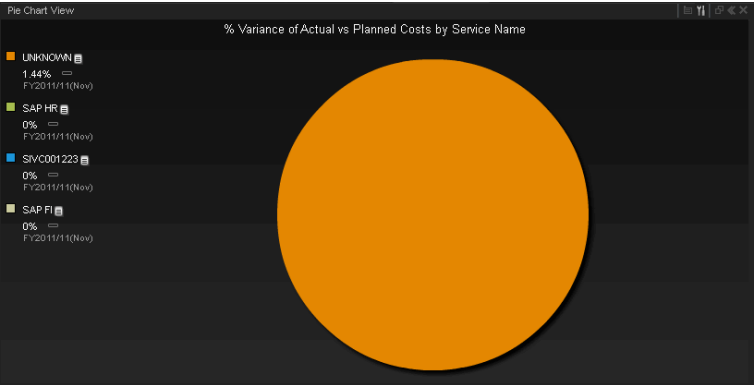
1. In the Executive Dashboard, select the relevant page (click the **Page Gallery**  button if the page you want does not already appear in the Dashboard).
2. Click the **Components**  button.
3. In the Component Gallery page that opens, double-click the component to place it in the layout area, or select the component and drag it to an area on the page, and close the Component Gallery page. For user interface details, see ["Manage Component Categories" on page 173](#).
 - If the target area is hidden by the Component Gallery dialog box, click the Component Gallery dialog box title bar and drag it to another location on your screen.
 - If you are dragging a new component to a target area that already has a component defined, drag the new component to the title bar of the target area, and not to the part of the component that is colored white.
4. In the component, click the **Configure Component**  button:
5. In the component Filter dialog box that opens, select the information you want to display and click **OK**.
6. The component displays the required information.

For more information, see ["Configure a Page Layout" on page 155](#).

UI Description







Pie Chart View Component




The Pie Chart View component displays a pie chart that enables you to compare the values of the selected Metrics or KPIs for the selected time period or the values of the selected KPI Breakdown or Metric Breakdown dimension for the selected time period.



Component Toolbar

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):











UI Element	Description
	Component Menu. Opens a menu where you can select:  Preferences. Depending on the component you are current configuring, opens the <component_name> Preferences dialog box where you can change the name of the component in the page by changing the name in the Name field and clicking OK .  Wiring. Depending on the component you are currently configuring, opens the Wiring dialog box where you can wire the current component to other components. For details, see "Set Up Wiring Between Components" on page 273 .  Help. Opens the online documentation page relevant to the component you are currently configuring.
	Configure Component. Opens the Configure Component dialog box for the relevant component. For details, see "Pie Chart View Configure Component Dialog Box" on page 232 .
	Open in a new window. Opens the component in a new window.

UI Element	Description
	<p>Collapse. Collapses the component.</p> <p>To expand the collapsed component, click the Expand  button on the collapsed component.</p>
	<p>Remove Component. Removes the component from the page.</p>

<Component Contents>

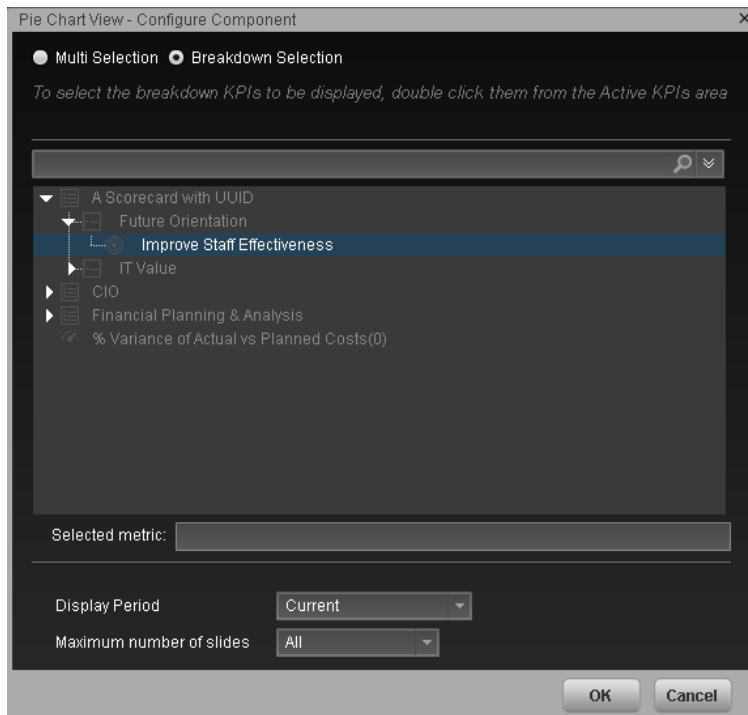
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
<Pie>	<ul style="list-style-type: none"> If you have selected Breakdown Selection, and depending on the number of slices you have selected, you can view one of the following: <ul style="list-style-type: none"> Each value of the KPI Breakdown dimension is represented by a slice of the pie One or more slices represent the highest values of the KPI Breakdown dimension, and one of the slices represents all the other values of the KPI Breakdown dimension. If you have selected Multi Selection, and depending on the number of slices you have selected, , you can view one of the following: <ul style="list-style-type: none"> Each item selected in the tree is represented by a slice in the pie. One or more slices represent the selected items with the highest value, and one of the slices represents all the remaining items.

UI Element	Description
<Legend>	<p>Lists one of the following:</p> <ul style="list-style-type: none"> If you have selected Multi Selection: <ul style="list-style-type: none"> The color of the slice followed by the name of the corresponding Metric, KPI, or Objective, followed by the unit. Double-click the name to open the Explorer tab filtered for the selected element.  (or  when a new annotation has been added to the KPI) Move the cursor above the icon to display the KPI tooltip that provides detailed information about the KPI and access to the Explorer in the context of the KPI. For details, see "Display More Information About a Specific Objective or KPI" on page 304. The value of the KPI.    The trend icon indicates the trend of the KPI value calculated over the display period. The current period or the last period depending on your selection in Display Period in the KPI List - Configure Component Dialog Box. For details, see "Pie Chart View Configure Component Dialog Box" below. If you have selected Breakdown Selection: <ul style="list-style-type: none"> The color of the slice followed by the name of the corresponding KPI Breakdown dimension's value. Double-click the name to open the Explorer tab filtered for the selected element.  (or  when a new annotation has been added to the KPI Breakdown) Move the cursor above the icon to display the tooltip that provides detailed information about the KPI Breakdown and access to the Explorer in the context of the KPI Breakdown. For details, see "Display More Information About a Specific Objective or KPI" on page 304. The value of the KPI.    The trend icon indicates the trend of the KPI value calculated over the display period. The current period or the last period depending on your selection in Display Period in the KPI List - Configure Component Dialog Box. For details, see "Pie Chart View Configure Component Dialog Box" below.
<Tooltip>	<p>Move the mouse over the pie slices to display a tooltip that include detailed information about the selected item. For details, see "Display More Information About a Specific Objective or KPI" on page 304.</p>

Pie Chart View Configure Component Dialog Box

Use the dialog box to configure the Pie Chart View component displayed in the Dashboard.







User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Multi Selection	<ul style="list-style-type: none"> • Multi Selection. You use this option when you want to compare several metrics or KPIs. For details, see below.
Breakdown Selection	<ul style="list-style-type: none"> • Breakdown Selection. Select this option when you want to compare the values of the selected KPI Breakdown dimension. For details, see below.

Multi Selection

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):


UI Element	Description
<Search>	<p>Enter the relevant string to display, in the tree, only the metrics or KPIs whose name includes the string.</p> <p>In addition, the child KPIs of the filtered KPIs are also listed even when the child KPIs names do not include the string.</p>
	<p>Advanced search. Opens additional fields to help you refine the component's filter:</p> <ul style="list-style-type: none"> • KPIs. To display, in the tree, only the KPIs. • Metrics. To display, in the tree, only the metrics.

UI Element	Description
Active KPIs	<p>The tree box lists all the active Scorecards, Perspectives, Objectives, and their KPIs, and KPI Breakdowns listed in the Active KPIs pane in the Studio. The items that can be selected are highlighted.</p> <p>To select/unselect the elements you want to display in the report, use the right and left arrows  to move the elements from the Available KPIs to the Selected KPIs and back. You can also double-click the element to move it from one box to the other.</p> <p>Note: You can only select metrics or KPIs with the same unit and with the same period. An error message is displayed if your selection does not match these criteria.</p>
Selected KPIs	<p>The box lists all the selected metrics or KPIs that you want to display in the component.</p> <p>To select/unselect the elements you want to display in the report, use the right and left arrows  to move the elements from the Available KPIs to the Selected KPIs and back. You can also double-click the element to move it from one box to the other.</p>
<Status sort>	<p>Select :</p> <ul style="list-style-type: none"> • Alphabetical sort to sort the selected KPIs in ascending alphabetical order. You can then click  to select the ascending or descending order.
	Click to display the KPIs in ascending or descending alphabetical order.
Title	Enter the title of the component in the Dashboard page.
Display Period	<p>Select the time period to display in the component:</p> <ul style="list-style-type: none"> • Current. The values of the selected metrics or KPIs whose calculation period has not yet completed according to the selected metrics or KPIs configured periodicity. • Last Closed. The values of the selected metrics or KPIs whose calculation period has already completed according to the selected metrics or KPIs configured periodicity. • Yearly/Monthly/Quarterly/Weekly. The list of time periods represents the longest periodicity configured for the selected metrics or KPIs. When you select Yearly/Monthly/Quarterly/Weekly, another field opens on the right. It lists only the years/months/quarters/weeks when the engine performed calculations. The values displayed in the pie chart are the values of the metrics or KPIs that have completed for the selected periods.

UI Element	Description
Maximum number of slices	<p>All. Each item selected in the tree is represented by a slice in the pie.</p> <p>2. The item with the highest value is represented by a slice. All the other selected items are represented by the other slice. A tooltip displays the details of all the other selected items.</p> <p>3, 4, 5, 6, 7, 8, 9. The item with the highest value is represented by a slice. Depending on the selected number of slices, each one of the other slices corresponds to the item with the next highest value. The last slice represents all the other remaining selected items. A tooltip displays the details of all the other remaining items.</p>

Breakdown Selection

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
<Search>	<p>Enter the relevant string to display, in the tree, only the metrics or KPIs whose name includes the string.</p> <p>In addition, the child KPIs of the filtered KPIs are also listed even when the child KPIs names do not include the string.</p>
	<p>Advanced search. Opens additional fields to help you refine the component's filter:</p> <ul style="list-style-type: none">• KPIs. To display, in the tree, only the KPIs.• Metrics. To display, in the tree, only the metrics.
<Tree>	<p>The tree box lists all the active Scorecards, Perspectives, Objectives, and their KPIs, and KPI Breakdowns listed in the Active KPIs pane in the Studio. Only the KPI Breakdowns are highlighted.</p> <p>To select the item you want to display in the report, double-click it. It is then listed in the Selected metric box. To unselect the item, remove it from the Selected metrics box.</p>
Selected metrics	<p>The box lists the selected KPI Breakdowns.</p> <p>To unselect the item, remove it from the Selected metrics box.</p>

UI Element	Description
Display Period	<p>Select the time period to be displayed in the component:</p> <ul style="list-style-type: none">• Current. The values of the selected KPI Breakdown dimensions whose calculation period has not yet completed according to the selected metrics or KPIs configured periodicity.• Last Closed. The values of the selected KPI Breakdown dimensions whose calculation period has already completed according to the selected metrics or KPIs configured periodicity.• Yearly/Monthly/Quarterly/Weekly. The list of time periods represents the longest periodicity configured for the selected KPI Breakdown dimension. When you select Yearly/Monthly/Quarterly/Weekly, another field opens on the right. It lists only the years/months/quarters/weeks when the engine performed calculations. The values displayed in the pie chart are the values of the KPI Breakdown dimensions that have completed for the selected periods.
Maximum number of slices	<p>All. Each value of the KPI Breakdown dimension is represented by a slice of the pie.</p> <p>2. The dimension with the highest value is represented by a slice. All the other values are represented by the other slice. A tooltip displays the details of all the other values.</p> <p>3, 4, 5, 6, 7, 8, 9. The dimension with the highest value is represented by a slice. Depending on the selected number of slices, each one of the other slices corresponds to the next highest value of the dimension. The last slice represents all the other remaining values. A tooltip displays the details of all the other remaining values.</p>


Add a Scorecard Component to a Page

Dashboard is provided with default components. The default components are located in the Component Gallery, together with any external components you have added.

The Scorecard component (Balanced Scorecard) displays the list of selected Perspectives and their Objectives with their value, trend, and status for the measurement period.

To access:

You can view the report in the relevant page in the Dashboard.

Click the **Configure Component**  button in the component to display the component filter.




Learn More

All the time periods used in the component are periods of the fiscal year (For example, the end of the fiscal year depends on the fiscal year you have set at the system level).

Tasks

Add a Component to a Dashboard Page

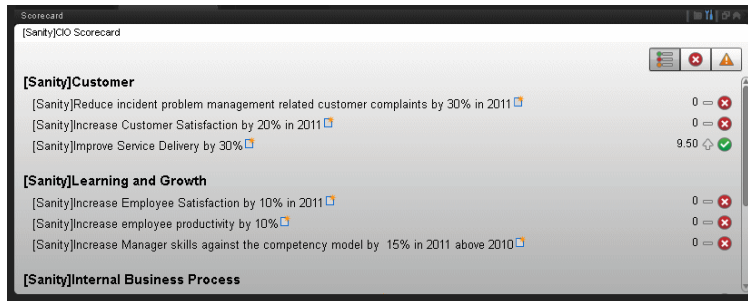
To add a component to a page that is already formatted:

1. In the Executive Dashboard, select the relevant page (click the **Page Gallery**  button if the page you want does not already appear in the Dashboard).
2. Click the **Components**  button.
3. In the Component Gallery page that opens, double-click the component to place it in the layout area, or select the component and drag it to an area on the page, and close the Component Gallery page. For user interface details, see "[Manage Component Categories](#)" on page 173.
 - If the target area is hidden by the Component Gallery dialog box, click the Component Gallery dialog box title bar and drag it to another location on your screen.
 - If you are dragging a new component to a target area that already has a component defined, drag the new component to the title bar of the target area, and not to the part of the component that is colored white.
4. In the component, click the **Configure Component**  button:
5. In the component Filter dialog box that opens, select the information you want to display and click **OK**.
6. The component displays the required information.

For more information, see "[Configure a Page Layout](#)" on page 155.










UI Description

Scorecard Component



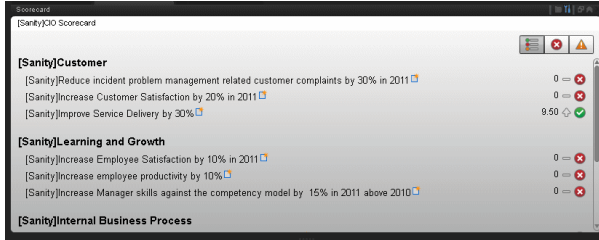







Component Toolbar


User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
	<p>Component Menu. Opens a menu where you can select:</p> <ul style="list-style-type: none">  Preferences. Depending on the component you are currently configuring, opens the <component_name> Preferences dialog box where you can change the name of the component in the page by changing the name in the Name field and clicking OK.  Wiring. Depending on the component you are currently configuring, opens the Wiring dialog box where you can wire the current component to other components. For details, see "Set Up Wiring Between Components" on page 273.  Help. Opens the online documentation page relevant to the component you are currently configuring.
	<p>Configure Component. Opens the Configure Component dialog box for the relevant component. For details, see "Scorecard - Configure Component Dialog Box" on page 240.</p>
	<p>Open in a new window. Opens the component in a new window.</p>
	<p>Collapse component. Collapses the component.</p> <p>To expand the collapsed component, click the  button on the collapsed component.</p>
	<p>Remove Component. Removes the component from the page.</p>

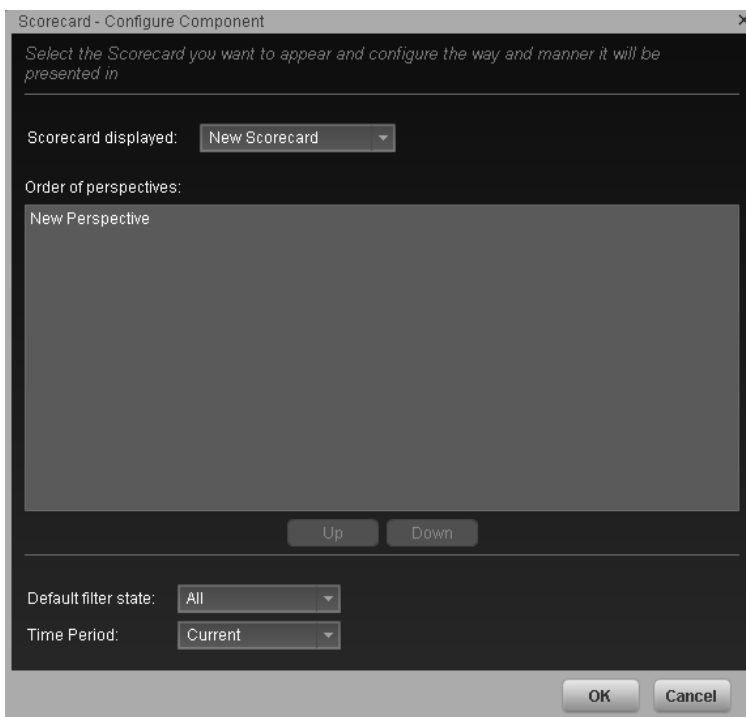
<Component Contents>

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
<Component contents>	<p>The following information is displayed, from left to right:</p>  <ul style="list-style-type: none"> • The name of the Scorecard. Double-click the name to open the Explorer tab filtered for the selected element. • ▾ Indicates that the Scorecard has Cascading (subordinate) Scorecards. Click the arrow to display the list of the Cascading Scorecards and select the relevant one to display its information. To return to the parent Scorecard, click the X to close the Cascading Scorecard display. Note that you can only access one level down (meaning that if the Cascading Scorecard has subordinates, to access their information, you must create a Scorecard component for the first level of Cascading Scorecard). • The name of the Perspective you selected in the Scorecard - Component Filter dialog box. For details, see "Scorecard - Configure Component Dialog Box" on next page. • The Perspective's Objectives, sorted by status (with the error status first) with: <ul style="list-style-type: none"> ■ The score of the Objective. ■  (or  when a new annotation has been added to the Objective) Move the cursor above the icon to display the Objective tooltip that provides detailed information about the Objective and access to the Explorer in the context of the Objective. For details, see "Display More Information About a Specific Objective or KPI" on page 304. ■  The trend icon that indicates the trend of the Objective over the display period. ■ The status of the Objective during the display period. It can be: <ul style="list-style-type: none"> ○  indicates that the status is Good. ○  indicates that the status is Warning. ○  indicates that the status is Error. ○  indicates that status was not calculated or that there was an error in the calculation.

UI Element	Description
	<p>Click the left button to display all Objective's statuses (Good, Warning, or Error).</p> <p>Click the middle button to display only the Objectives with an Error Status.</p> <p>Click the right button to display only the Objectives with a Warning status.</p> <p>The default selection is configured in the Default filter state field in the Scorecard - Component Filter dialog box. For details, see "Scorecard - Configure Component Dialog Box" below.</p>
<Tooltip>	<p>Move the mouse over the name of an Objective in the list to display a tooltip that include detailed information about the KPI. For details, see "Display More Information About a Specific Objective or KPI" on page 304.</p>

Scorecard - Configure Component Dialog Box



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Scorecard displayed	<p>Select the Scorecard you want to display in the component.</p> <p>The list of the Scorecard's Perspectives is displayed in the Order of Perspectives box.</p>

UI Element	Description
Order of perspectives	Select a Perspective and use the Up and Down buttons to order the Perspectives as you want to display them in the Scorecard component in the Dashboard.
Default filter state	Select the icon that is automatically selected in the Scorecard display: <ul style="list-style-type: none">• All• Warning• Exception
Display Period	<p>Select the time period to be displayed in the component:</p> <ul style="list-style-type: none">• Current. The values of the KPIs whose calculation period has completed as well as, for KPIs whose calculations are still proceeding, the values from the previous period, depending on the time period selected in the Overtime Period list.• <Longest_period>. Each KPI has its own period (as configured in the Configuration details tab in the Studio). When you move KPIs from the Available KPIs to the Selected KPIs area in the filter, the longest period for all the selected KPIs is displayed as an additional option near the Display Period field.<p>For example if one of the selected KPI's period is Weekly and another is Yearly, the Display Period field lists: Current, Yearly, and Last Closed.</p><p>When you select the <Longest_period> another field opens on the right. It lists only the corresponding periods when the engine performed calculations.</p><p>For example, if you select Quarterly, and the engine did not calculate the value of any KPI with the Quarterly period during the first and second quarters of 2008, these periods are not listed in the second field of the Display Period field.</p>• Last Closed. The values of only the KPIs whose calculation period has completed for the time period selected in the Overtime Period list.


Add a Web Intelligence Report Viewer Component to a Page

Dashboard is provided with default components. The default components are located in the Component Gallery, together with any external components you have added.

This component enables the user to view the selected SAP BusinessObjects report.

To access:

You can view the report in the relevant page in the Dashboard.

Click the **Configure Component**  button in the component to display the component filter.

Learn More

- A Web Intelligence Report Viewer component displays only one SAP BusinessObjects report. If you want to display more than one Web Intelligence Report Viewer in the Dashboard, you can create multiple Web Intelligence Report Viewer components and rename each component.
- The size of Web Intelligence reports can impact how the reports are displayed in the Dashboard page. The sizes are 374 pixels (width) x 199 pixels (height), 583 pixels (width) x 204 pixels (height), or 374 pixels (width) x 324 pixels (height). The description of each Web Intelligence report includes its size. For details, see "[Reference: Web Intelligence Reports and Operational Reports](#)" in the *Content Reference Guide*.

Tasks



This section includes the following tasks:


["Add a Component to a Dashboard Page" below](#)

["Wire the Web Intelligence Report Viewer component to the Page Filter component" on next page](#)

Add a Component to a Dashboard Page

To add a component to a page that is already formatted:

1. In the Executive Dashboard, select the relevant page (click the **Page Gallery**  button if the page you want does not already appear in the Dashboard).
2. Click the **Components**  button.
3. In the Component Gallery page that opens, double-click the component to place it in the layout area, or select the component and drag it to an area on the page, and close the Component Gallery page. For user interface details, see "[Manage Component Categories](#)" on page 173.
 - If the target area is hidden by the Component Gallery dialog box, click the Component Gallery dialog box title bar and drag it to another location on your screen.
 - If you are dragging a new component to a target area that already has a component defined, drag the new component to the title bar of the target area, and not to the part of the component that is colored white.

4. In the component, click the **Configure Component**  button:
5. In the component Filter dialog box that opens, select the information you want to display and click **OK**.
6. The component displays the required information.

For more information, see ["Configure a Page Layout" on page 155](#).

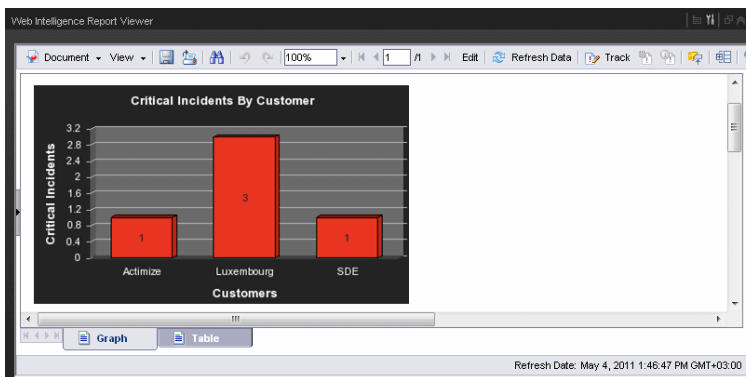
Wire the Web Intelligence Report Viewer component to the Page Filter component

To wire the Web Intelligence Report Viewer component to the Page Filter component, make sure that the report that you create to included in the Web Intelligence Report Viewer component includes a prompt with a name that uses the **<entity>;<dimension>** format. The entity and dimension correspond to the entity and dimension the user selects in the Page Filter Component.










For details about the Page Filter, see ["Add a Page Filter Component to a Page" on page 222](#).

UI Description

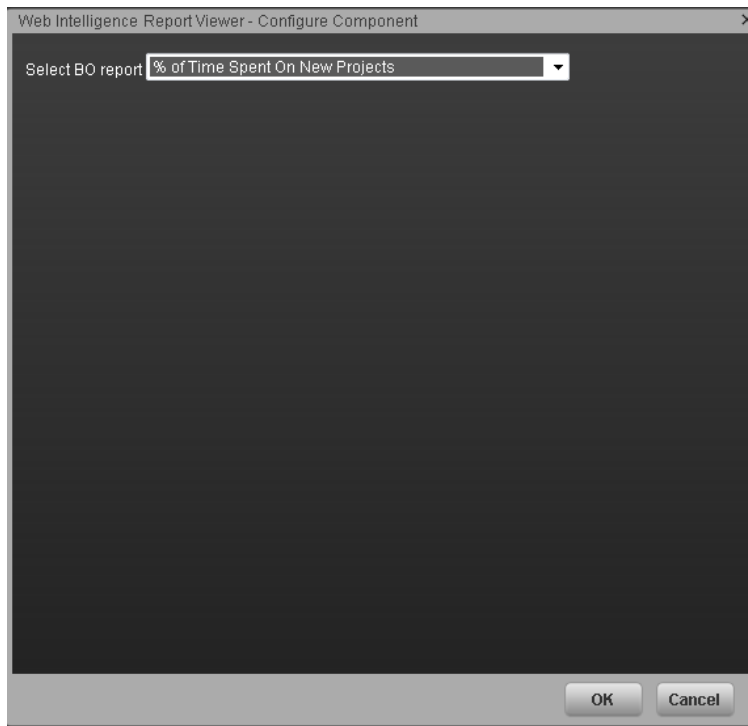
Web Intelligence Report Viewer Component



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
	<p>Component Menu. Opens a menu where you can select:</p> <p> Preferences. Depending on the component you are currently configuring, opens the <component_name> Preferences dialog box where you can change the name of the component in the page by changing the name in the Name field and clicking OK.</p> <p> Wiring. Depending on the component you are currently configuring, opens the Wiring dialog box where you can wire the current component to other components. For details, see "Set Up Wiring Between Components" on page 273.</p> <p> Help. Opens the online documentation page relevant to the component you are currently configuring.</p>
	<p>Configure Component. Opens the Configure Component dialog box for the relevant component. For details, see "Web Intelligence Report Viewer - Configure Component Dialog Box" on next page.</p>
	<p>Open in a new window. Opens the component in a new window.</p>
	<p>Collapse. Collapses the component.</p> <p>To expand the collapsed component, click the Expand  button on the collapsed component.</p>
	<p>Remove Component. Removes the component from the page.</p>
<Component contents>	<p>The selected report is displayed in the component. For details about the reports, see "Reference: Web Intelligence Reports and Operational Reports" (on page 1).</p>

Web Intelligence Report Viewer - Configure Component Dialog Box



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
<Report List>	Select the BO report you want to display in the Web Intelligence Report Viewer component. For details about the reports, see " Reference: Web Intelligence Reports and Operational Reports " (on page 1).


Add a Web Intelligence Dynamic Report Viewer Component to a Page

Dashboard is provided with default components. The default components are located in the Component Gallery, together with any external components you have added.

This component enables the user to view the selected SAP BusinessObject report while keeping some of the interactive capabilities of the original report in the Dashboard component.

To access:

You can view the report in the relevant page in the Dashboard.

Click the **Configure Component**  button in the component to display the component filter.

Learn More

- A Web Intelligence Report Viewer component displays only one SAP BusinessObject report. If you want to display more than one Web Intelligence Report Viewer in the Dashboard, you can create multiple Web Intelligence Report Viewer components and rename each component.
- If the SAP BusinessObject report you selected to add to this component has interactive capabilities (for example: drill down, wired elements in the reports), these capabilities are maintained in the Dashboard component.
- The size of Web Intelligence reports can impact how the reports are displayed in the Dashboard page. The sizes are 374 pixels (width) x 199 pixels (height), 583 pixels (width) x 204 pixels (height), or 374 pixels (width) x 324 pixels (height). The description of each Web Intelligence report includes its size. For details, see "[Reference: Web Intelligence Reports and Operational Reports](#)" in the *Content Reference Guide*.

Tasks



This section includes the following tasks:


["Add a Component to a Dashboard Page" below](#)

["Wire the Web Intelligence Dynamic Report Viewer component to the Page Filter component" on next page](#)

Add a Component to a Dashboard Page

To add a component to a page that is already formatted:

1. In the Executive Dashboard, select the relevant page (click the **Page Gallery**  button if the page you want does not already appear in the Dashboard).
2. Click the **Components**  button.
3. In the Component Gallery page that opens, double-click the component to place it in the layout area, or select the component and drag it to an area on the page, and close the Component Gallery page. For user interface details, see "[Manage Component Categories](#)" on page 173.

- If the target area is hidden by the Component Gallery dialog box, click the Component Gallery dialog box title bar and drag it to another location on your screen.
 - If you are dragging a new component to a target area that already has a component defined, drag the new component to the title bar of the target area, and not to the part of the component that is colored white.
4. In the component, click the **Configure Component**  button:
 5. In the component Filter dialog box that opens, select the information you want to display and click **OK**.
 6. The component displays the required information.

For more information, see ["Configure a Page Layout" on page 155](#).

Wire the Web Intelligence Dynamic Report Viewer component to the Page Filter component





To wire the Web Intelligence Dynamic Report Viewer component to the Page Filter component, make sure that the report that you create to included in the Web Intelligence Dynamic Report Viewer component includes a prompt with a name that uses the **<entity>;<dimension>** format. The entity and dimension correspond to the entity and dimension the user selects in the Page Filter Component.






For details about the Page Filter, see ["Add a Page Filter Component to a Page" on page 222](#).

UI Description

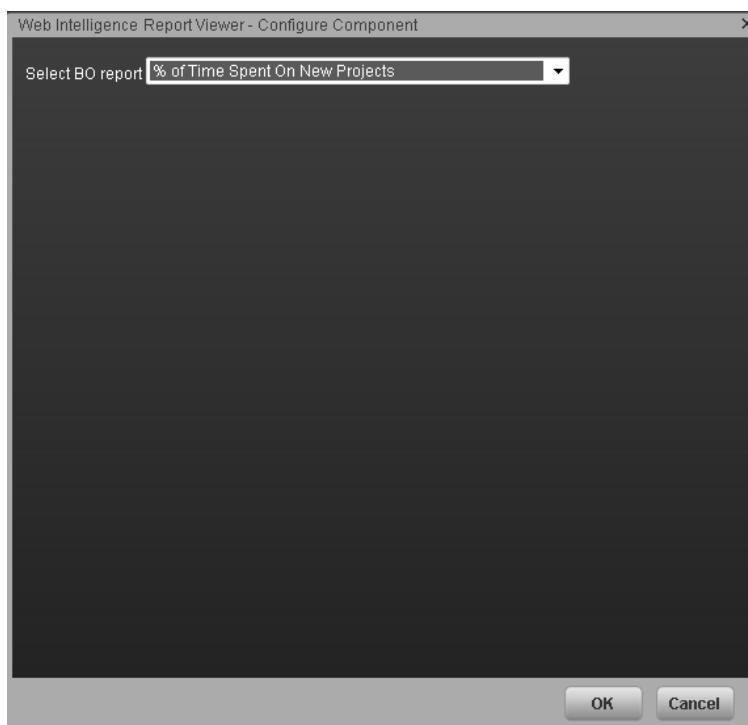
Web Intelligence Dynamic Report Viewer Component

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
	<p>Component Menu. Opens a menu where you can select:</p> <ul style="list-style-type: none"> Preferences. Depending on the component you are current configuring, opens the <component_name> Preferences dialog box where you can change the name of the component in the page by changing the name in the Name field and clicking OK. Wiring. Depending on the component you are currently configuring, opens the Wiring dialog box where you can wire the current component to other components. For details, see "Set Up Wiring Between Components" on page 273. Help. Opens the online documentation page relevant to the component you are currently configuring.

UI Element	Description
	Configure Component. Opens the Configure Component dialog box for the relevant component. For details, see " Web Intelligence Report Viewer - Configure Component Dialog Box " below.
	Open in a new window. Opens the component in a new window.
	Collapse. Collapses the component. To expand the collapsed component, click the Expand  button on the collapsed component.
	Remove Component. Removes the component from the page.
<Component contents>	The selected report is displayed in the component. For details about the reports, see " Reference: Web Intelligence Reports and Operational Reports " (on page 1) in the <i>Content Reference Guide</i> .

Web Intelligence Report Viewer - Configure Component Dialog Box



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
<Report List>	Select the BO report you want to display in the Web Intelligence Report Viewer component. For details about the reports, see " Reference: Web Intelligence Reports and Operational Reports " (on page 1) in the <i>Content Reference Guide</i> .


Add a Web Intelligence Static Report Viewer Component to a Page

Dashboard is provided with default components. The default components are located in the Component Gallery, together with any external components you have added.

The Web Intelligence Static Report Viewer component enables the user to view a selected BO report. You can create your own BO reports and display them in the Dashboard using the Web Intelligence Static Report Component Viewer component.

To access:

You can view the report in the relevant page in the Dashboard.

Click the **Configure Component**  button in the component to display the component filter.

Learn More

- A Web Intelligence Static Report Component Viewer component displays only one BO report. If you want to display more than one BO report in the Dashboard, you can create multiple Web Intelligence Static Report Component Viewer components and rename each component.
- You can create your own BO reports using BO and display them in the Web Intelligence Reports Static Viewer component. For details, see BO documentation.

Note: To view a list of the available Xcelsius reports, you must copy the reports **.swf** files to the following location:
<installation directory>\agora\xcelsius folder.

- The component analyzes the original BO report and returns tables and graphs. The tables become tables in html format, the graphs become images in the Web Intelligence Static Report Component Viewer component. The structure of the original BO report may also be changed as tables are moved to the beginning of the Web Intelligence Static Report Component Viewer component display and graphs are moved to the end of the component display.
- The size of Web Intelligence reports can impact how the reports are displayed in the Dashboard page. The sizes are 374 pixels (width) x 199 pixels (height), 583 pixels (width) x 204 pixels (height), or 374 pixels (width) x 324 pixels (height). The description of each Web Intelligence report includes its size. For details, see ["Reference: Web Intelligence Reports and Operational Reports"](#) in the *Content Reference Guide*.

Tasks




This section includes the following tasks:

["Add a Component to a Dashboard Page" on next page](#)

["Wire the Web Intelligence Static Report Viewer component to the Page Filter component" on next page](#)

Add a Component to a Dashboard Page

To add a component to a page that is already formatted:

1. In the Executive Dashboard, select the relevant page (click the **Page Gallery**  button if the page you want does not already appear in the Dashboard).
2. Click the **Components**  button.
3. In the Component Gallery page that opens, double-click the component to place it in the layout area, or select the component and drag it to an area on the page, and close the Component Gallery page. For user interface details, see ["Manage Component Categories" on page 173](#).
 - If the target area is hidden by the Component Gallery dialog box, click the Component Gallery dialog box title bar and drag it to another location on your screen.
 - If you are dragging a new component to a target area that already has a component defined, drag the new component to the title bar of the target area, and not to the part of the component that is colored white.
4. In the component, click the **Configure Component**  button:
5. In the component Filter dialog box that opens, select the information you want to display and click **OK**.
6. The component displays the required information.

For more information, see ["Configure a Page Layout" on page 155](#).

Wire the Web Intelligence Static Report Viewer component to the Page Filter component

To wire the Web Intelligence Static Report Viewer component to the Page Filter component, make sure that the report that you create to included in the Web Intelligence Static Report Viewer component includes a prompt with a name that uses the **<entity>;<dimension>** format. The entity and dimension correspond to the entity and dimension the user selects in the Page Filter Component.

For details about the Page Filter, see ["Add a Page Filter Component to a Page" on page 222](#).

UI Description

Web Intelligence Static Report Component Viewer (Display)

Web Intelligence Static Report Component Viewer

Document name	Conversion status
ComplexREPdoc	Partially Converted
Nb of Not Converted Documents	1










Type	Keyword	Nb of occurrences	Nb of impacted documents
Breaks	Break on multiple dimension	1	1
Chart	Plot area	1	1

ComplexREPdoc

Type	Subtype	Severity	Keyword	Focus	Error text	Cause	Workaround
Breaks	Break on multiple dimensions	Warning	Break on multiple dimension	ALL/Table 1.3/ Service Line	Breaks in Web Intelligence can only be set on one dimension	Not available in Web Intelligence	
Chart	Pie/3D Chart	Advisory	Plot area	ALL / Chart 1	Plot area does not exist in Web Intelligence Pies and 3D Charts	Not available in Web Intelligence	
Chart	Pie/3D Chart	Advisory	Plot area	Chart / Chart 1	Plot area does not exist in Web Intelligence Pies and 3D Charts	Not available in Web Intelligence	

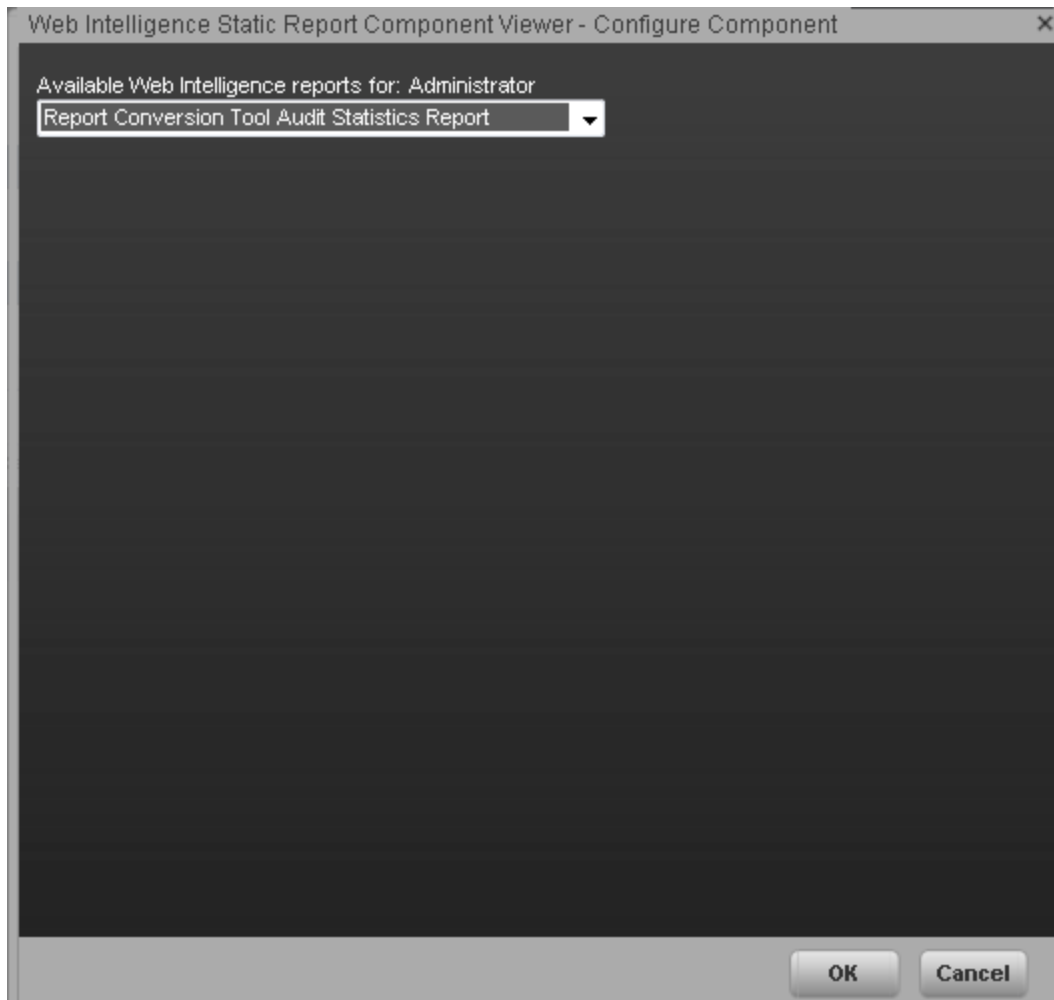
Type	Subtype	Severity	Keyword	Focus	Error text	Cause	Workaround
Breaks	Break on multiple dimensions	Warning	Break on multiple dimension	ALL/Table 1.3/ Service Line	Breaks in Web Intelligence can only be set on one dimension	Not available in Web Intelligence	
Chart	Pie/3D Chart	Advisory	Plot area	ALL / Chart 1	Plot area does not exist in Web Intelligence Pies and 3D Charts	Not available in Web Intelligence	
Chart	Pie/3D Chart	Advisory	Plot area	Chart / Chart 1	Plot area does not exist in Web Intelligence Pies and 3D Charts	Not available in Web Intelligence	

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
	<p>Component Menu. Opens a menu where you can select:</p> <p> Preferences. Depending on the component you are currently configuring, opens the <component_name> Preferences dialog box where you can change the name of the component in the page by changing the name in the Name field and clicking OK.</p> <p> Wiring. Depending on the component you are currently configuring, opens the Wiring dialog box where you can wire the current component to other components. For details, see "Set Up Wiring Between Components" on page 273.</p> <p> Help. Opens the online documentation page relevant to the component you are currently configuring.</p>
	<p>Configure Component. Opens the Configure Component dialog box for the relevant component. For details, see "Web Intelligence Static Report Component Viewer - Configure Component Dialog Box" below.</p>
	<p>Open in a new window. Opens the component in a new window.</p>
	<p>Collapse component. Collapses the component.</p> <p>To expand the collapsed component, click the  button on the collapsed component.</p>
	<p>Remove Component. Removes the component from the page.</p>
<Component contents>	<p>The selected report is displayed in the component. For details, see "Reference: Web Intelligence Reports and Operational Reports" (on page 1) in the <i>Content Reference Guide</i>.</p>

Web Intelligence Static Report Component Viewer - Configure Component Dialog Box

This dialog box enables you to select the relevant report to be displayed in the Web Intelligence Static Report Component Viewer component.



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
<Report List>	Select the BO report you want to display in the Web Intelligence Static Report Component Viewer component. For details, see " Reference: Web Intelligence Reports and Operational Reports " (on page 1) in the <i>Content Reference Guide</i> .

Create Categories for the Webi Reports

In the Context Management Console (CMC) application you can manage Categories. A Category flag provides the option to assign each metric to the relevant categories. The categories are useful to classify the different Webi reports in the list of reports to be added to a component in Dashboard. For example, you can add a category per business context, ALM, Asset, and more.

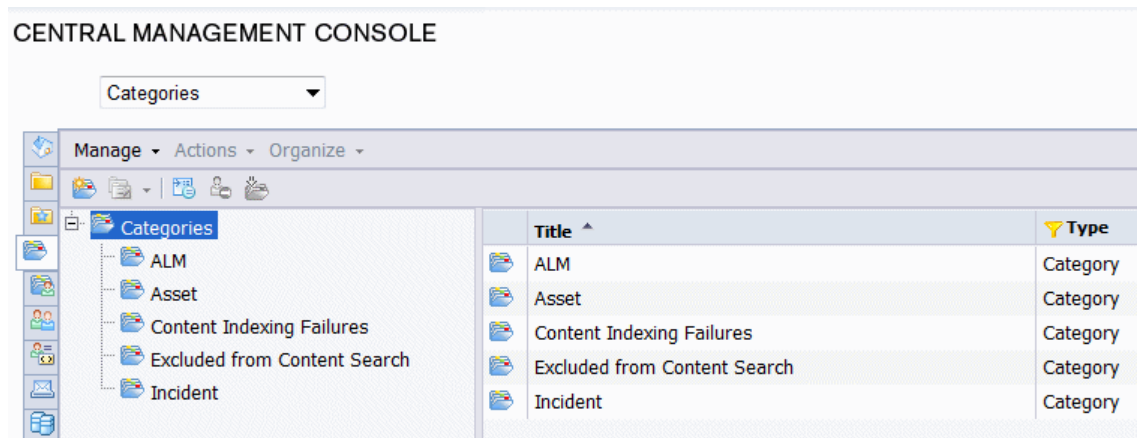
To access:

Access the CMC console.

Tasks

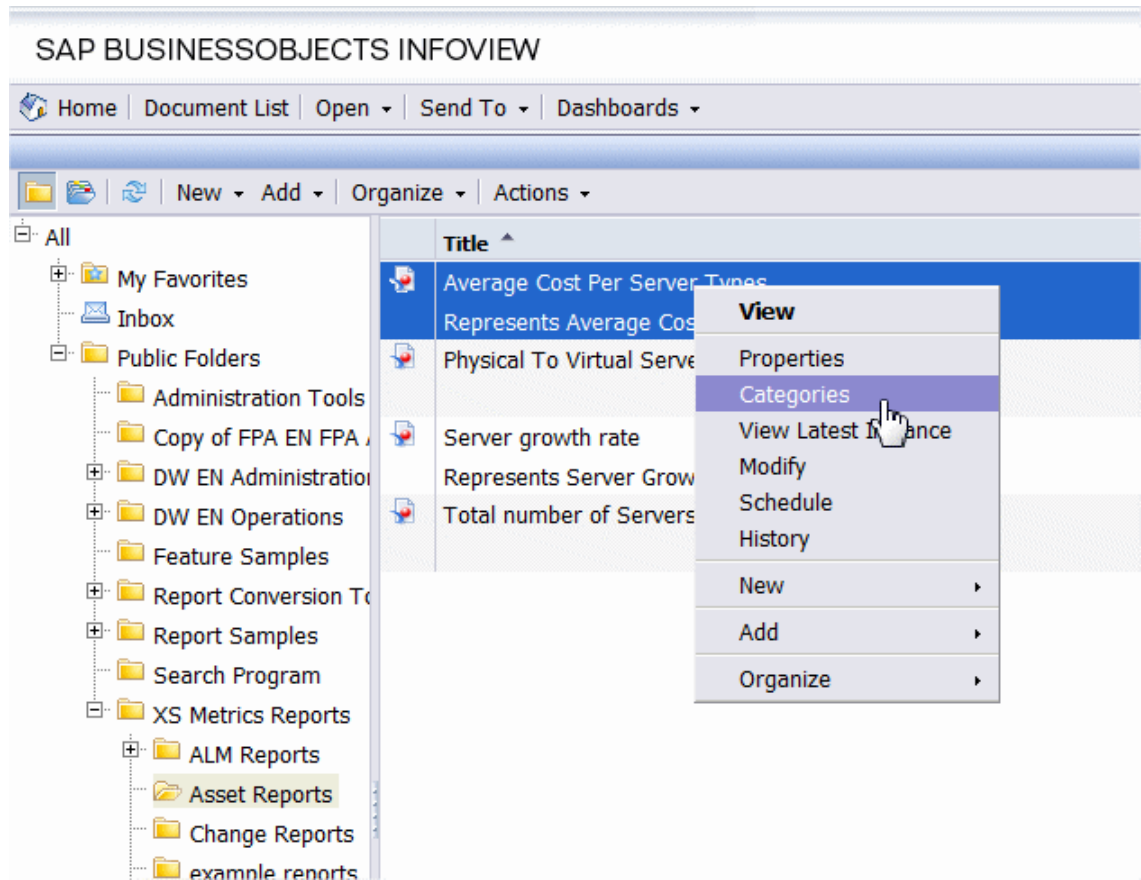
Create categories

1. Access the CMC console.
2. Create the categories:

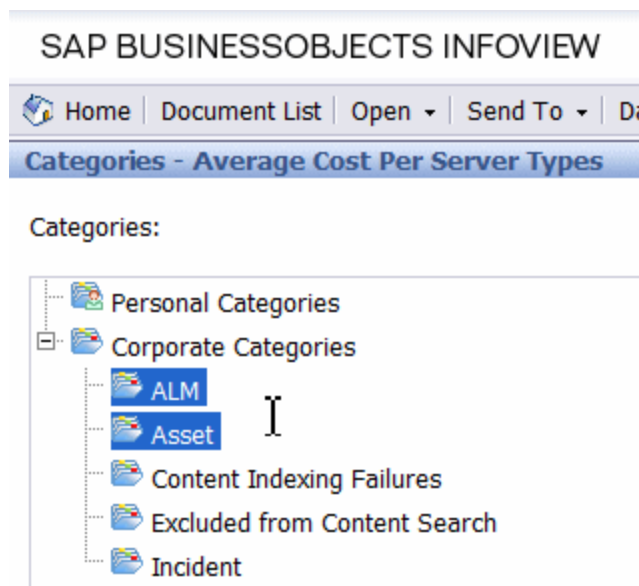


3. You can now associated metrics (reports) and categories. You can assign more than one category to a report.

- a. Right-click the relevant Webi report.

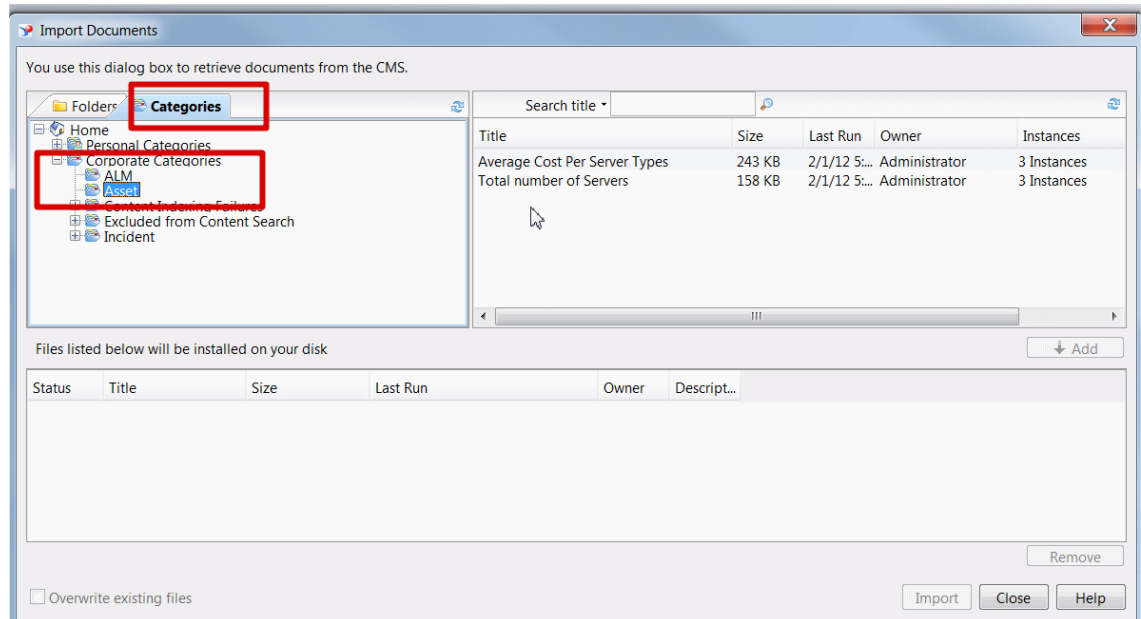


- b. Select the relevant categories for the selected report, and click **OK**



- c. Click **File> Import from CMS**.
- d. When you open the "Web Intelligence Rich Client" you can see all the Webi reports that are

relevant to the specific category.




Add a SWF Report Viewer Component to a Page

Dashboard is provided with default components. The default components are located in the Component Gallery, together with any external components you have added.

The SWF Report Viewer component enables the user to view the selected Xcelsius report.

To access:

You can view the report in the relevant page in the Dashboard.

Click the **Configure Component**  button in the component to display the component filter.

Learn More

An Xcelsius Report component displays only one Xcelsius report. If you want to display more than one Xcelsius Report in the Dashboard, you can create multiple Xcelsius Report components and rename each component.




Xcelsius Reports files have a **.swf** suffix.

Note: To view a list of the available Xcelsius reports, you must copy the reports **.swf** files to the following location:
<installation directory>\agora\xcelsius folder.

Tasks

Add a Component to a Dashboard Page

To add a component to a page that is already formatted:

1. In the Executive Dashboard, select the relevant page (click the **Page Gallery**  button if the page you want does not already appear in the Dashboard).
2. Click the **Components**  button.
3. In the Component Gallery page that opens, double-click the component to place it in the layout area, or select the component and drag it to an area on the page, and close the Component Gallery page. For user interface details, see "[Manage Component Categories](#)" on page 173.
 - If the target area is hidden by the Component Gallery dialog box, click the Component Gallery dialog box title bar and drag it to another location on your screen.
 - If you are dragging a new component to a target area that already has a component defined, drag the new component to the title bar of the target area, and not to the part of the component that is colored white.
4. In the component, click the **Configure Component**  button:
5. In the component Filter dialog box that opens, select the information you want to display and click **OK**.
6. The component displays the required information.

For more information, see ["Configure a Page Layout" on page 155](#).

When Executive Scorecard is installed on an SQL Server named instance, and in order for the Xcelsius and Webi reports to display properly in the relevant Dashboard components, the relevant universe (Context) connection must be updated to point to the <sql server name>\<named instance>.







To point to the named instance use the following steps:




1. Open the SAP BusinessObjects Enterprise Designer application on the SAP BusinessObjects Enterprise server.
2. Click **Tools > Connections** to display the connection list.
3. Select **XS_DWH_JDBC** and click **Edit**.
4. In the **Server** field enter <sql server name>\<named instance>:1433.
5. Click **Next** and then **Finish**.
6. Click **File > Export**, and then click **OK**.
7. Run a report to see if it works

UI Description

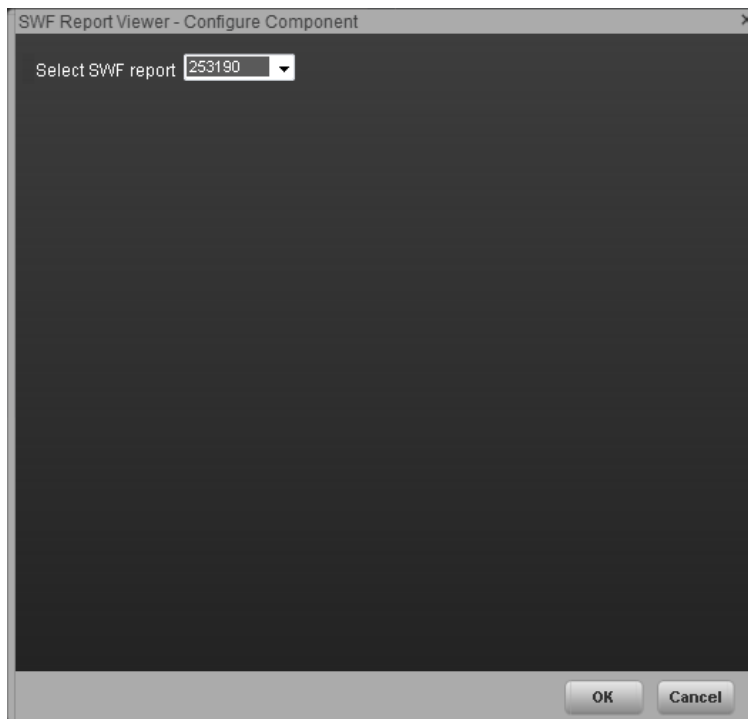
SWF Report Viewer Component

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
	<p>Component Menu. Opens a menu where you can select:</p> <ul style="list-style-type: none"> Preferences. Depending on the component you are currently configuring, opens the <component_name> Preferences dialog box where you can change the name of the component in the page by changing the name in the Name field and clicking OK. Wiring. Depending on the component you are currently configuring, opens the Wiring dialog box where you can wire the current component to other components. For details, see "Set Up Wiring Between Components" on page 273. Help. Opens the online documentation page relevant to the component you are currently configuring.
	<p>Configure Component. Opens the Configure Component dialog box for the relevant component. For details, see "Add a SWF Report Viewer Component to a Page" on previous page.</p>
	<p>Open in a new window. Opens the component in a new window.</p>

UI Element	Description
	Collapse. Collapses the component. To expand the collapsed component, click the Expand  button on the collapsed component.
	Remove Component. Removes the component from the page.
<Component contents>	The selected report is displayed in the component. For details, see the <i>Administrator Guide</i> .

SWF Report Viewer - Configure Component Dialog Box



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
<Report List>	Select the Xcelsius report you want to display in the SWF Report Viewer component. For details, see the <i>Administrator Guide</i> .

Add Xcelsius Reports Viewer Component to a Page


Dashboard is provided with default components. The default components are located in the Component Gallery, together with any external components you have added.

One of these components, the Xcelsius Reports Viewer Component enables the user to view the selected Xcelsius report when the report is in Flash format.

You can also view the report in SAP BusinessObjects Enterprise.

To access:

You can view the report in the relevant page in the Dashboard.

Click the **Configure Component**  button in the component to display the component filter.

Learn More

- An Xcelsius Reports Viewer (Flash) component displays only one Xcelsius report. If you want to display more than one Xcelsius Reports Viewer (Flash) component in the Dashboard, you can create multiple Xcelsius Reports Viewer (Flash) components and rename each component.
- Out-of-the-box Xcelsius reports in Flash format are automatically installed during the installation of Executive Scorecard:
 - **Project cost reduction.** This report presents all projects actual cost and budget along with the associated requirements including a “what if scenario” to calculate the reduced number of requirements as a result of cost reduction.
 - **KPI Audit.** This report lists all the active calculated KPIs and detailed KPI data, ordered by calculation status, status, and periodicity.
- To ensure that the Xcelsius reports work properly add the **crossdomain.xml** file to the **C:\Program Files (x86)\Business Objects\Tomcat55\webapps\ROOT** directory. The file contents are as follows:

```
<?xml version="1.0"?>
<!DOCTYPE cross-domain-policy SYSTEM
"http://www.macromedia.com/xml/dtds/cross-domain-policy.dtd">
<cross-domain-policy>
<site-control permitted-cross-domain-policies="all" />
<allow-access-from domain="*" secure="false"/>
<allow-http-request-headers-from domain="*" headers="*"
secure="false"/>
</cross-domain-policy>
```

Tasks

This section includes the following tasks:

["Add the Component to a Dashboard Page" on next page](#)

["Wire the Xcelsius Reports Viewer \(Flash\) component to the Page Filter component" on page 263](#)

"Create your own Flash report to be displayed in the Xcelsius Reports Viewer (Flash) Component" on next page

Add the Component to a Dashboard Page

To add the component to a page:

1. Prerequisite:

The component contains two types of Xcelsius reports in the selection list:



- **Out-of-the-box reports** - Out-of-the-box reports need some adjustments in order to present data.
- **Self-developed reports** - Self-developed reports show data as is.


Out-of-the-box Xcelsius reports receive data from Webi reports (with the same name) and both types of reports are located in SAP BusinessObjects Enterprise in the following folders:

- **Public Folders > Xcelsius > DWH Data > Reports**
- **Public Folders > Xcelsius > DWH Data > SWF**
- **Public Folders > Xcelsius > XS Data > Reports**
- **Public Folders > Xcelsius > XS Data > SWF**

Out-of-the-box reports must include information about the SAP BusinessObjects Enterprise server name (host) and the password of the SAP BusinessObjects Enterprise Administrator enterprise user (the default user for the out-of-the-box Xcelsius reports).

To include that information, proceed as follows:

- a. Login to SAP BusinessObjects Enterprise management console: **http://<server name>:8080/CmcApp**
 - b. Right-click each relevant **.swf** file (**Folders > Xcelsius > DWH Data > SWF** or **Folders > Xcelsius > XS Data > SWF**), and select **Properties**.
 - c. In the **Properties** dialog box, select **Flash vars**, click **host**, enter the name of the SAP BusinessObjects Enterprise server, and save.
 - d. In the **Administrator password** parameter enter the password of the SAP BusinessObjects Enterprise administrator user (default user for every SAP BusinessObjects Enterprise installation).
 - e. Do not touch the other parameters if there are any.
 - f. Save.
2. In the Executive Dashboard, select the relevant page (click the **Page Gallery**  button if the page you want does not already appear in the Dashboard).
3. Click the **Components**  button.
4. In the Component Gallery page that opens, double-click the component to place it in the layout area, or select the component and drag it to an area on the page, and close the Component Gallery page. For user interface details, see "[Manage Component Categories](#)" on page 173.

- If the target area is hidden by the Component Gallery dialog box, click the Component Gallery dialog box title bar and drag it to another location on your screen.
 - If you are dragging a new component to a target area that already has a component defined, drag the new component to the title bar of the target area, and not to the part of the component that is colored white.
5. In the component, click the **Configure Component**  button:
 6. In the component Filter dialog box that opens, select the information you want to display and click **OK**.
 7. The component displays the required information.

Wire the Xcelsius Reports Viewer (Flash) component to the Page Filter component

To wire the Xcelsius Reports Viewer (Flash) Component to the Page Filter component, you can use one of the following options:

- Xcelsius report: add a Flash variable to the report and name the parameters using the **<entity>;<dimension>** format.

The entity and dimension correspond to the entity and dimension the user selects in the Page Filter Component.

For details about the Page Filter, see ["Add a Page Filter Component to a Page" on page 222](#).

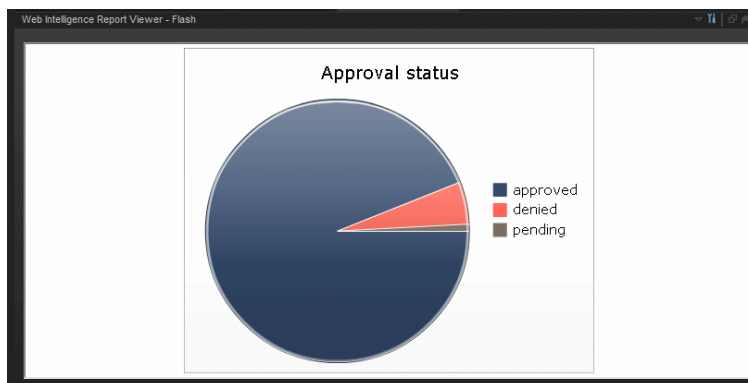
Create your own Flash report to be displayed in the Xcelsius Reports Viewer (Flash) Component

Create your Flash report in Xcelsius and make sure that:










- The parameters you add to the Flash report in Xcelsius have an **<entity>:<dimension>** format. These parameters are used as prompt parameters for the report.
- The report that you create to be displayed in Flash format must include a prompt with the **<entity>:<dimension>** format.

UI Description

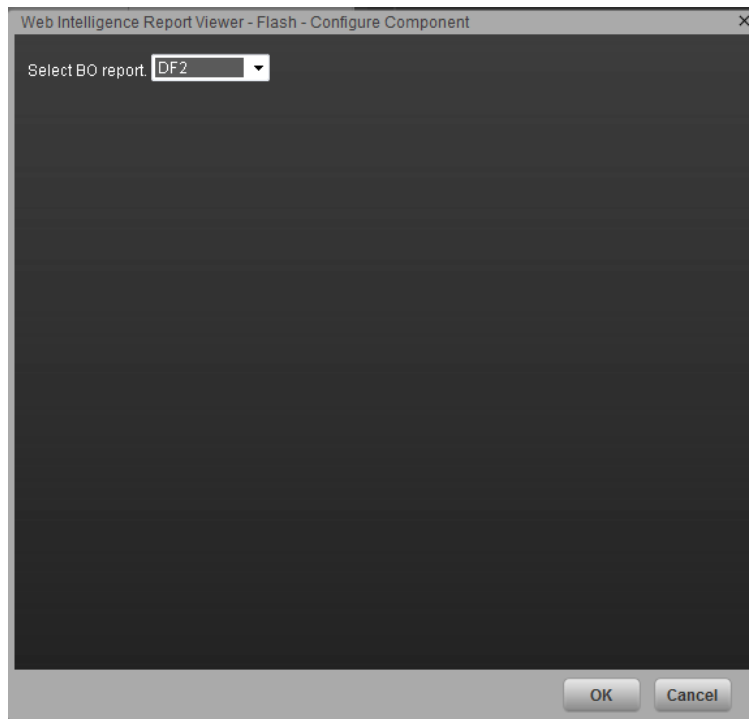
Xcelsius Reports Viewer (Flash) Component



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
	<p>Component Menu. Opens a menu where you can select:</p> <p> Preferences. Depending on the component you are current configuring, opens the <component_name> Preferences dialog box where you can change the name of the component in the page by changing the name in the Name field and clicking OK.</p> <p> Wiring. Depending on the component you are currently configuring, opens the Wiring dialog box where you can wire the current component to other components. For details, see "Set Up Wiring Between Components" on page 273.</p> <p> Help. Opens the online documentation page relevant to the component you are currently configuring.</p>
	<p>Configure Component. Opens the Configure Component dialog box for the relevant component. For details, see "Xcelsius Reports Viewer (Flash) - Configure Component Dialog Box" on next page.</p>
	<p>Open in a new window. Opens the component in a new window.</p>
	<p>Collapse. Collapses the component.</p> <p>To expand the collapsed component, click the Expand  button on the collapsed component.</p>
	<p>Remove Component. Removes the component from the page.</p>
<Component contents>	<p>The selected Xcelsius Report in Flash format is displayed in the component.</p>

Xcelsius Reports Viewer (Flash) - Configure Component Dialog Box





User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
<Report List>	Select the Xcelsius Report in Flash format you want to display in the Xcelsius Reports Viewer (Flash) component.

Create an External Component

You can use a static URL, where the component simply opens the URL that you enter. You can also create a dynamic URL, where the component URL responds to other components on the page.

To access:

In the Component Gallery, click the **Add External Component**  button or select a component and click the **Edit Component Properties**  button.

Learn More

Note: The URL for an external component must begin with one of the following: **https://**, **http://**, or **ftp://**.



Tasks

This section includes:

["Create a simple URL component" below](#)




["Create a dynamic URL" below](#)


Create a simple URL component

1. In the Dashboard, click the **Components**  button in the Dashboard toolbar, or in an empty component of the Dashboard, click the **Add Component**  button.
2. In the Component Gallery dialog box that opens, click the **Add External Component**  button.
3. In the New Component dialog box that opens, enter the name, URL, and description, and click **OK**.
4. Optionally. In the Categorize Component area, select one or more categories to which you want the component assigned.

The new component is added to the Component Gallery, and can then be added to any page.

Create a dynamic URL

1. In the Dashboard, click the **Components**  button in the Dashboard toolbar, or in an empty component of the Dashboard, click the **Add Component**  button.
2. In the Component Gallery dialog box that opens, click the **Add External Component**  button.

3. In the New Component dialog box that opens, enter a name for the component and the static portion of the URL.
4. Optionally. In the **Categorize Component** area, select one or more categories to which you want the component assigned.
5. In the **Wiring Context** area, select one or more contexts whose attributes can be used to define the URL pattern.
6. In the **URL Parameters and Values** area, click the **New Parameter**  button.
7. In the **New Parameter** dialog box that opens select the URL Part (the area of the URL where you want to add the parameter), and the name of the parameter, and click **OK**. The parameter is added to the **URL Parameter and Value** table.
8. Drag the relevant attribute from the **Attributes** list. The attributes displayed in the list are based on the contexts you selected in the Wiring Context area.
The **URL Pattern** area shows the dynamic URL you have built, using the static URL in the upper area of the dialog box, and the URL parameters that you defined.
9. Click **OK** to save the component.

The new component is added to the Component Gallery, and can then be added to any page.


UI Description

New/Edit Component Dialog Box

New Component

Enter a URL and define parameters for every context you want to use, to create the URL pattern


Name :

URL : 

Description :

► Categorize Component

▼ Configure Wiring

Wiring Context + | 


No items to display.

URL Parameters

OK Cancel Help

<Upper Pane>

User interface elements are described below:

UI Element	Description
	Refresh. If you have edited the static part of the URL, click refresh to update the URL pattern below.
Name	Enter the name you want to assign to the component.

UI Element	Description
URL	<p>Enter the URL of the component.</p> <p>If you are creating a dynamic URL using parameters, enter the static part of the URL here.</p> <p>Example: The URL to search for the string hp in Google.com uses the following format: http://www.google.com/search?q=hp. The static part of this URL is the section before the question mark: http://www.google.com/search.</p>
Description	The description of the component.

Categorize Component Area




Click on the drop down element to display a list of the existing categories. You can select one or more categories. You can also create new categories. For details, see the Left Pane section of user interface in the "[Manage Component Categories](#)" on page 173.

Configure Wiring

This area enables you to select one or more contexts whose attributes are used to define the URL pattern.

User interface elements are described below:


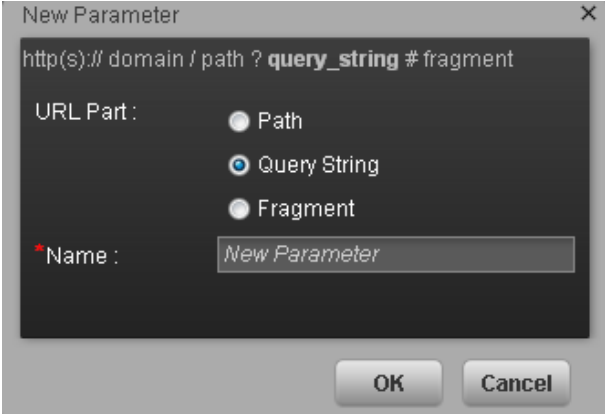
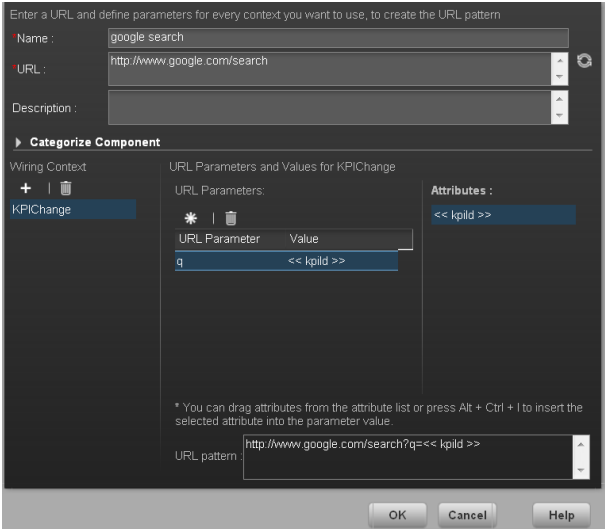

UI Element	Description
Wiring Context	Lists the wiring contexts you have already configured. Each line represents a context whose attributes can be used to create the URL pattern.

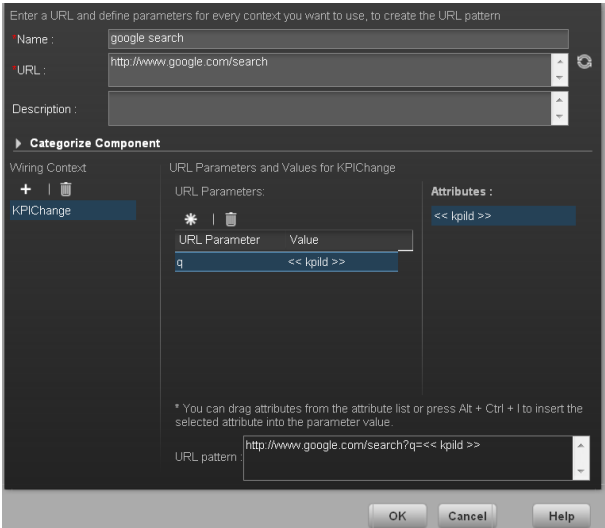
UI Element	Description
	<p>Add Context. Click to add a context whose attributes can be used to define the URL pattern.</p> <p>You must enter a URL in the URL box before you click the Add Context button.</p> <p>The Select Contexts dialog box enables you to select which context to add.</p>  <p>You can select:</p> <ul style="list-style-type: none">• KPIChange. The context is sent to the target component, when you select a KPI in the source component.• ObjectiveChanged. The context is sent to the target component, when you select an Objective in the source component.
	<p>Remove. Select a wiring context and click the button to remove it from the list.</p>

URL Parameters and Values Area for KPIChange or ObjectiveChanged

This area enables you to add URL parameters and values to build the URL pattern, using wiring context attributes.

User interface elements are described below:

UI Element	Description
	<p>New Parameters. Click to add a URL parameter. Select the area of the URL where you want to add the parameter in the URL Part:</p> <p>Path. The parameter is used in the path part of the URL.</p> <p>Query String. The parameter is used in the query string of the URL.</p> <p>Fragment. The parameter is used in the rest of the URL.</p> <p>Type the parameter name in the Name box in the URL Parameters dialog box that appears.</p>  <p>Example: To create a dynamic URL based on http://www.google.com/search?q=hp, add a URL parameter named q.</p> 
	<p>Remove. Select a URL parameter and click this button to remove it from the list.</p>

UI Element	Description
URL Parameter and Value	<p>Lists the URL parameters you have already configured.</p> <p>Each line represents the name of a URL parameter which is used to create the URL pattern, and its value. After defining a parameter name, drag an attribute from the Attributes area to the Value area of the URL parameter.</p> <p>To edit a parameter value, click the value itself and edit its contents.</p>
Attributes	<p>This contains a list of the attributes that can be used to build the URL pattern. This list is dependent on the contexts you select in the Wiring Context area.</p> <ul style="list-style-type: none"> If you select KPIChange in the Wiring Context area, the attribute <<kpild>> is available to build your URL pattern. The parameter represents the ID of the KPI on which you click in the source component to run the external URL with the ID of the KPI as a parameter. If you select ObjectiveChanges in the Wiring Context area, the attributes <<id>> and <<type>> are available to build your URL pattern. The <<id>> parameter represents the ID of the Objective and the <<type>> parameter represents the type of the Objective on which you click in the source component to run the external URL with the ID of the KPI as a parameter. <p>To use an attribute as the value of a URL parameter, drag the attribute from this area to the Value area of the parameter.</p>
URL Pattern	<p>This shows the URL pattern that was built using the static URL that you entered in the URL field, and the URL parameters that you defined in the URL Parameters area.</p> <p>Example: The result of the creation of a dynamic URL based on http://www.google.com/search?q=.</p> 

Set Up Wiring Between Components

You can define the wiring between the components on a page. The wiring determines how components interact with one another. After you place components on a page, you can use define the source components that are to send contexts to target components.

To access:

Click the **Wiring**  button located in the Dashboard toolbar.

Tasks

Set Up Wiring Between Components


Component wiring defines how the components on the same Dashboard page can interact with each other. When two components are wired and the first component sends a wiring context indicating what has changed in the first component, then the second component responds to this change.

For example, the selection of one KPI in the KPI View component causes the display of the details of the same KPI in the Historical View component on the same page, if the two components are wired and the KPI View component is the source.

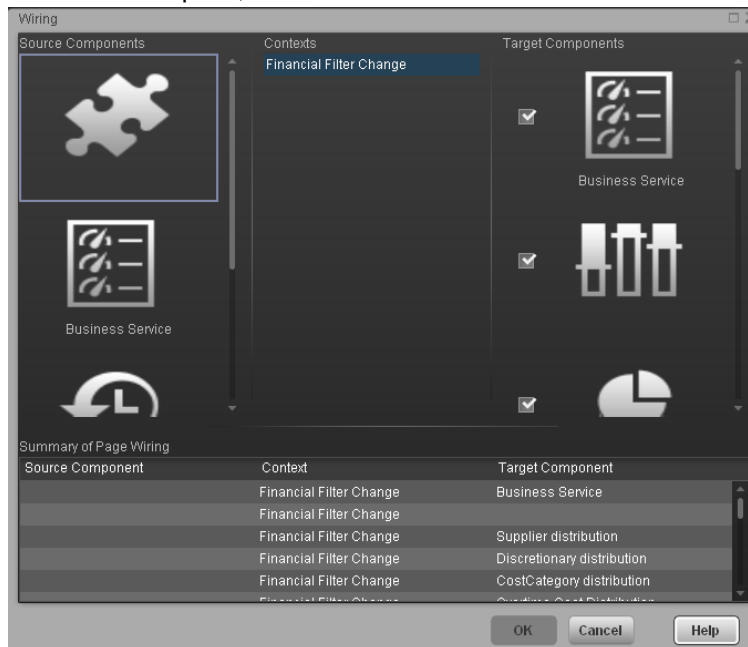
Note that if you select an Objective in the Scorecard component, the details of all the Objective's KPIs are displayed in the components that are wired to the Scorecard component on the same page.

Out-of-the-box pages have predefined wiring; you can also modify their default wiring definitions.

To configure the wiring between components on a page:

1. In Dashboard, open the relevant page, and click the **Wiring**  button in the Dashboard toolbar. The Wiring dialog box appears. For user interface details, see below. The Wiring button is usually disabled for out-of-the-box pages that are read-only.
2. The **Source Components** on the left side of the Wiring dialog box lists the components whose wiring context is to be sent to one or more target components. Select the relevant source component. For example, select Scorecard.
3. The **Contexts** box lists the contexts that can be sent from the selected source component. Select the relevant context. For example, select ObjectiveChanged. For a list of the contexts


and their description, see below.



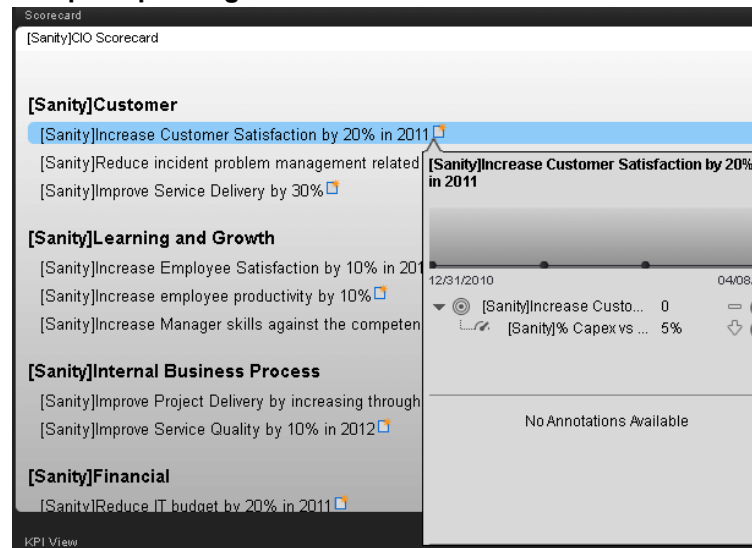
4. In the list of Target Components on the right side of the Wiring dialog box, select one or more component that will receive contexts from the source component. For example, select KPI View.
5. Click **OK**.

The **Summary of Page Wiring** area displays all of the wiring defined for the page.

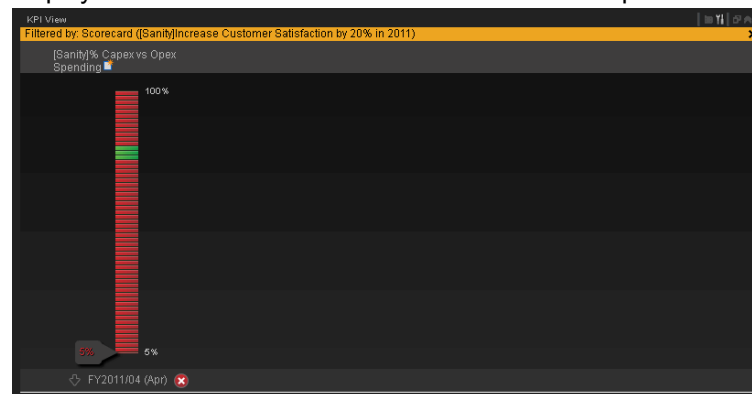
Summary of Page Wiring		
Source Component	Context	Target Component
Scorecard	ObjectiveChanged	KPI View
KPI View	ShowOvertime	Historical View

6. In the Dashboard page, move the cursor over the  icon of the relevant objective in the Scorecard component. The tooltip displays the KPIs of the Objective, for example: **% Capex**

vs Opex Spending.



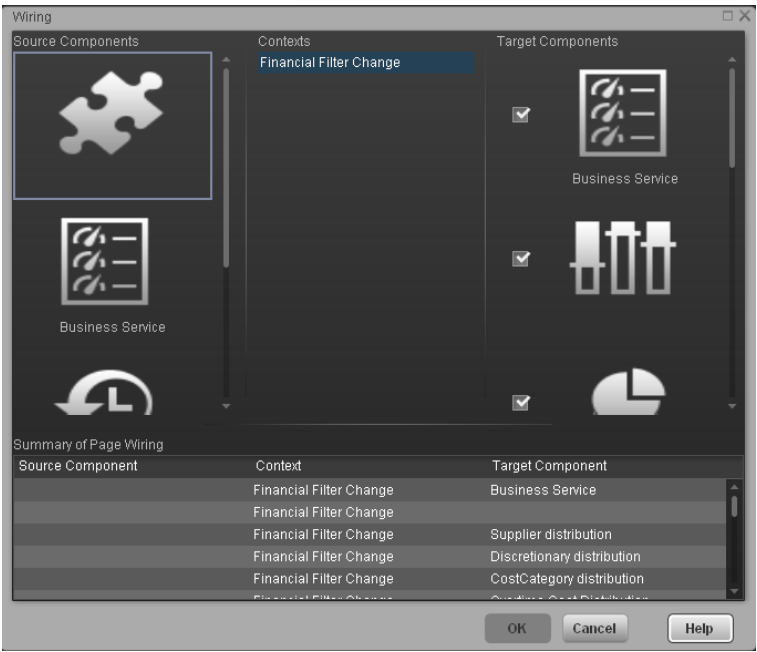
7. In the Scorecard component, click the relevant Objective. The KPI View component that is wired to the Scorecard component immediately refreshes to display the KPI View for the Objective's KPIs, for example: **% Capex vs Opex Spending**. In addition, the time period of the KPI View component is reset to the Scorecard time period. A message indicates that the display of the KPI View is wired to the Scorecard component.



8. To restore the original display of the KPI View component, click X on the yellow message.

UI Description

Wiring Dialog Box



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Source components	This column displays all of the page components that have the ability to send contexts to other components. Select a source component, then select the context and the target components.

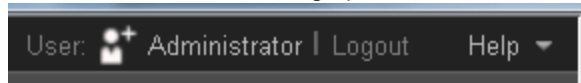
<p>Contexts</p>	<p>After you select a source component in the left column, the context box contains a list of the contexts that can be sent from this source to the target components.</p> <p>Select the context you want to send to one or more targets, and then select the target component.</p> <p>The contexts are:</p> <ul style="list-style-type: none"> • KPI Selection. When the user selects a KPI in the KPI Viewer component, a KPI Selection event is published. The Historical View component wired to the KPI Viewer component receives that event and its display is updated to show the selected KPI's history. • Objective Selection. When the user selects an Objective in the Scorecard component, an Objective Selection event is published. The KPI Viewer component that is wired to the Scorecard component receives that event and update its display to show the details of Objective's children (Objectives, KPIs, or KPI Breakdowns). • Filter Change. When the user selects another entity:dimension in the Page Filter component, a Filter Change event is published. Component that are wired to the Scorecard component receive that event and update their display to show the details of Objective's children (Objectives, KPIs, or KPI Breakdowns). The components that are wired to the Page Filter component are: <ul style="list-style-type: none"> ■ KPI View ■ KPI List ■ KPI Rolodex ■ Pie Chart View ■ Historical View ■ Historical Metric View ■ Dimension Scoring ■ Web Intelligence Report Viewer ■ Xcelsius Reports Viewer
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<

Personalize the Dashboard

To add the user's picture to the Dashboard frame.

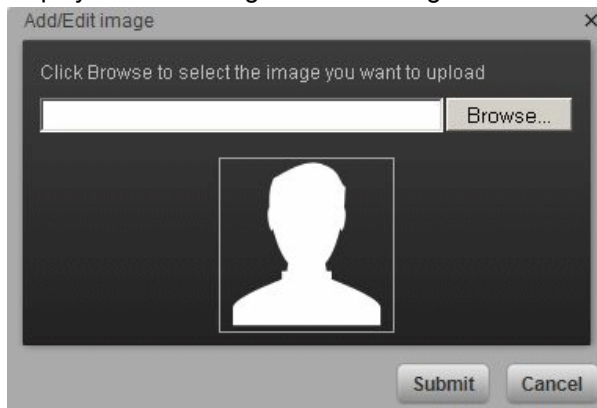
1. Move the cursor above the graphic next to **User:**



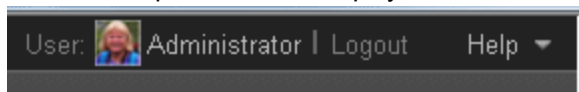
2. Click the **Add Image** button that is displayed.



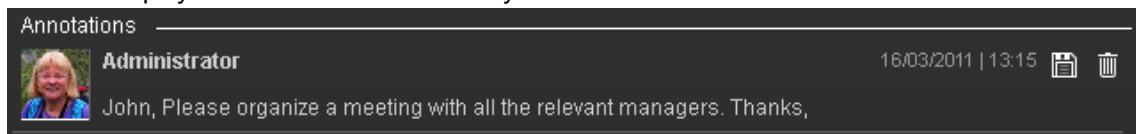
3. In the **Add/Edit image** dialog box that opens, locate the relevant picture. The image is displayed in the dialog box. The change is saved only when you click **Submit**.



The relevant picture is now displayed in the Dashboard frame.



It is also displayed in the annotations sent by the same user.



Limitations

You can only upload images as follows:

- The size of the picture must be less than 5 MB.
- The allowed extensions are: .png, .jpg, .jpeg, .gif, .tif, or .bmp
- For best display, the recommended image ratio is 3 x 4.

During the image upload, the image is automatically resized to 100 x 100 pixels and the size of the file is reduced.

View and Analyze the Business Objectives in the Dashboard

This section includes the following topics:

- [View and Analyze the Business Objectives](#)282
- [View and Analyze Results in the Explorer Page](#)289
- [Display More Information About a Specific Objective or KPI](#)304

View and Analyze the Business Objectives

In the relevant pages in Dashboard, and depending on your permissions, you can view and analyze the business objectives you set for yourself, your department, or your enterprise. This information is displayed in the relevant Scorecards and components.

Once the Administrator has set up the relevant pages in Dashboard, you can view the information contained in the pages and analyze it using the capabilities described below.

To access:

Click the relevant tabs in the Dashboard

Learn More

The out-of-the-box pages provide the tools that help the Executive plan, expand and monitor the strategies that help managing the business challenges of that Executive. For details on the business challenges for each role, see ["Executive Personas and their Business Challenges"](#) on page 11.

Tasks

This section includes the following topics:

- ["View the relevant objectives in your pages" on next page](#)
- ["Analyze your objectives using the components on your pages" on next page](#)
- ["Drill down to your subordinate's Scorecards" on next page](#)
- ["Display more information about a specific Objective or KPI" on page 284](#)
- ["Use the wiring feature to display more details about a KPI" on page 286](#)
- ["Drill down to more details about the Objectives, KPIs, or KPI Breakdowns in the Explorer tab" on page 286](#)
- ["View details about the Scorecards, Perspectives, Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, or Orphan KPIs in the Explorer tab" on page 286](#)
- ["Understand the meaning of an Objective or KPI" on page 286](#)
- ["View and Analyze the Business Objectives" above](#)
- ["View and Analyze the Business Objectives" above](#)
- ["Add annotations to a specific Objective or KPI" on page 287](#)
- ["Print, email, or PDF the relevant annotation" on page 287](#)
- ["View and Analyze the Business Objectives" above](#)
- ["View and Analyze the Business Objectives" above](#)

View the relevant objectives in your pages

The administrator has prepared pages for your use. These pages reflect the objectives you set for yourself or your department.

In the Dashboard, click the relevant tab. It includes several components that can enable you to analyze these objectives.

Analyze your objectives using the components on your pages

Depending on your permissions, the pages may include Scorecard components. Each Scorecard component represents the results of the list of selected Perspectives and their Objectives with their value, trend, and status for the measurement period. It represents strategic goals for the organization headed by the executive for whom the page was created. For details, see ["Add a Scorecard Component to a Page" on page 237](#).

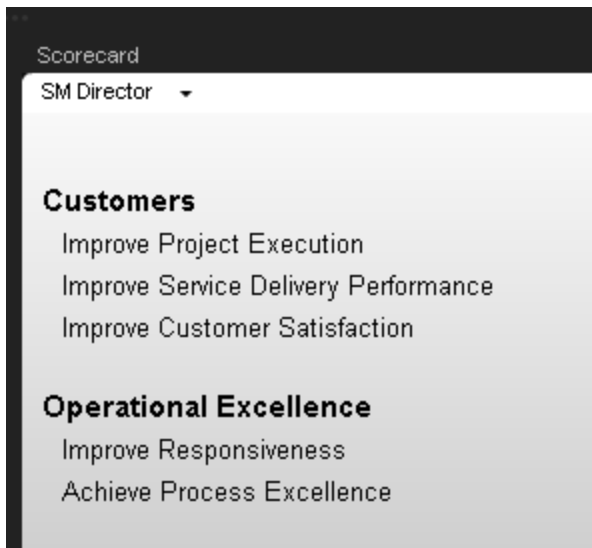
In addition, the pages may include other components that provide additional information:

- KPI List component. For details, see ["Add a KPI List Component to a Page" on page 207](#).
- Dimension Scoring component. For details, see [Add a Dimension Scoring Component to a Page](#).
- Historical Metric View component. For details, see ["Add a Historical View Component to a Page" on page 186](#).
- Historical View component. For details, see ["Add a Historical View Component to a Page" on page 186](#).
- KPI Rolodex component. For details, see ["Add a KPI Rolodex Component to a Page" on page 214](#).
- KPI View component. For details, see ["Add a KPI View Component to a Page" on page 196](#).
- Pie Chart View component. For details, see ["Add a Pie Chart Component to a Page" on page 229](#).
- Scorecard component. For details, see ["Add a Scorecard Component to a Page" on page 237](#).
- Web Intelligence Reports Viewer component. For details, see ["Add a Web Intelligence Report Viewer Component to a Page" on page 242](#).
- Web Intelligence Static Report Viewer component. For details, see ["Add a Web Intelligence Static Report Viewer Component to a Page" on page 250](#).
- Web Intelligence Dynamic Report Viewer component. For details, see ["Add a Web Intelligence Dynamic Report Viewer Component to a Page" on page 246](#).
- Xcelsius Report component. For details, see ["Add a SWF Report Viewer Component to a Page" on page 258](#).

Drill down to your subordinate's Scorecards

If the administrator has prepared the relevant capability, you can drill down from your Scorecard to your subordinate Scorecard.

If the Scorecard component you are analyzing has drilldowns to subordinate (cascading) Scorecards, a small black arrow is displayed to the right of the Scorecard title.




Click the arrow to display the list of subordinate Scorecards and select the relevant one to display it.

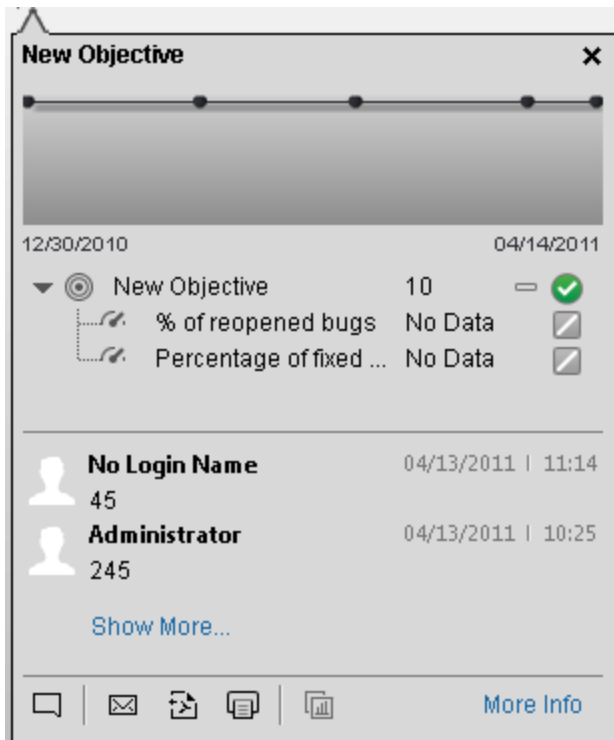
To return to the parent Scorecard, click the X to close the subordinate Scorecard display. Note that you can only access one level down (meaning that if the subordinate Scorecard has subordinates, to access their information, you must create a Scorecard component for the first level of subordinate Scorecard).

For details, see ["Add a Scorecard Component to a Page" on page 237](#).

Display more information about a specific Objective or KPI

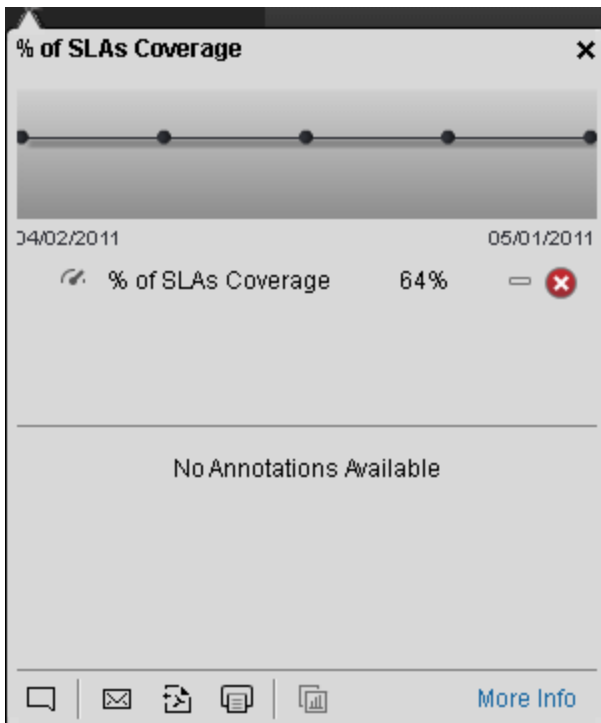
From a Scorecard component, move the cursor above the  icon at the end of the Objective's name to view over time information about the Objective, details about the Objective's KPIs and the annotations added to the Scorecard by users.

You can also add annotations, send the tooltip by email, PDF it, or print it. For details, see ["Display More Information About a Specific Objective or KPI" on page 304](#).



From any other out-of-the-box component, moving the cursor above the icon at the end of the KPI's name to view over time information about the KPI, its value, trend, and status, and the annotations added to the KPI by other users.

You can also add annotations, send the tooltip by email, PDF it, or print it. For details, see "[Display More Information About a Specific Objective or KPI](#)" on page 304.



Use the wiring feature to display more details about a KPI

Component wiring defines how components on the same page interact with each other. When two components are wired, you may select one element on the first component, and immediately, the second component's display changes to view the relevant information for the selected element.

For example, you select one KPI in the KPI View component that is wired to the Historical View and the details of the same KPI are immediately displayed in the Historical View component, on the same page, using the format of the Historical View component.

For details, see ["Set Up Wiring Between Components" on page 273](#)

Drill down to more details about the Objectives, KPIs, or KPI Breakdowns in the Explorer tab

From an Objective or KPI tooltip, click **More Info** to open the Explorer tab filtered for the Objective, KPI, or KPI Breakdown. The Explorer tab provides over time information, details about the Objective or KPI's configuration, the complete list of annotations, the location of the Objective or KPI in the active tree, and a Goal map for the element. For details, see ["View and Analyze Results in the Explorer Page" on page 289](#).

View details about the Scorecards, Perspectives, Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, or Orphan KPIs in the Explorer tab

Depending on the selected type of entity (Scorecard, Perspective, Objective, KPI, KPI Breakdown, Metric, Metric Breakdown, or Orphan KPI), the Explorer tab provides over time information, configuration details, the complete list of annotations, the capability to add or edit annotations, the location of the selected item in the active tree, and a Goal map for the item. For details, see ["View and Analyze Results in the Explorer Page" on page 289](#).

Understand the meaning of an Objective or KPI

The Objectives that are displayed in the pages and components represent the overall performance goal that you want to track. For details, see ["Objectives" on page 19](#).

The Objectives include groups of KPIs of different types that can represent different aspects of the goal. For details, see ["KPIs and Metrics" on page 20](#).

For example, if you want to measure the IT department responsiveness, you create an Objective that measures different aspects of the IT department related to responsiveness. Each aspect is measured by a different KPI types (for example: project initiation time, PC purchase time, and more). These KPIs provide values, trends, and statuses that help you track your goals.

Drilldown to KPI Breakdown information

A KPI represents a business context. The value of the KPI is calculated based on the entities (facts or dimensions) that provide information on the business context. A business context can include lots of facts or dimensions.

The administrator creates multiple levels of KPI Breakdowns depending on the definition of the KPI and on the KPI's business context. These definitions provide the different levels of Breakdown

that enable you to obtain very detailed information about the business aspect that you are measuring.

For details, see ["Manage KPI Breakdowns" on page 123](#).

Access Explorer to display detailed information about a selected KPI or Objective


You can view more detailed information for a selected KPI or Objective by moving the cursor over the relevant item in the page, component, or Scorecard component, in the Dashboard. In the tooltip that opens, click **More info**. The Explorer tab opens for the selected item.

You can also click the **Explorer** tab to display the Active KPIs tree, and by clicking the Objectives and KPIs in the tree, display detailed information about the selected item in the Explorer tab.

The information includes the items description, value or score, value over time, annotations sent by other users, links to relevant pages, external URLs, reports, and more.

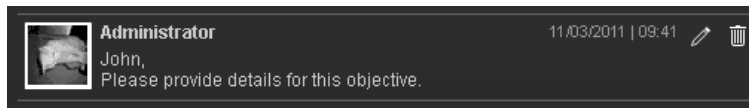
For additional details, see ["View and Analyze Results in the Explorer Page" on page 289](#).

Add annotations to a specific Objective or KPI

1. In Explorer, click the relevant Objective or KPI in the Active KPIs tree.
2. Examine the information displayed in the Explorer Details, Calculation Details, Goal Map tabs.
3. If you have comments, click the **Add annotation**  button at the bottom of the Annotations area.
4. In the box that opens, enter your annotation, and click **Add** to add the annotation to the list of annotations in the Annotations area.

A screenshot of a dark-themed input box for adding an annotation. It features a large text area and two buttons at the bottom right: "Add" and "Discard".

5. The annotation is added to the list.



For additional details, see ["View and Analyze Results in the Explorer Page" on page 289](#).

Print, email, or PDF the relevant annotation

You can email the owner of the Objective or KPI you are analyzing.

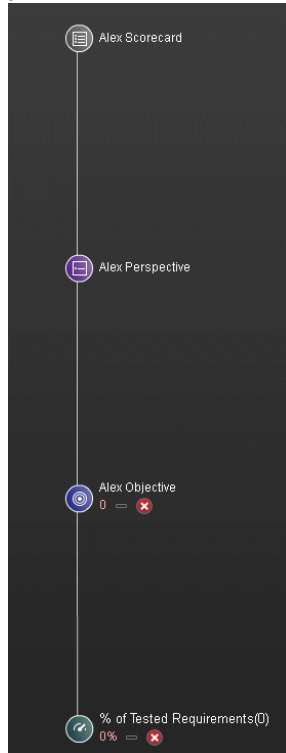
You can also save a snapshot of the information displayed in the Explorer details tab (chart, annotations, and additional information for the KPI or Objective), in PDF format, or you can print that snapshot.

For additional details, see ["View and Analyze Results in the Explorer Page" on page 289](#)

Understand the impact of one KPI on Objectives, Perspectives, and Scorecards

1. In Explorer, click the relevant Objective or KPI in the Active KPIs tree.



2. Examine the information displayed in the Goal Map tab. The Goal Map provides a tree of nodes that represents the display of the impact of the selected KPI on the relevant Objectives, Perspectives, and Scorecards, or of the selected Objective on the relevant Perspectives, and Scorecards. The Goal Map displays the impact configuration only for the current period of the selected KPI or Objective. The information displayed on the Goal Map depends on the user permission. You can double-click on a node (KPI or Objective) to select the KPI or Objective in the Active Tree and to display the Explorer Details tab for the selected node and the current period. For details, see ["View and Analyze Results in the Explorer Page" on next page.](#)





View and Analyze Results in the Explorer Page

You can view detailed Scorecard, Objective, Perspective, KPI, KPI Breakdown, Metric, Metric Breakdown, or Orphan KPI information in the Explorer page.

To access:

- Click the **Explorer** tab to access detailed information about all the Scorecards, Objectives, Perspectives, KPIs, KPI Breakdowns, Metric, Metric Breakdown, or Orphan KPIs that are active in Executive Studio. In the Explorer tab, click the relevant item to display detailed information about that item.
- Click **More info** in the Scorecard component Objective tooltip to access detailed information about the specific Objective.
- Click **More info** in the Scorecard component KPI tooltip to access detailed information about the specific KPI.
- Double-click a point in the Historical View component to open the Explorer tab for the period of time corresponding to that point and to the KPI. For details, see ["Add a Historical Metric View Component to a Page" on page 177](#).
- Click  or  in any of the KPI components.

Learn More

- When you double-click a point in the KPI Overtime component or  or  in the other components, the Explorer tab displays only the details for the selected KPI for which you have the correct permissions. You are not able to display all the nodes in the Active tree.
- If you do not have permission to display the Explorer tab, then you cannot access it, even to look at the Objectives and KPIs for which you have permission.
- Click X in the top right corner of the Explorer tab to access or return to the Dashboard.

Tasks

This section includes:

["Access Explorer to display detailed information about a selected KPI or Objective" below](#)

["Add annotations to a specific Scorecard, Objective, Perspective, KPI, KPI Breakdown, Metric, Metric Breakdown, or Orphan KPI " on next page](#)

["Send Mail" on next page](#)

["Export the First Level Navigation Tooltip to a PDF file" on next page](#)

["Print the contents of the First Level Navigation tooltip" on page 291](#)

Access Explorer to display detailed information about a selected KPI or Objective

You can view more detailed information for a selected KPI or Objective by moving the cursor over the relevant item in the KPI or Scorecard component in the Dashboard page. In the tooltip that


opens, click **More info**. The Explorer tab opens for the selected item.

You can also click the **Explorer** tab to display the Active KPIs tree, and by clicking the Objectives and KPIs in the tree, display detailed information about the selected item in the Explorer tab.

The information includes the items description, value or score, value over time, annotations sent by all users, links to relevant pages, external URLs, reports, and more.

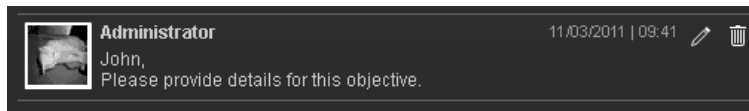
For additional details, see ["Explorer Tab" on next page](#).

Add annotations to a specific Scorecard, Objective, Perspective, KPI, KPI Breakdown, Metric, Metric Breakdown, or Orphan KPI

1. In the Explorer tab, click the relevant item in the Active KPIs tree.
2. Examine the information displayed in the Explorer Details, Calculation Details, Goal Map tabs.
3. If you have comments, click the **Add annotation**  button at the bottom of the Annotations area.
4. In the box that opens, enter your annotation, and click **Add** to add the annotation to the list of annotations in the Annotations area.




5. The annotation is added to the list.



For additional details, see ["Explorer Tab" on next page](#).

Movie:[Movie](http://youtu.be/2u72DzSOqhU) (<http://youtu.be/2u72DzSOqhU>)


Send Mail

1. In the Explorer tab, click the relevant item in the Active KPIs tree.
2. To send an email to the Owner of the entity, click the **Send Mail**  icon.
If you send an email right after adding an annotation, the content of the annotation is automatically added to the email.

For additional details, see ["Explorer Tab" on next page](#).

Movie:[Movie](http://youtu.be/2u72DzSOqhU) (<http://youtu.be/2u72DzSOqhU>)


Export the First Level Navigation Tooltip to a PDF file

1. In the Explorer tab, click the relevant item in the Active KPIs tree.
2. To export a First Level Navigation tooltip to a PDF file, click the **Save snapshot**  icon.

For additional details, see ["Explorer Tab" on next page](#).

Movie:Movie (<http://youtu.be/2u72DzSOqhU>)

Print the contents of the First Level Navigation tooltip

- 1. In the Explorer tab, click the relevant item in the Active KPIs tree.
- 2. To print the content of the First Level Navigation tooltip, click the **Print**  icon.

For additional details, see "Explorer Tab" below.

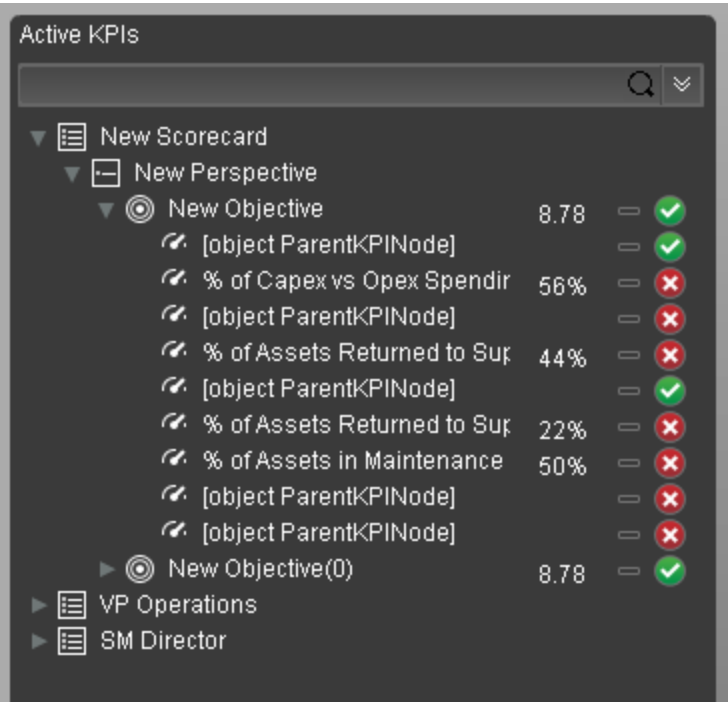
Movie:Movie (<http://youtu.be/2u72DzSOqhU>)

UI Description

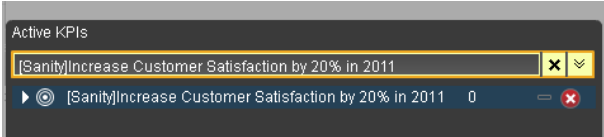





Explorer Tab

The Explorer tab includes the following areas:

Active KPIs



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
<Search>	<p>Enter the relevant string to display, in the tree, the nodes whose name includes the string.</p> <p>In addition, the child nodes of the filtered nodes are also listed even when the child node names do not include the string.</p> <p>If the display is filtered (in case you accessed the Explorer from one of the components in the Dashboard, the <Search> box displays information about the filter. For example:</p> 
	<p>Expand the query. Opens additional fields to help you refine the component's filter:</p> <ul style="list-style-type: none"> • Status: Select one of the All, Good, Warning, or Critical values to display only the KPIs with the selected status, in the Active KPIs area. • Type: Select: <ul style="list-style-type: none"> ▪ All. To display all the elements in the tree. ▪ KPIs. To display only the KPIs with the selected status. ▪ Objectives. To display only the Objectives, which have the selected status, and their KPIs .
Active KPIs	<p>The pane lists all the Scorecards, Perspectives, Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, and Orphan KPIs, active in the HP IT Executive Scorecard.</p> <p>Click one of the Scorecards, Perspectives, Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, or Orphan KPIs to display their detailed information in the other panes.</p> <p>The area also displays on the right side of the pane, a subset of the following items depending on the type of item you selected:</p> <ul style="list-style-type: none"> • The name of the item. • The value of the item. •  The trend icon indicates the trend of the value calculated over the current period. • The status of the item, during the current period. It can be: <ul style="list-style-type: none"> ▪  indicates that the status is Good. ▪  indicates that the status is Warning. ▪  indicates that the status is Critical.

Explorer Details Tab

The tab displays different information depending on the type of item you selected.

Note: When in Executive Scorecard, you navigate to another tab and then return to the Explorer, the details of the item that was previously in focus are displayed again. However, its properties might be refreshed.

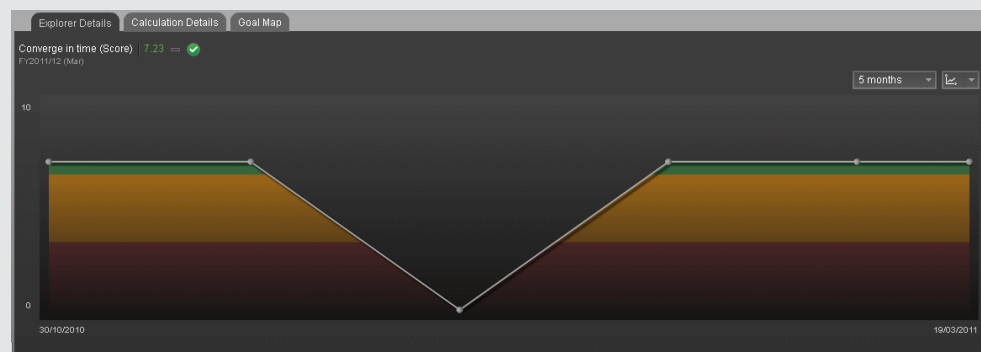
- **For a Scorecard or Perspective:**

UI Element	Description
Name	The name of the Scorecard or Perspective you selected in the Active KPIs pane.
Description	The description of the Scorecard or Perspective as it appears in the Scorecard Configuration Details pane.
Cascading Scorecards	The list of Cascading Scorecards assigned to the Scorecard.





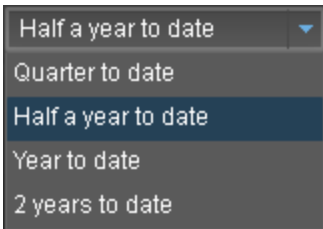




- **For an Objective, KPI, Metric, or Orphan KPI**


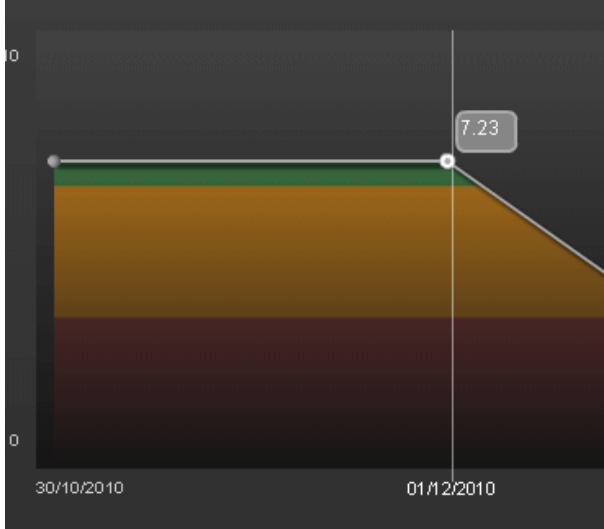

The tab displays the selected item over time information for the current period as defined in the item configuration. You can also display past information by selecting a past period of time.

The figure below shows an example of Explorer details for an Objective.



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

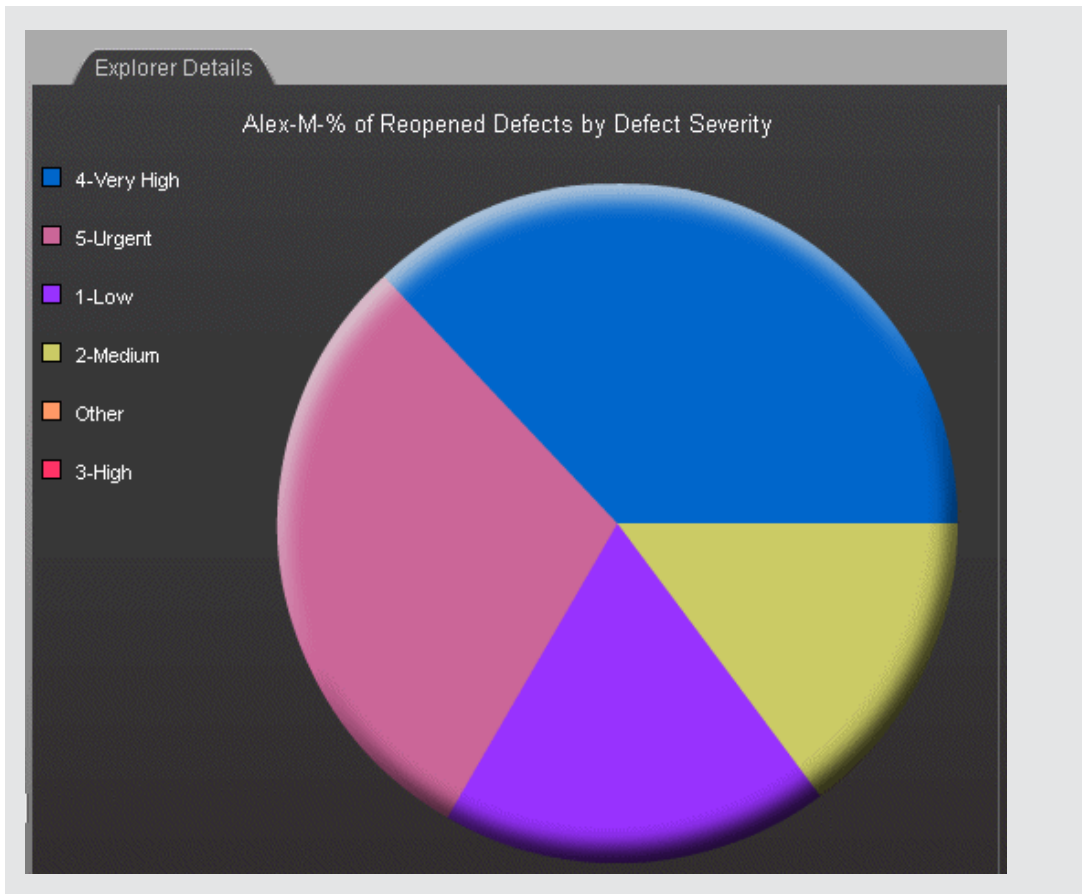
UI Element	Description
<Item name>	<p>The title on the top left corner lists:</p> <ul style="list-style-type: none"> ■ The name of the selected item. ■ The value of the selected item. ■  The trend icon indicates the trend of the value calculated over the current period configured for the selected Objective, KPI, KPI Breakdown, Orphan KPI, or, Metric, or Metric Breakdown. ■ The status of the Objective, KPI, KPI Breakdown, or Orphan KPI, during the current period. It can be: <ul style="list-style-type: none"> ○  indicates that the status is Good. ○  indicates that the status is Warning. ○  indicates that the status is Error. <p>The current period corresponding to the period configured for the selected item.</p>
	<p>To display historical information, select the relevant past periods of time corresponding to the period configured for the selected item.</p>
	<p>Select one of the following chart types:</p> <ul style="list-style-type: none">  to display the information in line chart format.  to display the information in bar chart format.  to display the information in table format.

UI Element	Description
	<p>Indicates a regular "point" corresponding to a division of the time period.</p> <p>You can move the cursor above the graph to display a line that shows the exact date of a specific point.</p> 
	<p>(yellow point) Indicates that there is no calculated data for the selected item for the selected period. This can be due to an incorrect formula (for example: division by zero), an arithmetic error due to missing data, or other reasons.</p> <p>Double-click the problematic point to open the Explorer page where a short description of the reason why there is no data for that point, is displayed at the top of the page.</p>
<Threshold>	The chart automatically displays the thresholds if you have selected an Objective.
<Y-axis>	The Y-axis displays the values of the selected item in the relevant unit.
<X-axis>	The X-axis displays the time frame of the selected item, split into equal segments.

- **For a KPI Breakdown or a Metric Breakdown:**

If you click the KPI Breakdown or Metric Breakdown in the Active KPIs area of the Explorer, the pie chart below is displayed.

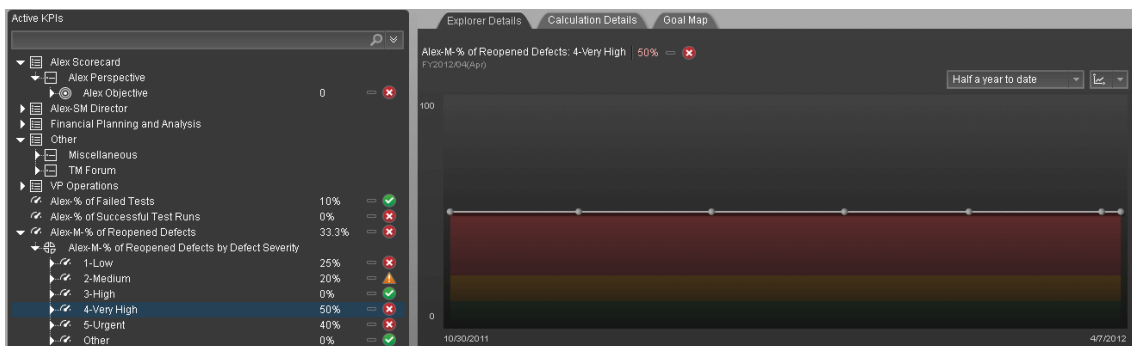
The figure below shows an example of Explorer details for a KPI Breakdown.



If you click one of the values of the KPI Breakdown in the Active KPIs area of the Explorer, the regular Explorer Details tab ("For an Objective, KPI, Metric, or Orphan KPI" on page 293), Calculation Details tab ("Calculation Details Tab" on next page), and Global Map tab ("Goal Map Tab" on page 299) are displayed.

If you click one of the values of the Metric Breakdown in the Active KPIs area of the Explorer, the regular Explorer Details tab ("For an Objective, KPI, Metric, or Orphan KPI" on page 293), and Calculation Details tab ("Calculation Details Tab" on next page), are displayed.

The figure below shows an example of Explorer details for a KPI Breakdown dimension value.



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
<Legend>	The legend displays the representative color and the value of the KPI Breakdown or Metric dimension.
<Pie>	<p>The pie includes up to 10 slices.</p> <p>If the KPI Breakdown or Metric dimension has more than 10 values, 9 slices of the pie represent the highest values of the dimension. The 10th slice represents all the other values. A tooltip displays details about each slice: the name of the KPI or Metric, the value of the dimension. The tooltip of the 10th slice shows the list of all the other values.</p>

Calculation Details Tab

Note: This tab is displayed only for Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, or Orphan KPIs.

A typical Calculation Details tab for a KPI:

Explorer Details Calculation Details Goal Map

General

Business Context: FinancialManagement

Unit: %

Calculation period: Monthly

Formula KPI:

```
percentage_math (sum(CostAmount, Cost.CostType = 'Actual' and Period.EndDate <= END_PERIOD and Period.Year IN_CURRENT_YEAR), sum(CostAmount, Cost.CostType = 'Planned' and Period.Year IN_CURRENT_YEAR))
```

Filter:

Thresholds:

-50% -30 -10 10 30 50%

Comments

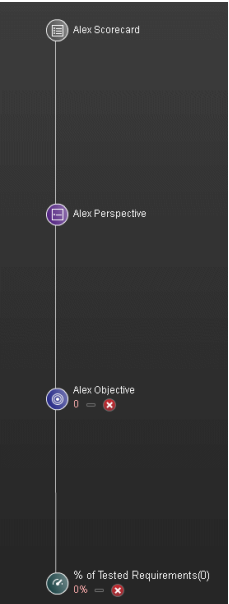
Chat Email Print Copy

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Formula	The formula used to calculate the value of the KPI, Metric, Metric Breakdown, or KPI Breakdown.

UI Element	Description
Filter	The filter used to limit the range of data used to calculate the value of the Metric, Metric Breakdown, KPI or KPI Breakdown.
Thresholds	<p>The threshold definition of the Objective, KPI or KPI Breakdown.</p> <p>Thresholds are not relevant for a Metrics or Metric Breakdowns.</p>
Unit	The unit of the Metrics, KPI, or KPI Breakdown or Metric.
Calculation Period	The period of the Objective, Metric, KPI, or KPI Breakdown.
Calculated using	<p>The type of rule used to calculate the Objective's score according to the score of its children. It can be:</p> <ul style="list-style-type: none"> • Worst child. The Objective score is the worst score of all the KPIs assigned to the parent Objective (when the Objective has child KPIs) or of the Objectives assigned to the parent Objective. • Best child. The Objective score is the best score of all the KPIs assigned to the parent Objective (when the Objective has child KPIs) or of the Objectives assigned to the parent Objective. • Weighted average. The Objective score is the average of the scores of the KPIs assigned to the parent Objective (when the Objective has child KPIs) or of the child Objectives multiplied by the relevant weights. When you select this rule, an additional column (Weight) where the user can configure the weight of each child (Objective or KPI) for the weighted average calculation. When you select this value a note is displayed explaining what is weighted average.

Goal Map Tab





The Goal Map provides a tree of nodes that represents the display of the impact of the selected KPI, KPI Breakdown, or Orphan KPI on the relevant Objectives, Perspectives, and Scorecards.



The Goal Map displays the impact configuration only for the current period of the selected KPI, KPI Breakdown, or Orphan KPI.

In addition, the display of the Goal Map depends on the user permission.

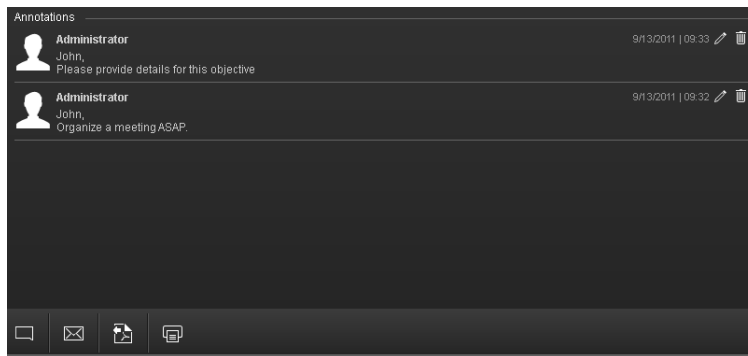
In the Goal Map, you can double-click an Objective, KPI, KPI Breakdown, or Orphan KPI to select it in the Active Tree and to display the Explorer Details tab for the selected item and the current period.

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
	Represents the parent Scorecard of the selected KPI, KPI Breakdown, or Orphan KPI. The name of the Scorecard is displayed near the icon.
	Represents the parent Perspective of the selected KPI, KPI Breakdown, or Orphan KPI. The name of the Perspective is displayed near the icon.

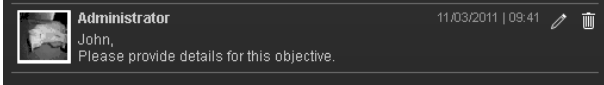


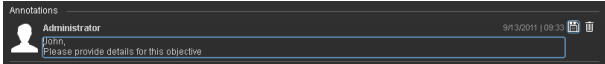


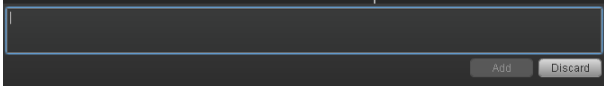

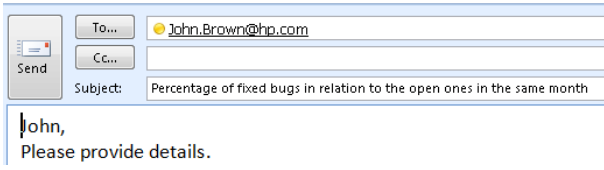

UI Element	Description
	Represents one of the following: <ul style="list-style-type: none"> The selected Objective. The name, score, trend, and status of the Objective is displayed near the icon. The parent Objective of the selected KPI, KPI Breakdown, or Orphan KPI.
	Represents the selected KPI, KPI Breakdown, or Orphan KPI. The name, value, trend, and status of the KPI, KPI Breakdown, or Orphan KPI is displayed near the icon.
<Toolbar>	For details, see " Annotations Area " below.


Annotations Area



Note: This area is displayed only for Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, or Orphan KPIs.

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
<Annotation>	<p>Lists the annotations sent for the selected Objective, KPI, KPI Breakdown, Metrics, or Orphan KPI. The annotation includes the sender's name and photo (if available), the date and time when the annotation was sent, and the contents of the annotation.</p>  <p>The listed annotations correspond to the annotations entered by users for the selected period of time (current period of time in addition to the historical period of time selected in the graph).</p> <p>The sender can also:</p> <ul style="list-style-type: none"> • Edit  an annotation. An edit box opens around the text of the annotation. A Save  icon is displayed.  <ul style="list-style-type: none"> • Discard  an annotation. A confirmation message is issued. Click OK to discard.
	<p>Add annotation. Opens a box where you can add your annotation:</p>  <p>Enter the text of the annotation and click Add to add the annotation to the list or Discard to discard the annotation.</p>
	<p>Send mail. Opens an Outlook email, with the owner of the selected Objective, KPI, or KPI Breakdown listed in the To box, Regarding: <Objective_or_KPI_name> in the Subject box, and the text of the just written annotation in the body of the email.</p> 
	<p>Save snapshot. Opens your list of directories, where you can select the location of the PDF you are creating.</p>

UI Element	Description
	<p>Print. Displays the Print dialog box where you can select the printer and how to print the content of the corresponding Explorer tab.</p> <p>The printout includes:</p> <ul style="list-style-type: none">• The graph area with the tab that was selected while you clicked the Print button.• The Annotations Area.• The Additional Information Area relevant for the selected tab.

<Additional Information> Area**Description:**

The number of requirements that are actually covered and completed by tests that run relative to the total number of requirements.

By default, the KPI is based on cycles; if the organization does not use cycles the default can be changed to Projects.

Business motivation:

Do my projects fulfill their promises?
Do they deliver the promised scope?

Owner:**Additional info:**


Note: This area is displayed only for Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, or Orphan KPIs.


User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Description	The description of the Objective, KPI, KPI Breakdown, Metric, Metric Breakdowns or Orphan KPI selected in the Active KPIs pane.
Business motivation	The business motivation of the KPI, KPI Breakdown selected in the Active KPIs pane.

UI Element	Description
Owner	The owner of the Objective, KPI, KPI Breakdown, Metric, Metric Breakdowns or Orphan KPI selected in the Active KPIs pane.
Additional info	<p>Links to external pages, Dashboard pages that were configured in the Studio for the Objective, KPI, or Metric, BO, or Xcelsius reports as configured in the Objective, KPI, KPI Breakdown, Metric, Metric Breakdowns or Orphan KPI configuration.</p> <p>Note for the System Administrator: Xcelsius and BO Reports can be added as Additional Info in the Objective, KPI, KPI Breakdown, Metric, Metric Breakdowns or Orphan KPI configuration when the parameter bo.in.use is configured as true in the SETTINGS_MANAGEMENT table in the Management database.</p>

Display More Information About a Specific Objective or KPI

From a Scorecard component in a page, move the cursor above the  icon at the end of the Objective's name to view over time information about the Objective, details about the Objective's KPIs and the annotations added to the Scorecard by users.

From any other out-of-the-box component, moving the cursor above the  icon at the end of the KPI's name to view over time information about the KPI, its value, trend, and status, and the annotations added to the KPI by other users.


To access:

Move the cursor above the name of a KPI in a Dashboard component to display the KPI tooltip.

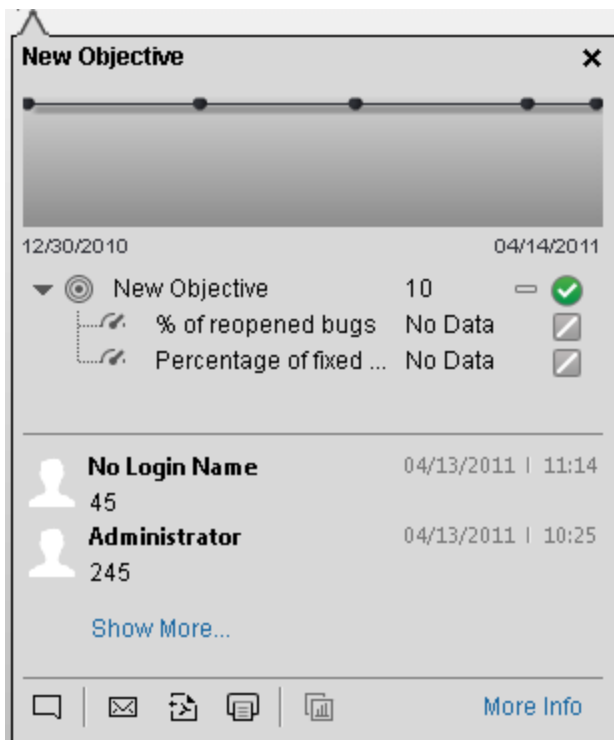
Move the cursor above the name of an Objective in a Dashboard component to display the Objective tooltip.


Tasks

Display more information about a specific Objective or KPI

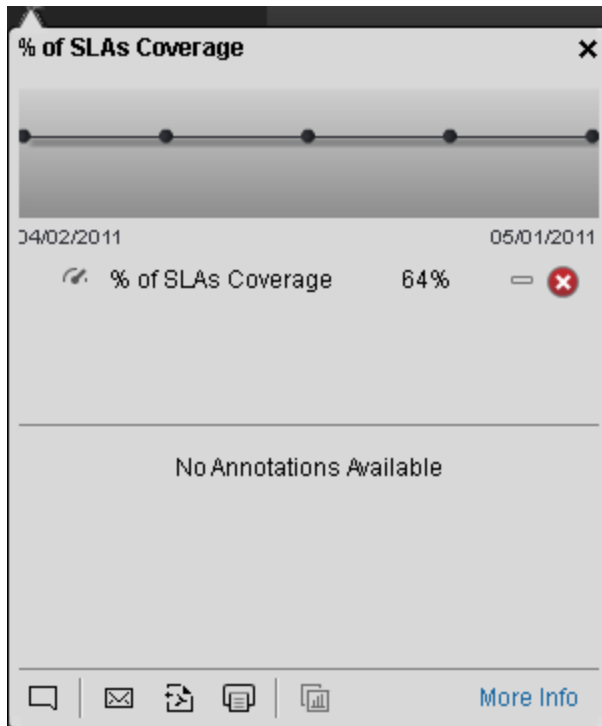
From a Scorecard component in a page, move the cursor above the  icon at the end of the Objective's name to view over time information about the Objective, details about the Objective's KPIs and the annotations added to the Scorecard by users.

You can also add annotations, send the tooltip by email, PDF it, or print it. For details, see ["Objective Tooltip" on page 308](#).



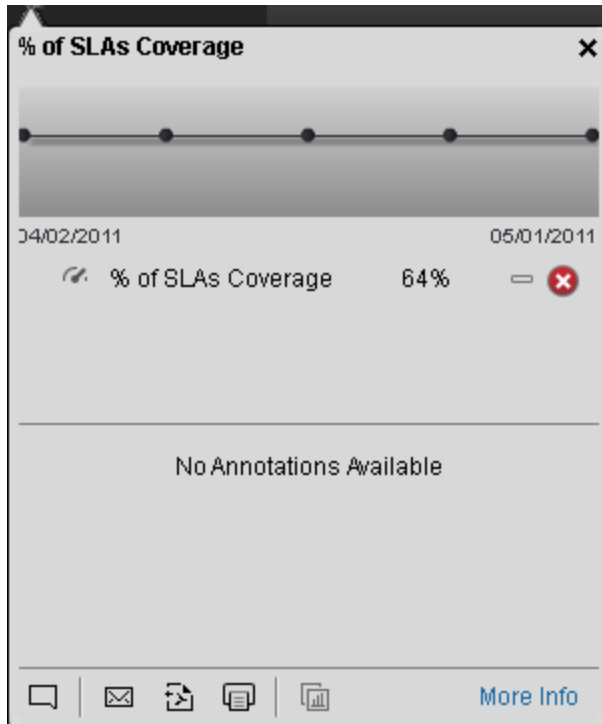
From any other out-of-the-box component, moving the cursor above the  icon at the end of the KPI's name to view over time information about the KPI, its value, trend, and status, and the annotations added to the KPI by other users.

You can also add annotations, send the tooltip by email, PDF it, or print it. For details, see "[KPI Tooltip](#)" on next page.





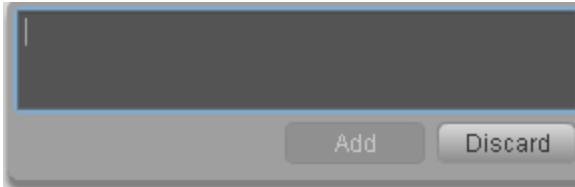

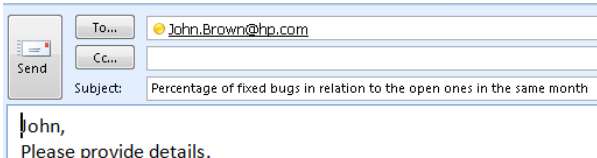
UI Description





KPI Tooltip



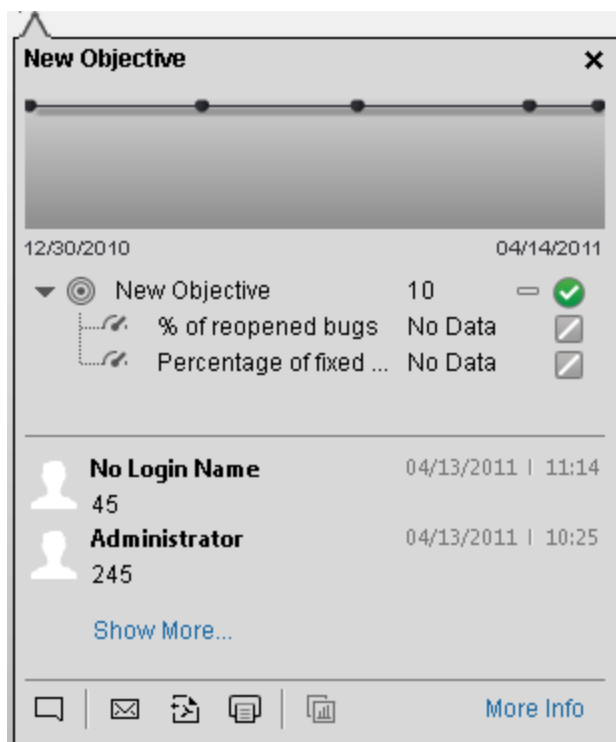
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Name>	The name of the KPI.
<Over Time value>	<p>The graph displays the over time value of the KPI for 5 periods in the past from the current period. The periods displayed are based on the period configured for the KPI.</p> <p>For example, if the KPI period is 1 month, the graph displays the value of the KPI over the past 5 months.</p> <p>A large point  in the graph indicates that an annotation was added to that point. Move the cursor above the point to see the annotation.</p> <p>You can add a new annotation to the over time chart only if there is already an annotation attached to the over time chart. To add an annotation to the chart, you can click the More info link to open Explorer filtered for the selected KPI.</p>


UI Element	Description
<KPI and KPI Breakdowns>	<p>This section displays:</p> <ul style="list-style-type: none"> The name of the KPI, its value, trend, and status. If the KPI has 3 KPI Breakdowns or less, the 3 KPI Breakdowns with the lowest score are displayed in the tooltip with their name, value, trend, and status. If the KPI has more than 3 KPI Breakdowns, a Show more link appears below the list of KPI Breakdowns. Click the link to open Explorer filtered for the selected KPI, where you can see all the KPI Breakdowns of the selected KPI. When a KPI does not display data because there is no calculated data (for example, the formula is incorrect, or includes a division by zero), the KPI Tooltip is available but displays No data and clicking the KPI in the KPI Tooltip displays the Explorer tab with a short explanation of the No data problem. When a KPI does not display data because the calculation period corresponds to a time when the KPI had not yet been configured in the Studio, the KPI Tooltip is not available.
Annotations	<p>Lists the last 3 annotations sent by all users (including the current user). If more than 3 annotations have been sent for the selected KPI, only 2 are displayed followed by a Show more link. Click the link to open Explorer filtered for the selected KPI, where you can see all the annotations of the selected KPI.</p>
	<p>Add annotation. Opens a box where you can add your annotation:</p>  <p>Enter the text of the annotation and click Add to add the annotation to the list or Discard to discard the annotation.</p>
	<p>Send mail. Opens an Outlook email, with the owner of the selected Objective, KPI, or KPI Breakdown listed in the To box, Regarding: <Objective_KPI_Breakdown_KPI_name> in the Subject box, and the text of the latest annotation in the body of the email.</p> 


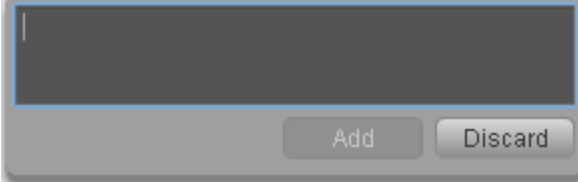

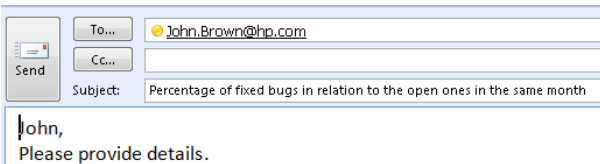




UI Element	Description
	Save snapshot. Opens your list of directories, where you can select the location of the PDF you are creating.
	Print. Opens a dialog box where you can select and configure the printer, and send the tooltip to print.
	Reports. Opens a popup that lists all the additional info configured for the KPI: reports, Dashboard pages, or external URLs. 
More Info	Click to open Explorer filtered by the selected KPI.

Objective Tooltip



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Name>	The name of the Objective.
<Over Time value>	<p>The graph displays the over time value of the Objective for 5 periods in the past from the current period. The periods displayed are based on the period configured for the Objective.</p> <p>For example, if the Objective period is 1 month, the graph displays the value of the Objective over the past 5 months.</p> <p>A large point  in the graph indicates that an annotation was added to that point. Move the cursor above the point to see the annotation.</p> <p>You can add a new annotation to the over time chart only if there is already an annotation attached to the over time chart. To add an annotation to the chart, you can click the More info link to open Explorer filtered for the selected Objective.</p>
<Objective>	<p>This section displays:</p> <ul style="list-style-type: none"> • The name of the Objective, its value, trend, and status. • If the Objective has 3 KPIs or less, the 3 KPIs with the lowest score are displayed in the tooltip with their name, value, trend, and status. • If the Objective has more than 3 KPIs, a Show more link appears below the list of KPIs. Click the link to open Explorer filtered for the selected Objective, where you can see all the KPIs of the selected Objective. <p>Note:</p> <ul style="list-style-type: none"> • When an Objective displays data but some of its KPIs do not have calculated data (for example, their formula is incorrect, or includes a division by zero), the Objective Tooltip is available but displays Objective has been calculated with partial data and clicking the Objective in the Objective Tooltip displays the Explorer tab with the same message. • When an Objective does not display data because none of its KPIs has data, the Objective Tooltip is available. • When an Objective does not display data because the calculation period of the Objective corresponds to a time when none of its KPIs had not yet been configured in the Studio, the Objective Tooltip is not available.
Annotations	Lists the last 3 annotations sent by all users (including the current user). If more than 3 annotations have been sent for the selected Objective, only 2 are displayed followed by a Show more link. Click the link to open Explorer filtered for the selected Objective, where you can see all the annotations of the selected Objective.

UI Element	Description
	<p>Add annotation. Opens a box where you can add your annotation:</p>  <p>Enter the text of the annotation and click Add to add the annotation to the list or Discard to discard the annotation.</p>
	<p>Send mail. Opens an Outlook email, with the owner of the selected Objective, KPI, or KPI Breakdown listed in the To box, Regarding: <Objective_KPI_Breakdown_KPI_name> in the Subject box, and the text of the latest annotation in the body of the email.</p> 
	<p>Save snapshot. Opens your list of directories, where you can select the location of the PDF you are creating.</p>
	<p>Print. Opens a dialog box where you can select and configure the printer, and send the tooltip to print.</p>
	<p>Reports. Opens a popup that lists all the additional info configured for the Objective: reports, Dashboard pages, or external URLs.</p> 
More Info	Click to open Explorer filtered by the selected Objective.

Work with Enhanced Telecom Operations Map KPIs

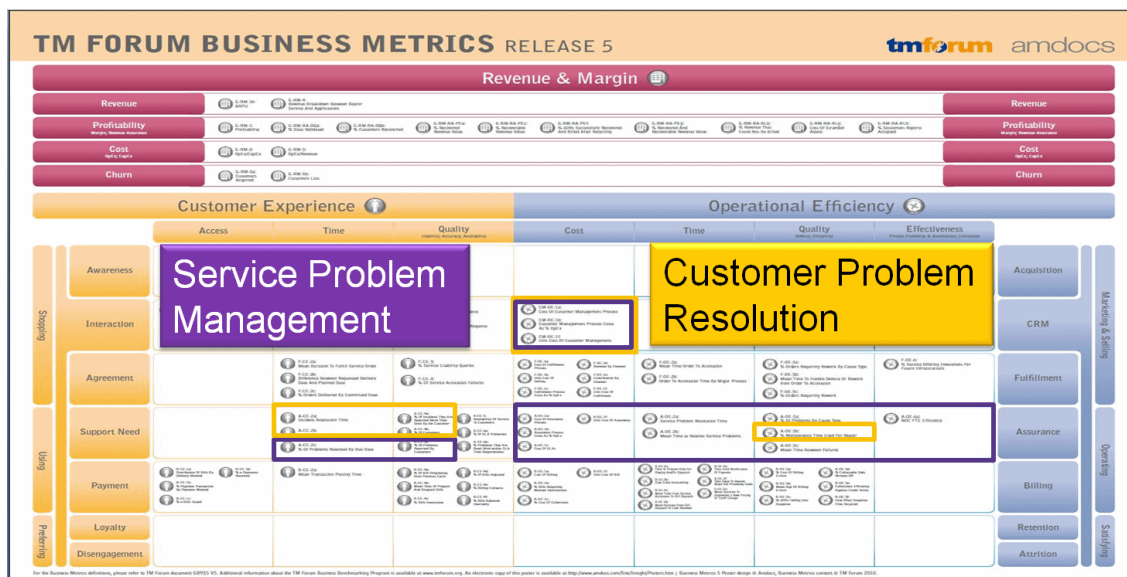
The eTOM (enhanced Telecom Operations Map), published by the TM Forum, is a guidebook that defines the most widely used and accepted standard for business processes in the telecommunications industry. The eTOM model describes the full scope of business processes required by a service provider and defines key elements and how they interact. As a not-for-profit organization, TM Forum is driven by a Board of senior executives from across the industry.

Learn More

More information about eTOM's Business Metrics and Benchmarking Programs

Developed by service providers, for service providers, eTOM's Business Metrics and Benchmarking Programs define and gather quantitative metrics ranging from tactical to business performance data and conduct qualitative surveys on topics of service provider interest. There are two primary aspects to Business Metrics Automation (BMA): Inclusion of the appropriate, standard eTOM Business Metrics in products and systems used by service providers and support for the programmatic interface into the Forum's secure Benchmarking Database, via controlled, secure data transfer. Service providers can also implement these aspects directly in their internal systems and can then work with the BMA interface.

The following figure presents the complete set of eTOM Business metrics in release 5. The 2 groups currently implemented in Executive Scorecard have been highlighted.



How does it work?

For many service providers, the easier approach is simply to use products from suppliers who have added the Business Metrics and BMA interface to their commercial off the shelf (COTS) products. These products bear a mark indicating that they have been tested for their inclusion of the appropriate group of metrics (such as the set of revenue assurance metrics for a revenue assurance product) and the BMA interface functionality. Service providers can ensure consistent, accurate, and apples-to-apples comparisons for both benchmarking studies and internal dashboards by procuring products with TM Forum Business Metrics built in. eTOM's Business Benchmarking Program manages and delivers metric-based business performance benchmarking studies on topics including Broadband, Mobile, Business IP Services, and Self-Service.

HP IT Executive Scorecard is certified (from this version and above) in the following areas: **Customer Problem Resolution** and **Service Problem Management**. The certification provides a secure interaction with the eTOM Business Benchmarking database, including uploading data for the specified standard metrics in the correct format, generating queries, and downloading the query results.



HP IT Executive Scorecard offers the standard metrics in the following areas: **Customer Problem Resolution** and **Service Problem Management**.

A special tool extracts the results from the eTOM-related KPIs from the Results database, the values extracted are mapped to TM Forum business metrics and business metrics details. This information is then structured as XML and changed into an XML file and the XML files are sent to the eTOM Benchmarking database via the eTOM secure Web Portal.

eTOM-Related KPIs Location in the Studio

After they have been imported, the eTOM-related KPIs are listed in the Active KPIs pane, in the **Industry Standards** Scorecard, in the **eTOM** Perspective, and are distributed under two

Objectives: **Customer Problem Resolution** and **Service Problem Management**.

Tip: Though these KPIs also appear by default in the KPI Template pane, it is recommended not to drag and drop these KPIs from the KPIs Template pane to the Active KPIs pane to activate them, because in such a case, the KPI Breakdowns do not appear in the Active KPIs pane and these KPI Breakdowns are important for TMF. It is recommended instead to import the TMF-related tree of Scorecards, Perspectives, Objectives, KPIs, and KPI Breakdowns directly as described below into the Active KPIs pane.

eTOM-Related KPIs

A folder of XML files is available to be imported into the Studio to provide the relevant components needed to create the corresponding eTOM-related KPIs.

Each file corresponds to a KPI.

Data Displayed by the eTOM-Related KPIs

The data displayed by the eTOM-related KPIs is extracted from the Incident and Interaction Data in the IT Infrastructures Library (ITIL) of HP Service Manager related to SQM or CME.

Tasks

This section includes:

["Work with Enhanced Telecom Operations Map KPIs" on page 311](#)

["Import Source Data using ETL tool" below](#)

["Import the TM Forum-related KPIs into the Active KPIs pane in the Studio" below](#)

["Calculate All Breakdown Paths" on page 315](#)

["Work with Enhanced Telecom Operations Map KPIs" on page 311](#)

["Check Certification Results in BMA Portal" on page 317](#)

["View the eTOM-Related KPIs in the Dashboard" on page 317](#)

1. **Make sure that the integration with the HP Service Manager data source has been performed**

For details, see ["Integrate with the SM Data Source"](#) in the *Content Reference Guide*.

2. **Import Source Data using ETL tool**

Import the source data into the Studio using the ETL tool. For details, see ["To verify or schedule the run_steps command:"](#) in the *Administrator Guide*.

3. **Import the TM Forum-related KPIs into the Active KPIs pane in the Studio**

- a. Copy the files from the <install-root>\tools\TMF\ContentApp directory in the Executive Scorecard DVD to the following directory:

C:\<installation

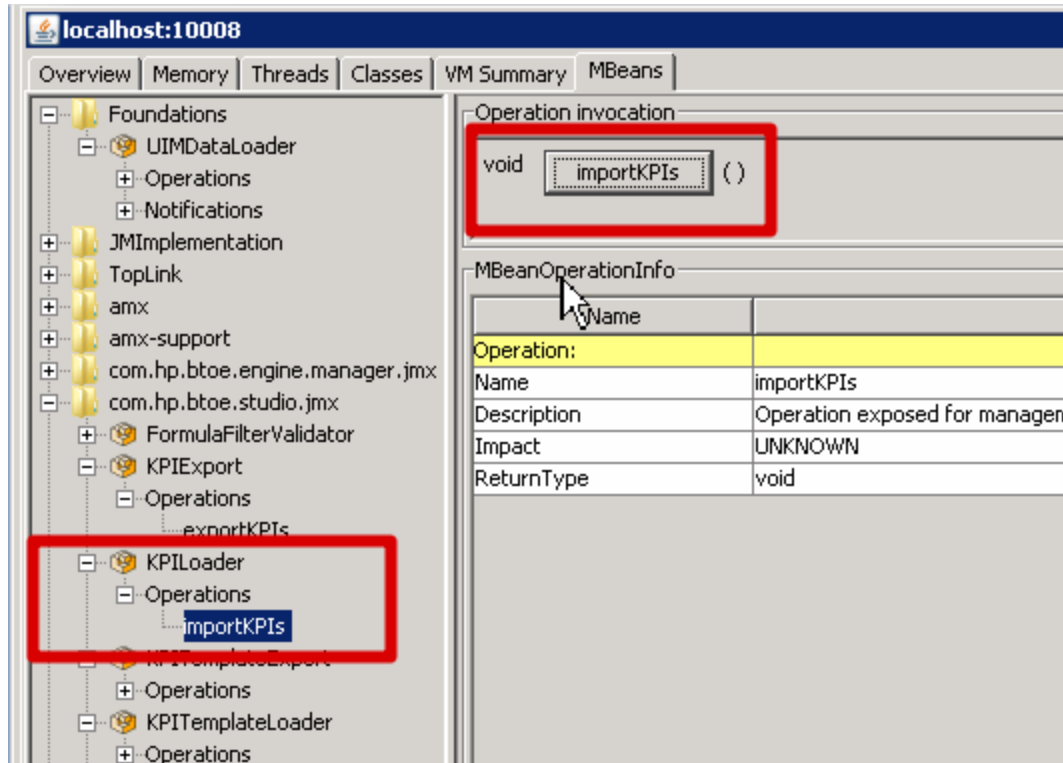
direc-

tory>\agora\glassfish\glassfish\domains\BTOA\config\kpiconfiguration\import\load

- b. Activate <installation directory>\agora\jdk\bin\j-Console.exe.
- c. Select **Remote process** and enter **localhost:10008** in the field below.




- d. Click the **MBeans** tab.
- e. Expand the **KPILoader** and click the **importKPIs** button. Close the j-Console.



4. Calculate All Breakdown Paths

In the Active KPI Pane in the Studio, under the Industry Standards Scorecard, under the TM Forum Perspective, the KPIs are distributed between the Customer Problem Resolution Objective and the Service Problem Management Objective.

Click the TM Forum Perspective, and click  and select the **Calculate now** option, and in the Calculate now dialog box, select the ServiceDesk universe. This operation calculates the values, statuses, and trends of all the KPIs and KPI Breakdowns as well as the values of the related Objectives, Perspectives, and Scorecards and displays the relevant data in the Dashboard.

For details on calculating KPIs, see ["Calculate Displayed Values after Configuration Change" on page 110](#).

5. Generate XML Data and Send the Data to the BMA Portal for Certification

- Set the XS server information and BMA web service information in the **xmlTemplateConfig.properties** file. The file is used to store information about the XS server and the BMA web service.

#CPR --- Customer Problem Resolution

```
CPR = CPR-BB-Max-Data,CPR-IP-Min-Short-Data
```

```
CPR_Data = CPR-BB-Max-Data,CPR-IP-Min-Short-Data
```

```
CPR_App = CPR-BB-Max-App,CPR-BB-Min-App
```

#SPM --- Service Problem Management

```
SPM = SPM-BB-Max-Data,SPM-IP-Min-Short-Data
```

```
SPM_Data = SPM-BB-Max-Data,SPM-IP-Min-Short-Data
```

```
SPM_App = SPM-BB-Max-App,SPM-BB-Min-App
#All metric names - the names of the separate Metric XML files
that are created by the import operation.
#batch file and that are sent to the BMA site.
Metric_All = CPR-BB-Max-Data,CPR-IP-Min-Short-Data,CPR-BB-Max-
App,CPR-BB-Min-App,
SPM-BB-Max-App,SPM-BB-Max-Data,SPM-BB-Min-App,SPM-IP-Min-Short-
Data
#Periods (Don't change the Periods name) - The periods for which
you want to calculate the metrics.
Periods = FY2011/04 (Apr) ,FY2011/05 (May) ,FY2011/06 (Jun)
#Login TMF info (Don't change the key name) - the username and
password are provided by BMA:
#BMA WS login name:
ws_name = xyz
#BMA Web Service login password:
ws_password = xyz
#BMA Web Service URL:
ws_url = http://
#BMA Web Service port:
ws_port =
# The host name of the XS Server:
server = xyz
# The port of the Executive Scorecard server:
port = 10004
```

- b. For each metric group, generate the relevant XML file based on the templates using the command:

```
java -jar BMA_16.jar <metric_group_code> <research_stream> 0
```

where metric_group_code can be:

- **CPR** - Customer Problem Resolution
- **SPM** - Service Problem Management

and <research_stream>. For certification, TM Forum has defined Research Streams which corresponds to different types of industry. Current research streams are:

- **BB** (Broadband) - Includes xDSL, cable fiber and satellite.
- **Mobile** - Includes 2G, 3G and 4G. It represents network equipment used to be provide the service.
- **IP** - IP Business Services.

Example: java -jar BMA_16.jar CPR BB 0

- c. For each metric group, send the relevant XML file to the BMA web service using the command:

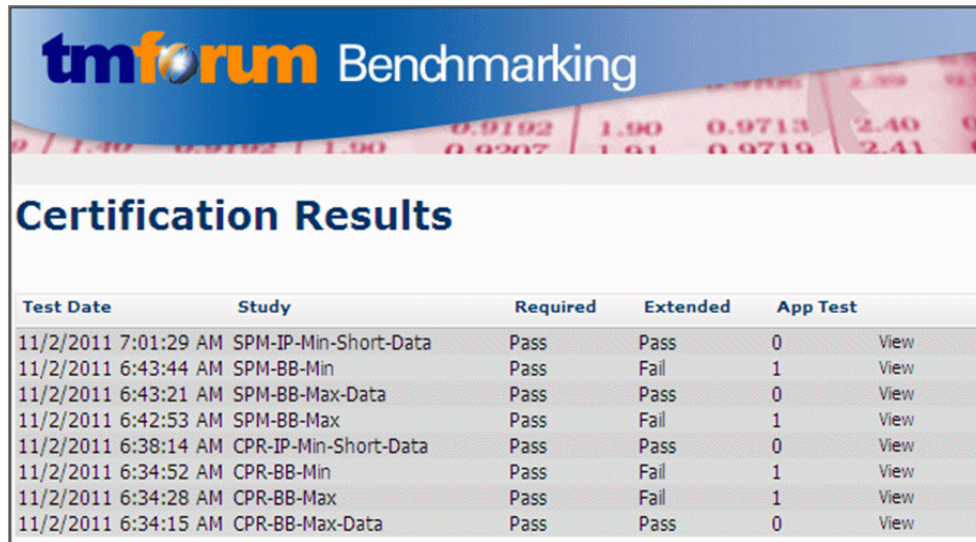
```
java -jar BMA_16.jar <metric group code> BB 1
```

For example: java -jar BMA_16.jar CPR BB 1, where CPR represents the Customer Problem Resolution metric group and BB means Broadband.

6. Check Certification Results in BMA Portal

Access the BMA portal and check the certification results.

A typical certification results screen is as follow:



Test Date	Study	Required	Extended	App Test	
11/2/2011 7:01:29 AM	SPM-IP-Min-Short-Data	Pass	Pass	0	View
11/2/2011 6:43:44 AM	SPM-BB-Min	Pass	Fail	1	View
11/2/2011 6:43:21 AM	SPM-BB-Max-Data	Pass	Pass	0	View
11/2/2011 6:42:53 AM	SPM-BB-Max	Pass	Fail	1	View
11/2/2011 6:38:14 AM	CPR-IP-Min-Short-Data	Pass	Pass	0	View
11/2/2011 6:34:52 AM	CPR-BB-Min	Pass	Fail	1	View
11/2/2011 6:34:28 AM	CPR-BB-Max	Pass	Fail	1	View
11/2/2011 6:34:15 AM	CPR-BB-Max-Data	Pass	Pass	0	View



The failed tests in the above picture, are due to optional (Extended) Business Metrics not supported by HP Service Manager.

7. View the eTOM-Related KPIs in the Dashboard

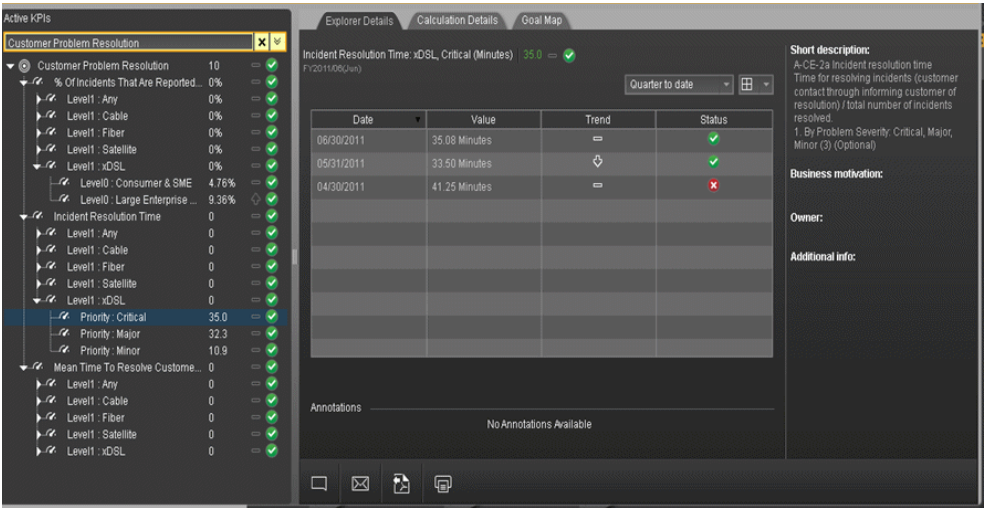
Create a page in Dashboard to display components that include the eTOM-Related KPIs. For details, see ["Configure a Page Layout" on page 155](#).

For example:



Click the  or  to display the tooltip of the Objective and click the relevant KPI or KPI Breakdown.

The Explorer tab opens and displays the KPI or KPI Breakdown details:



For details about the Explorer tab, see "View and Analyze Results in the Explorer Page" on [page 289](#)

eTOM-Related KPIs

Customer Problems Resolution

The Metric IDs are standard in eTOM.

Metric ID	KPI Name	Description
A-CE-2a	Incident Closure Time	Incident resolution time Time for resolving incidents (customer contact through informing customer of resolution) / total number of incidents resolved. 1. By Problem Severity: Critical, Major, Minor (3) (Optional)
A-CE-2b	Mean Time To Resolve Customer Incident	Mean time to resolve customer incident Time for resolving incidents (customer contact through informing customer of resolution) / total number of incidents resolved. 1. By Customer Segment: Consumer & SME, Large Enterprise & Government (2) (Optional) 2. By Service Component: Voice Services, Data Services (2) (Optional)
A-CE-4a	Metric ID	% of incidents that are reported more than once by the customer Number of incident re-reports / total number of customer reported incidents 1. By Customer Segment: Consumer & SME, Large Enterprise & Government (2) (Optional)
A-CE-4c	% Of Problems Reported By Customers	% of problems reported by customers Total number of problems reported by CUSTOMERS / Total number of problems reported 1. By Problem Severity: Critical, Major, Minor (3) (Optional)
A-OE-3b	% Maintenance Time Used For Repair	% maintenance time used for repair Repair time / Total assurance time (Maintenance + Repair)

Service Problem Management

The Metric IDs are standard in TM Forum.

Metric ID	KPI Name	Description
A-CE-2c	% Of Problems Resolved By Due Date	% of problems resolved by due date Number of problems resolved to customer satisfaction by committed date / total number of problems occurring during the reporting period
A-CE-4c	% Of Problems Reported By Customers	% of problems reported by customers Total number of problems reported by CUSTOMERS / Total number of problems reported 1. By Problem Severity: Critical, Major, Minor (3) (Optional)

Metric ID	KPI Name	Description
A-OE-2a	Service Problem Resolution Time	Service Problem Resolution Time Aggregate time to resolve SO service problems for Assurance Meta Process Blocks (1-4) inclusive / number of closed problem reports 1. By Problem Severity: Critical, Major, Minor (3) (Optional) 2. By Customer Segment: Consumer & SME, Large Enterprise & Government (2) (Optional)
A-OE-2b	Mean Time To Resolve Service Problems	Mean Time to resolve service problems Time to resolve SO Service Problems by process block (Meta Blocks 1-4) / Number of Service Problems closed within period 1. By META process blocks: resource data collection and processing, service problem management, resource trouble detection/handling, customer QoS/SLA management (4) 2. By Customer Segment: Consumer & SME, Large Enterprise & Government (2) (Optional) 3. By Problem Severity: Critical, Major, Minor (3) (Optional)
A-OE-3a	% Problems By Cause Type	% problems by cause type Number of problem reports of type X / Total number of problem reports 1. By Cause Type: customer caused, technology caused, workforce caused, data mismatch problems for internal systems, other (5)
A-OE-3b	% Maintenance Time Used For Repair	% maintenance time used for repair Repair time / Total assurance time (Maintenance + Repair)
A-OE-3c	Mean Time Between Failures	Mean time between failures ((Revenue System Size) - (MTTR*number of trouble tickets closed in month)) / number of trouble tickets closed in month
A-OE-6a	NOC FTE Efficiency	NOC FTE Efficiency Total Number of problem reports resolved / Total number of NOC FTEs working on problem resolution

