Hewlett Packard
Enterprise

IT Business Analytics

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Linux operating system

Business Analyst Guide

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- Document Release Date, which changes each time the document is updated.
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Contents

Getting Started with the Studio and Dashboard

IT Business Analytics 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.

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

1. Learn about how the Dashboard can help the challenges facing end-users. For details, see Learn About the Dashboard.
2. Make sure the IT Business Analytics settings are configured. For details, see Settings in the *Administrator Guide*.
3. Make sure the IT Business Analytics users and permissions are configured. For details, see User Management in the *Administrator Guide*.
4. Create and activate Scorecards, Perspectives, Objectives, Metrics, and KPIs. For details, see "Create the Dashboard Contents in the Studio" on page 13.
5. Enrich the Dashboard contents with Metric Breakdowns and KPIs, overrides, Cascading Scorecards, and more. For details, see "Enrich the Dashboard Contents in the Studio" on page 162.
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 "Dashboard Display" on page 195.
7. The Executive user can now view and analyze the relevant business objectives. For details, see "View and Analyze the Business Objectives" on page 440.
8. Perform the maintenance of IT Business Analytics. For details, see Getting Started with Administration Tasks in the *Administrator Guide*.

Create the 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.

To access:

Click the **STUDIO** tab.

Learn More Tasks

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, you can create your own elements directly in the Active KPIs pane, or you can upload and activate a CAP. For task details, see Activate Scorecards, Perspectives, Objectives, Metrics, or KPIs Using Templates, Create Active Scorecards, Perspectives, Objectives, Metrics, or KPIs or Content Acceleration Packs (CAPs) in the *Administrator Guide*.

> **Note:** When in ITBA, 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 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.

For details, see "About Templates" on page 24.

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 directory tree. A directory tree includes only directories, KPIs, and Metrics.

About the Active KPIs

The Active KPIs pane is part of the Studio. It contains only one tree that can include the active Scorecards, their Perspectives, Objectives, KPIs and KPI Breakdowns. It also includes the **Public Metrics and KPIs** directory that includes the Metrics, and Unassigned KPIs and their Breakdowns. Unassigned KPIs or Metrics are used when the user does not work with Scorecards, Perspectives, and Objectives.

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.

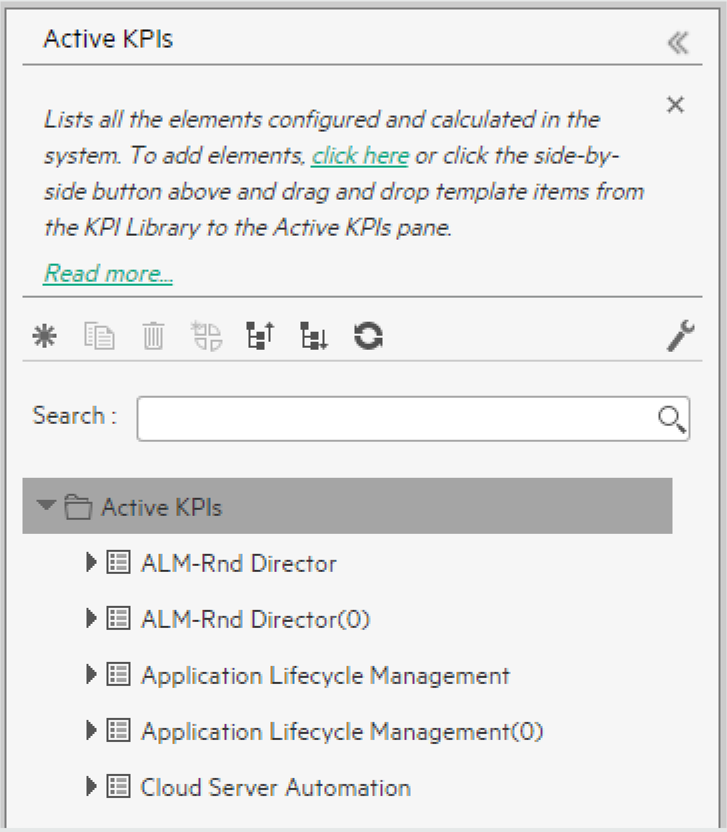
You can add to the pool of out-of-the-box elements that are used to create the Dashboard display, by dragging the relevant Scorecard, Perspective, Objective, KPI, and Metric templates from the KPI Library pane to the Active KPIs pane.

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 56.

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.

About Trees

Example



Lists all the elements configured and calculated in the system. To add elements, click here or click the side-by-side button above and drag and drop template items from the KPI Library to the Active KPIs pane.

Read more...

The KPI Library pane may include several trees. These trees can include Scorecards, Unassigned KPIs, or Metrics, or Folders. Template KPIs are unassigned 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 Unassigned KPIs can be different.

The Active KPIs pane includes one tree that can include one or more Scorecard trees as well as the **Public Metrics and KPIs** directory.

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 or .

The names of the nodes (Scorecards, Perspectives, Objectives, and KPIs) are unique for the same hierarchical level.

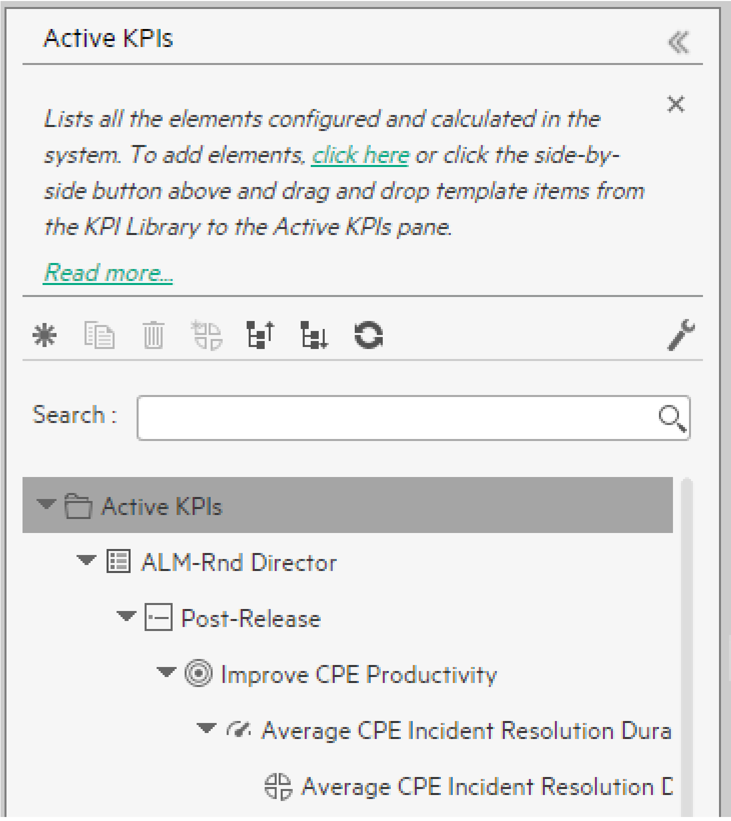
Metrics are indicated by or .

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 "KPI Breakdowns" on page 163.

Example



Active KPIs

Lists all the elements configured and calculated in the system. To add elements, click here or click the side-by-side button above and drag and drop template items from the KPI Library to the Active KPIs pane.

Read more...

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 56.

Tasks

This task includes the following steps

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 and see if the out-of-the-box nodes are appropriate of if they should be customized.

For details, see Executive Personas and their Business Challengesin the *Getting Started Guide*...

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

When you start IT Business Analytics, the out-of-the-box Scorecard, Perspective, Objective, KPI, or Metric templates, Folders, Unassigned KPI or Metric templates, and Dashboard components 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, seeImport or Export Contexts, Data, KPIs, Metrics, Trees, Pages, or Components in the *Administrator Guide*..

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

IT Business Analytics 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 47.

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

You can create new active Scorecards, their Perspectives, Objectives, KPIs and Metrics. For details, see "Create Active Scorecards, Perspectives, Objectives, Metrics, or KPIs" on page 56.

5. Customize Scorecards, their Perspectives, and Objectives

You can customize out-of-the-box Scorecards, their Perspectives, and Objectives. For details, see "Scorecard Configuration Details" on page 70, "Perspective Configuration Details" on page 79, or "Objective Configuration Details" on page 83.

6. Customize KPIs or Metrics

You can customize KPIs or Metrics by:

- Changing a KPI or a Metric configuration. For details, see "KPI or Metric Configuration and Calculation Details" on page 103.
- 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 56.
- Changing their Business Context of a KPI or a Metric. For details, see "KPI or Metric Business Context" on page 139.
- Changing the formula used to calculate the KPI or a Metrics. For details, see "KPI or Metric Formula" on page 113.

- Changing the filter used to limit the range of data used in the calculation of the KPI or the Metric. For details, see "KPI or Metric Filter" on page 133.
- Change the thresholds to recalculate the status of a KPI. For details, see "Calculation" on page 144 or "Recalculation" on page 148.

7. Enrich the Executive Dashboard Display

You can enrich the Executive Dashboard display by:

- Creating cascading Scorecards that enable the Executive to drill down to lower levels of the same Scorecard. For details, see "Cascading Scorecards" on page 187.
- Creating breakdowns of KPIs to obtain more detailed information about the KPI's measurements. For details, see "KPI Breakdowns" on page 163.
- Managing overrides. For details, see "KPI and Metric Breakdown Overrides" on page 177.
- Adding additional information to the Metric, KPI or Objective. For details, see "KPI or Objective Additional Information" on page 183.

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 Objectives, KPIs or Metrics to display the resulting information in the Dashboard. For details, see "Calculation" on page 144.
- Activate the recalculation of the values, statuses, and scores of the Objectives, KPIs or Metrics for a historical (past) period to display the resulting information in the Dashboard. For details, see "Recalculation" on page 148.

You can schedule the calculation of specific business context automatically. For details, see "Calculation Scheduling" on page 152.

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 "Dashboard" on page 441.

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 "Dashboard Display" on page 195.

About 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 in the *Administrator Guide*.

Each template has a unique name.

All the values and thresholds of the Studio KPIs 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 in the *Getting Started Guide*.

Scorecard Template

Out-of-the-box templates of Scorecards are available in the KPI Library pane. Each template has a unique name.

To access:

1. Click the **STUDIO** tab. If the KPI Library pane is not displayed , click the vertical **KPI Library** tab to the left of the Active KPIs pane.
2. In the KPI Library pane, select the relevant tree.
3. Click the relevant Scorecard template in the tree to display its Configuration Details area.

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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 48. A Scorecard can include one or more Perspectives.

Scorecard Element	Key Performance Question	More Information and Example
		Example Operational excellence.
Objective	What is the objective trying to achieve?	For details about Objectives, see "Objectives" on page 49. 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 "Activate Scorecards, Perspectives, Objectives, Metrics, or KPIs Using Templates" on page 47. 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 47.

Active Scorecards, Perspectives, Objectives, and KPIs display real data in the Dashboard. For details, see "Active KPIs Pane" on page 64.

Tasks

View the template definitions

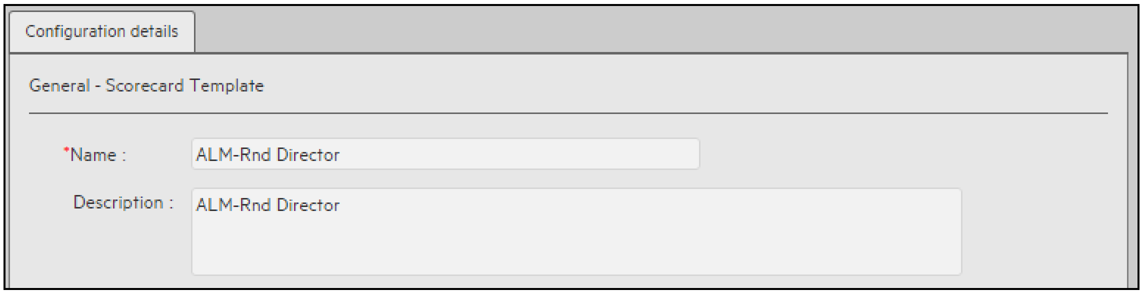
1. Click the **STUDIO** tab. If the KPI Library pane is not displayed , click the vertical **KPI Library** tab to the left of the Active KPIs pane.
2. In the KPI Library pane, select the relevant tree.

3. Click the relevant Scorecard template in the tree to display its Configuration Details area.

UI Description

Configuration Details Tab for a Scorecard Template

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



*Name : ALM-Rnd Director

Description : ALM-Rnd Director

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 240.
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 > Settings > BA 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 > Settings > BA Settings**, and in **Debug Mode**, select the **Application Debug Mode** setting.

Perspective Templates

Out-of-the-box templates of Perspectives are available in the KPI Library pane. Each template has a unique name.

To access:

1. Click the **STUDIO** tab. If the KPI Library pane is not displayed , click the vertical **KPI Library** tab to the left of the Active KPIs pane.
2. In the KPI Library pane, select the relevant tree.
3. Click the relevant Perspective template in the tree to display its Configuration Details area.

Learn More | Tasks | UI Description

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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.

Tasks

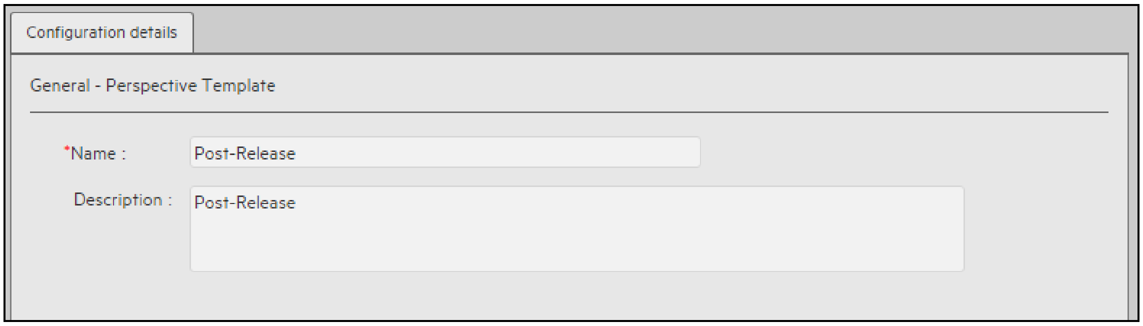
View the template definitions

1. Click the **STUDIO** tab. If the KPI Library pane is not displayed , click the vertical **KPI Library** tab to the left of the Active KPIs pane.
2. In the KPI Library pane, select the relevant tree.
3. Click the relevant Perspective template in the tree to display its Configuration Details area.

UI Description

Configuration Details Tab for a Perspective Template

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



*Name : Post-Release
Description : Post-Release

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 240.
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 > Settings > BA 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 > Settings > BA Settings**, and in **Debug Mode**, select the **Application Debug Mode** setting.

Objective Templates

Out-of-the-box templates of Objectives are available in the KPI Library pane. Each template has a unique name.

To access:

1. Click the **STUDIO** tab. If the KPI Library pane is not displayed , click the vertical **KPI Library** tab to the left of the Active KPIs pane.
2. In the KPI Library pane, select the relevant tree.
3. Click the relevant Objective template in the tree to display its Configuration Details area.

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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.

Tasks

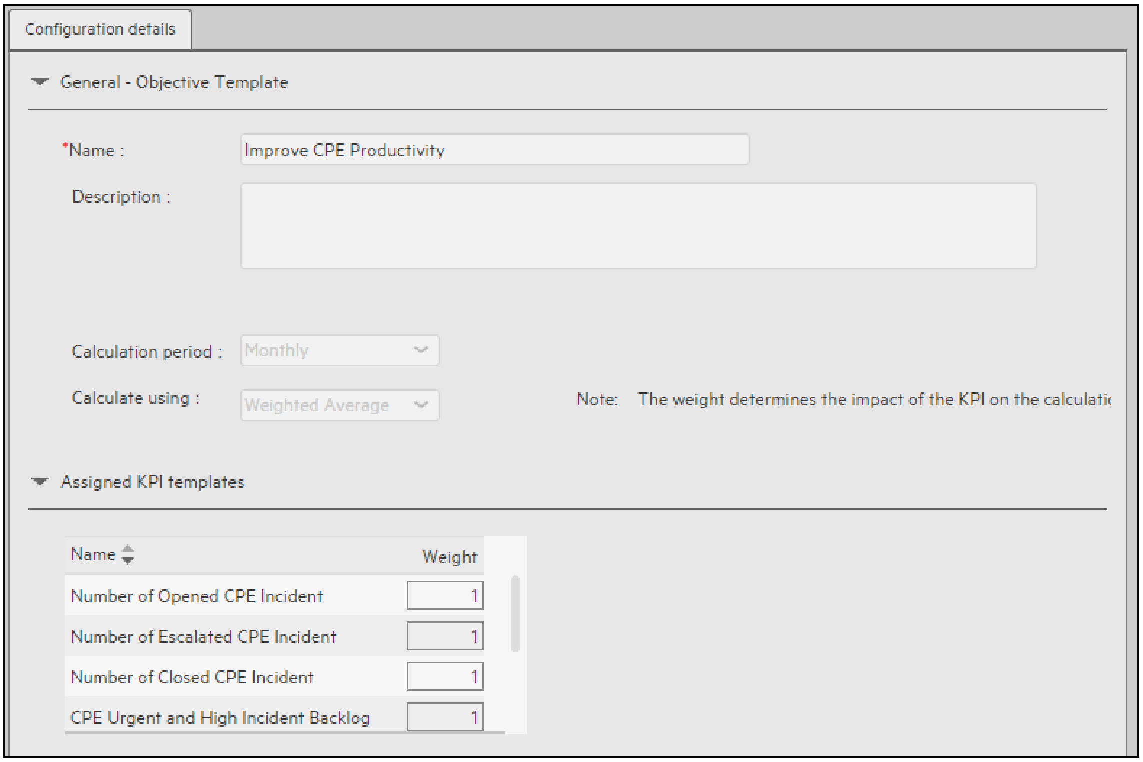
View the template definitions

1. Click the **STUDIO** tab. If the KPI Library pane is not displayed , click the vertical **KPI Library** tab to the left of the Active KPIs pane.
2. In the KPI Library pane, select the relevant tree.
3. Click the relevant Objective template in the tree to display its Configuration Details area.

UI Description

Configuration Details Tab for an Objective Template

This page displays configuration information for the selected Objective template.



*Name : Improve CPE Productivity

Description :

Calculation period : Monthly

Calculate using : Weighted Average

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

Name	Weight
Number of Opened CPE Incident	1
Number of Escalated CPE Incident	1
Number of Closed CPE Incident	1
CPE Urgent and High Incident Backlog	1

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

UI Element	Description
General - Objective Template	
Name	The name of the Objective template. **Limitations:** The maximum number of characters is 240.

UI Element	Description
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 > Settings > BA 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 > Settings > BA 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: • **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 multiplied by the relevant weights, or if the Objective has child Objectives, the average of the scores of the child Objectives multiplied by the relevant weights. When you select this rule in the Studio, 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 KPI Templates. lists the KPI templates as assigned to the selected Objective template.	
Name	The KPI templates assigned to the Objective template.
Weight	The weight of the KPI used in the calculation of the Objective score.

KPI Templates

Out-of-the-box templates of KPIs are available in the KPI Library pane. Each template has a unique name. All the values and thresholds of the Studio KPIs depend on their definition in the Configuration details and Calculation details tabs.

For details about KPIs, see The Scorecard KPI Engine in the *Getting Started Guide*.

To access:

1. Click the **STUDIO** tab. If the KPI Library pane is not displayed , click the vertical **KPI Library** tab to the left of the Active KPIs pane.
2. In the KPI Library pane, select the relevant tree.
3. Click the relevant KPI or Unassigned KPI in the tree and then click either the **Configuration Details** or the **Calculation Details** tab.

Learn More | Tasks | UI Description

Learn More

Key Performance Indicators (KPIs) and Metrics, Formulas, Filters, Thresholds, Values, Trends, and Scores

For details about KPI and Metric formulas, filter, values, decimal precision, thresholds, status, score, and trend, see "KPI and Metric Formulas, Filter, Threshold, Value, Trend, Score, and Decimal Precision" on page 97.

Tasks

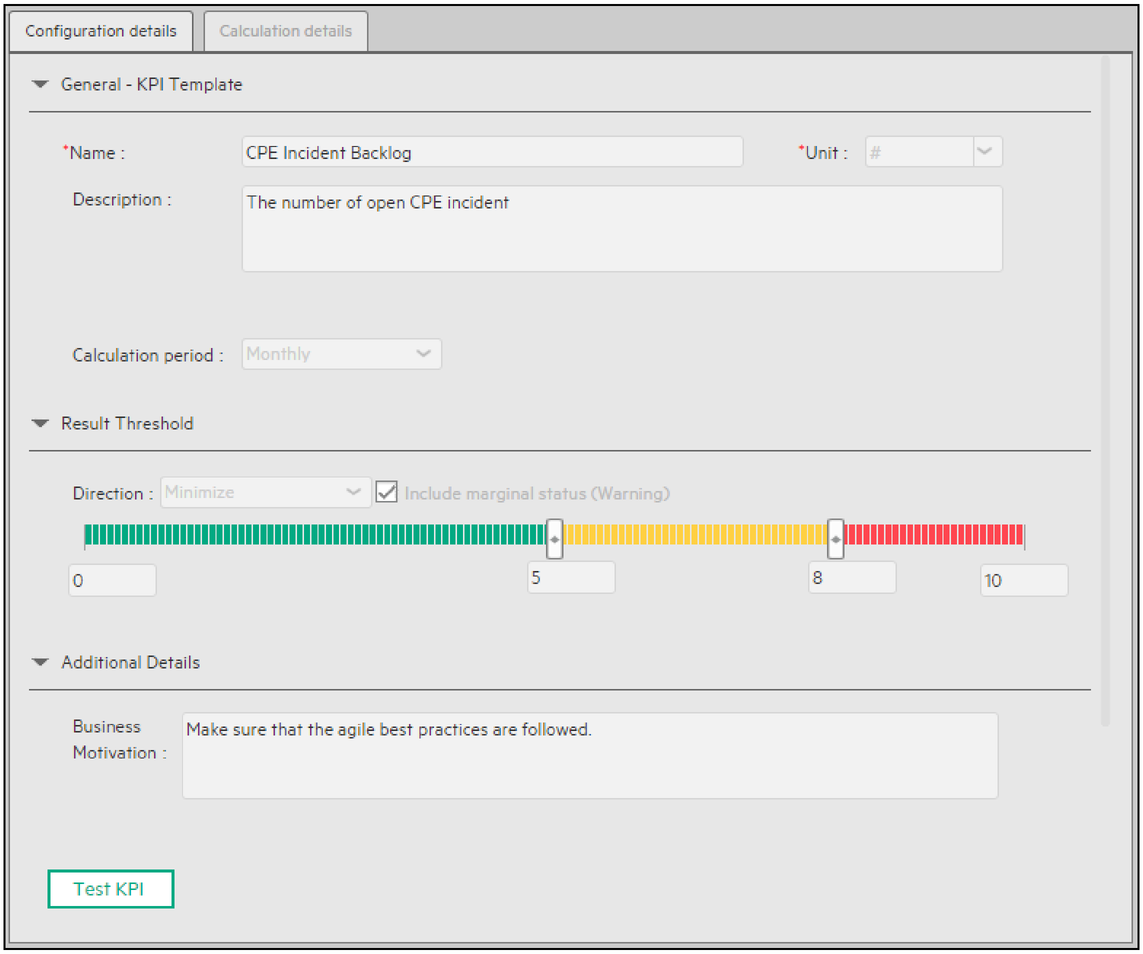
View the template definitions

1. Click the **STUDIO** tab. If the KPI Library pane is not displayed , click the vertical **KPI Library** tab to the left of the Active KPIs pane.
2. In the KPI Library pane, select the relevant tree.
3. Click the relevant KPI or Unassigned KPI in the tree and then click either the **Configuration Details** or the **Calculation Details** tab.

UI Description

Configuration Details Tab for a KPI Template

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



*Name : CPE Incident Backlog

*Unit : #

Description : The number of open CPE incident

Calculation period : Monthly

Direction : Minimize

☑ Include marginal status (Warning)

0 5 8 10

Business Motivation : Make sure that the agile best practices are followed.

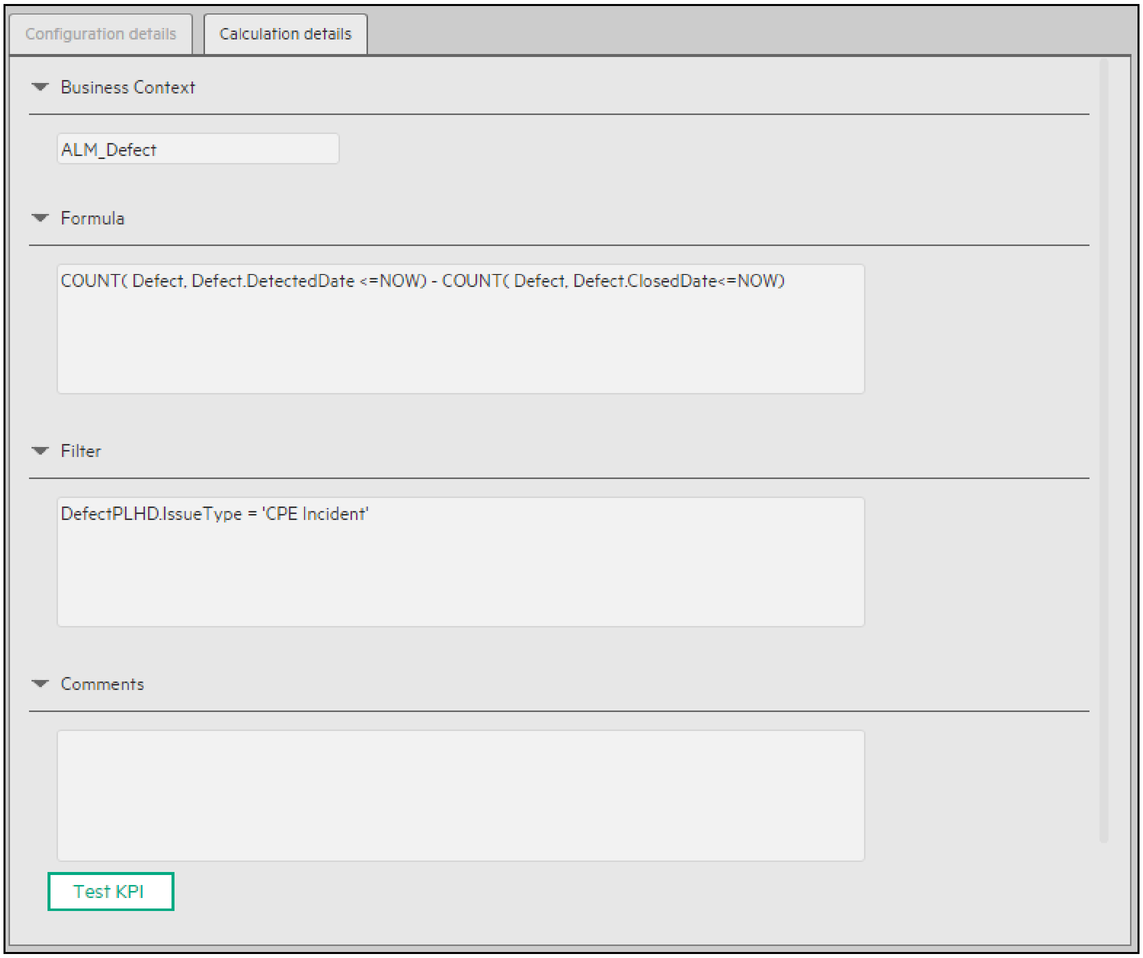
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
General KPIs	
Name	The name of the KPI template. **Limitations:** The maximum number of characters is 240.
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).
Id	The Id of the KPI. It is automatically assigned.

UI Element	Description
	This information is displayed only when in debug mode. To set the debug mode, click **ADMIN > Settings > BA Settings**, and in **Debug Mode**, select the **Application Debug Mode** setting.
Type	The type of the KPI. It is automatically assigned. This information is displayed only when in debug mode. To set the debug mode, click **ADMIN > Settings > BA Settings**, and in **Debug Mode**, select the **Application Debug Mode** setting.
Result Threshold	
Direction	It can be: • **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	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 "Activate Scorecards, Perspectives, Objectives, Metrics, or KPIs Using Templates" on page 47. 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. The Threshold fields values increase from left to right.
Include marginal status (Warning)	This option is selected when the status of the KPI is either **Good**, **Warning**, or **Critical**. This option is not selected when the status of the KPI is only **Good**, or **Critical**.
Additional Details	
Business Motivation	The business motivation of the KPI.

Calculation Details Tab for a KPI Template

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



ALM_Defect

COUNT(Defect, Defect.DetectedDate <=NOW) - COUNT(Defect, Defect.ClosedDate<=NOW)

DefectPLHD.IssueType = 'CPE Incident'

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.
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 calculation. 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.

Metric Templates

Out-of-the-box templates of Metrics are available in the KPI Library pane. Each template has a unique name.

To access:

1. Click the **STUDIO** tab. If the KPI Library pane is not displayed , click the vertical **KPI Library** tab to the left of the Active KPIs pane.
2. In the KPI Library pane, select the relevant tree.
3. Click the relevant Metric in the tree and then click either the **Configuration Details** or the **Calculation Details** tab.

Learn More | Tasks | UI Description

Learn More

Key Performance Indicators (KPIs) and Metrics, Formulas, Filters, Thresholds, Values, Trends, and Scores

For details about KPI and Metric formulas, filter, values, decimal precision, thresholds, status, score, and trend, see "KPI and Metric Formulas, Filter, Threshold, Value, Trend, Score, and Decimal Precision" on page 97.

Tasks

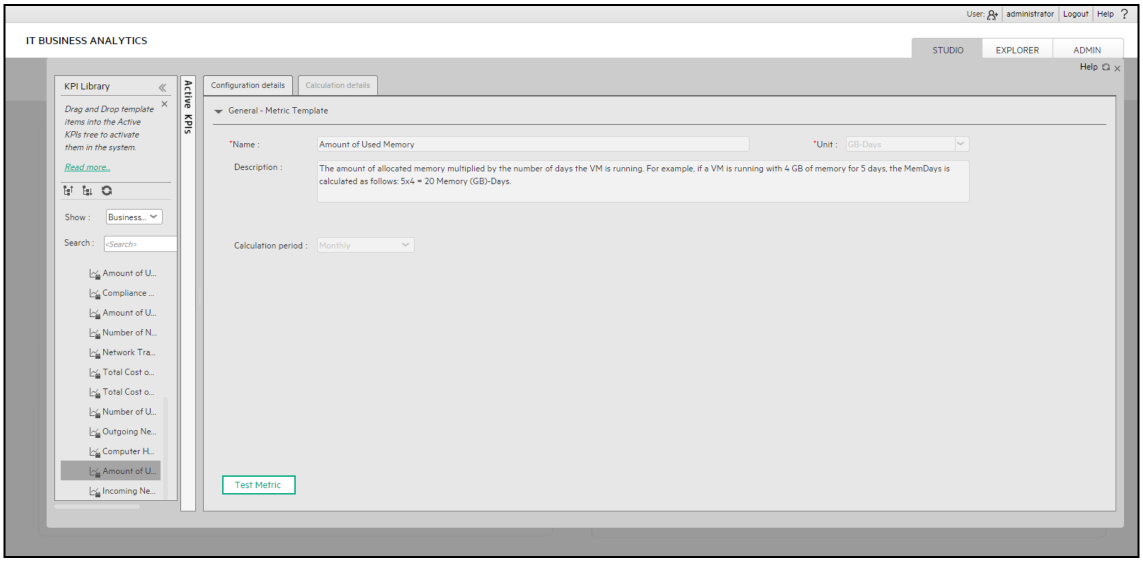
View the template definitions

1. Click the **STUDIO** tab. If the KPI Library pane is not displayed , click the vertical **KPI Library** tab to the left of the Active KPIs pane.
2. In the KPI Library pane, select the relevant tree.
3. Click the relevant Metric in the tree and then click either the **Configuration Details** or the **Calculation Details** tab.

UI Description

Configuration Tab for a Metric Template

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



*Name : Amount of Used Memory

*Unit : GB-Days

Description : The amount of allocated memory multiplied by the number of days the VM is running. For example, if a VM is running with 4 GB of memory for 5 days, the MemDays is calculated as follows: 5x4 = 20 Memory (GB)-Days.

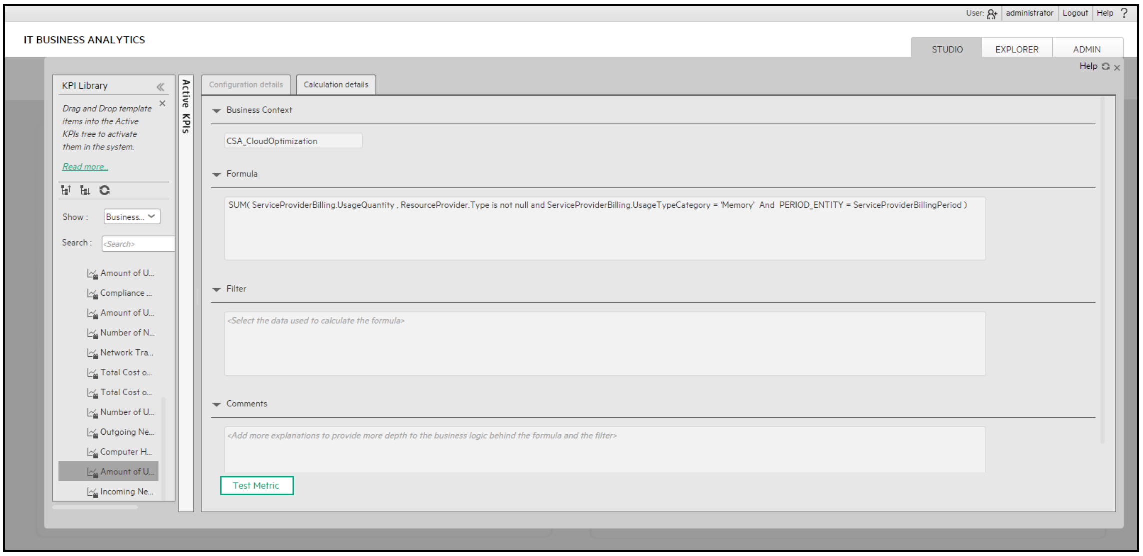
Calculation period : Monthly

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 240.
Unit	The unit of the Metric 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).
Id	The Id of the KPI. It is automatically assigned. This information is displayed only when in debug mode. To set the debug mode, click **ADMIN > Settings > BA Settings**, and in **Debug Mode**, select the **Application Debug Mode** setting.
Type	The type of the KPI. It is automatically assigned. This information is displayed only when in debug mode. To set the debug mode, click **ADMIN > Settings > BA Settings**, and in **Debug Mode**, select the **Application Debug Mode** setting.

Calculation Tab for a Metric Template

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



Business Context: CSA_CloudOptimization

Formula: SUM(ServiceProviderBilling.UsageQuantity , ResourceProvider.Type is not null and ServiceProviderBilling.UsageTypeCategory = 'Memory' And PERIOD_ENTITY = ServiceProviderBillingPeriod)

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	The formula used to calculate the value of the Metric.
Comments	A description of the formula, filter, Metric, and their purpose, or other information.

Folder Templates

Out-of-the-box templates Folders are available in the KPI Library pane. Each template has a unique name and is configured in the Studio.

To access:

1. Click the **STUDIO** tab. If the KPI Library pane is not displayed , click the vertical **KPI Library** tab to the left of the Active KPIs pane.
2. In the KPI Library pane, select the relevant tree.
3. Click the relevant Folder in the tree to display its Configuration Details area.

Learn More Tasks UI Description

Learn More

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.

Tasks

View the template definitions

1. Click the **STUDIO** tab. If the KPI Library pane is not displayed , click the vertical **KPI Library** tab

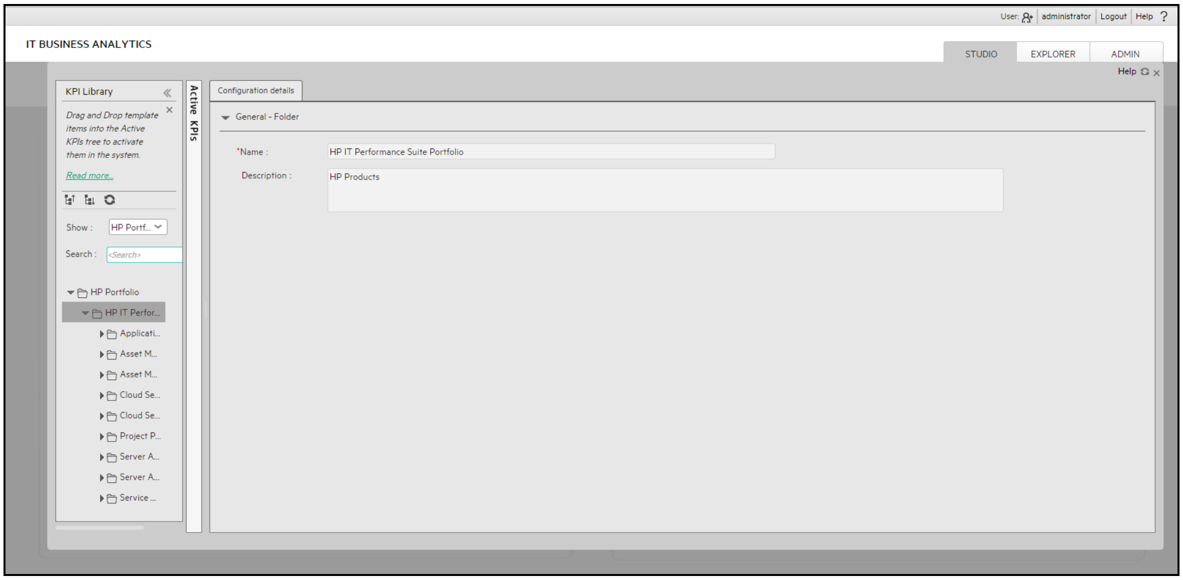
to the left of the Active KPIs pane.

2. In the KPI Library pane, select the relevant tree.
3. Click the relevant Folder in the tree to display its Configuration Details area.

UI Description

Configuration Details Tab for a Folder

This page displays configuration information for the selected Folder.



Drag and Drop template items into the Active KPIs tree to activate them in the system.

Show : HP Portf...

Search : <Search>

*Name : HP IT Performance Suite Portfolio

Description : HP Products

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

UI Element	Description
General - Folder	
Name	The name of the Folder. **Limitations:** The maximum number of characters is 240.
Description	The description of the Folder. **Limitations:** The maximum number of characters is 1000.

UI Element	Description
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 > Settings > BA 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 > Settings > BA Settings**, and in **Debug Mode**, select the **Application Debug Mode** setting.
Assigned KPIs. lists the KPIs assigned to the selected Folder. **Note:** This section is displayed only if the Folder does not have child Folders.	
Name	The table lists the KPIs templates assigned to the Folder.

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

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

You can create active KPIs/Metrics by dragging the corresponding KPI/Metric templates from the KPI Library pane.

To access:

Click the **STUDIO** tab. If the KPI Library pane is not displayed , click the vertical **KPI Library** tab to the left of the Active KPIs pane.

Learn More Tasks UI Description

Learn More

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 the next page. A Scorecard can include one or more Perspectives.

Scorecard Element	**Key Performance Question**	**More Information and Example**
		Example Operational excellence.
Objective	What is the objective trying to achieve?	For details about Objectives, see "Objectives" on the next page. 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 "Activate Scorecards, Perspectives, Objectives, Metrics, or KPIs Using Templates" on the previous page. 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 the previous page.

Active Scorecards, Perspectives, Objectives, and KPIs display real data in the Dashboard. For details, see "Active KPIs Pane" on page 64.

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.

Key Performance Indicators (KPIs) and Metrics, Formulas, Filters, Thresholds, Values, Trends, and Scores

For details about KPI and Metric formulas, filter, values, decimal precision, thresholds, status, score, and trend, see "KPI and Metric Formulas, Filter, Threshold, Value, Trend, Score, and Decimal Precision" on page 97.

Tasks

This section includes:

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 **KPI Library** bar 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 Unassigned 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 56.

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.

The Metric is automatically moved to the **Public Metrics and KPIs** directory.

You can move the KPI either to the relevant Objective. If you move it to an empty space it is automatically moved to the **Public Metrics and KPIs** directory. You can also move it directly to the **Public Metrics and KPIs** directory.

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:

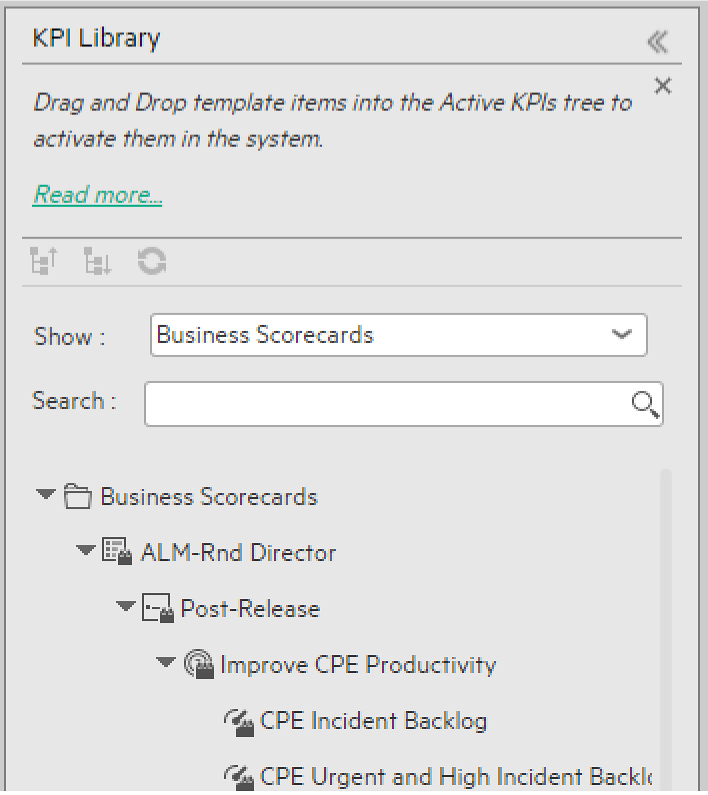
1. Click the **Studio** button (top right corner) to open the Studio.
2. You must work with the KPI Library pane and the Active KPIs pane side-by-side, so if necessary, click the **KPI Library** bar to display the **KPI Library** pane and the **Active KPIs** pane side by side.
3. Select **HP Portfolio** in the **Show:** list. The KPI Library pane displays the Folder template tree and Unassigned 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 56.

UI Description

KPI Library Pane

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



KPI Library

Drag and Drop template items into the Active KPIs tree to activate them in the system.

Read more...

Show : Business Scorecards

Search :

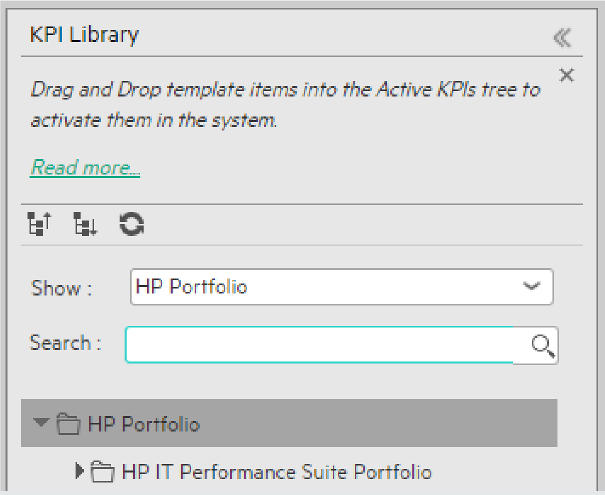
- Business Scorecards
  - ALM-Rnd Director
    - Post-Release
      - Improve CPE Productivity
        - CPE Incident Backlog
        - CPE Urgent and High Incident Backl

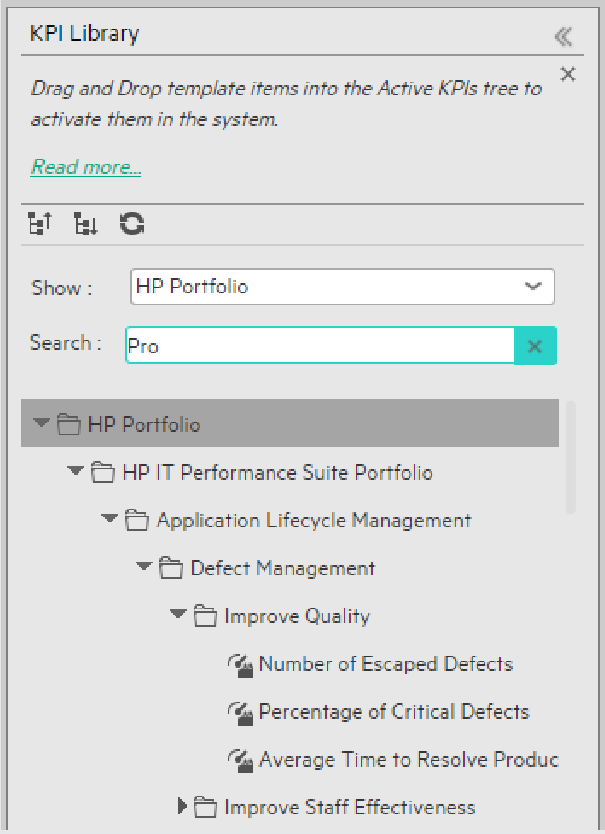
When you select an element in the KPI Library pane, the rightmost pane in the Studio displays the configuration of the selected element.

> **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
KPI Library	If the KPI Library pane is closed, click the KPI Library bar. Do the same for the Active KPIs pane if it is closed. Click **<<** in the top right corner of the pane to collapse it. Both panes can be displayed side-by-side together with the **Configuration**/**Calculation** details tabs.
⟳	**Refresh the tree.** Click to refresh the display of the tree. For details, see "About Templates" on page 24.
↑	Collapse the tree nodes.

UI Element	Description
	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 Unassigned KPI templates. For concept details, see the Learn More section in "About Templates" on page 24.
Show	Displays the current template tree. **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.
Search	Enter the relevant string to search for all the elements (Scorecard, Perspective, Objective, and KPI templates, Unassigned KPI templates, and Folders) in the tree, whose name includes the string. 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 sub-tree of the element is collapsed and displayed under the element. If more than one element includes the specified string, the paths to these elements are also displayed. **Example** If the tree is as follows:  *Drag and Drop template items into the Active KPIs tree to activate them in the system.* Show : HP Portfolio KPI Library Read more... Search : HP Portfolio HP IT Performance Suite Portfolio After searching for the string: **pro**, the resulting tree is as follows:

UI Element	Description
	 *Drag and Drop template items into the Active KPIs tree to activate them in the system.* *Read more...* Show : HP Portfolio Search : Pro HP Portfolio HP IT Performance Suite Portfolio Application Lifecycle Management Defect Management Improve Quality Number of Escaped Defects Percentage of Critical Defects Average Time to Resolve Produc Improve Staff Effectiveness

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 **Active KPIs** bar.

Learn More | Tasks | UI Description

Learn More

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 48. A Scorecard can include one or more Perspectives.

Scorecard Element	Key Performance Question	More Information and Example
		Example Operational excellence.
Objective	What is the objective trying to achieve?	For details about Objectives, see "Objectives" on page 49. 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 "Activate Scorecards, Perspectives, Objectives, Metrics, or KPIs Using Templates" on page 47. 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 47.

Active Scorecards, Perspectives, Objectives, and KPIs display real data in the Dashboard. For details, see "Active KPIs Pane" on page 64.

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.

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 at the same hierarchical level. 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 active tree, it is given the same name as the KPI template. If a KPI with the same name already exists in the same active 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 "Scorecard Configuration Details" on page 70.
- For a Perspective, see the UI Description section in "Perspective Configuration Details" on page 79.
- For an Objective, see the UI Description section in "Objective Configuration Details" on page 83.
- For a KPI, see the UI Description section in "KPI or Metric Configuration and Calculation Details" on page 103.

> **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

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 "Scorecard Configuration Details" on page 70.
    - 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 "Perspective Configuration Details" on page 79.
    - 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 "Objective Configuration Details" on page 83.

> **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 a new active KPI

To create a new active KPI, 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 "KPI or Metric Configuration and Calculation Details" on page 103.

- Select the **Public Metrics and KPIs** directory, and click the **Create a new entity** ✱ button and select the **KPI** option in the menu that opens. A new Unassigned KPI is added to the directory. 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 "KPI or Metric Configuration and Calculation Details" on page 103. You can then move the KPI to the relevant Objective.

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 **Public Metrics and KPIs** directory 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 "KPI or Metric Configuration and Calculation Details" on page 103.
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 "Calculation" on page 144.

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

Movie: To display the relevant movie, open the ITBA application, click **Help** in the top right corner of the application main page and select the **Movies** option. Select the relevant movie.

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 for the Objective or at the bottom of the **Public Metrics and KPIs** directory. 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 "KPI or Metric Configuration and Calculation Details" on page 103.

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 Unassigned KPI, the KPI is deleted when you click **Yes**.

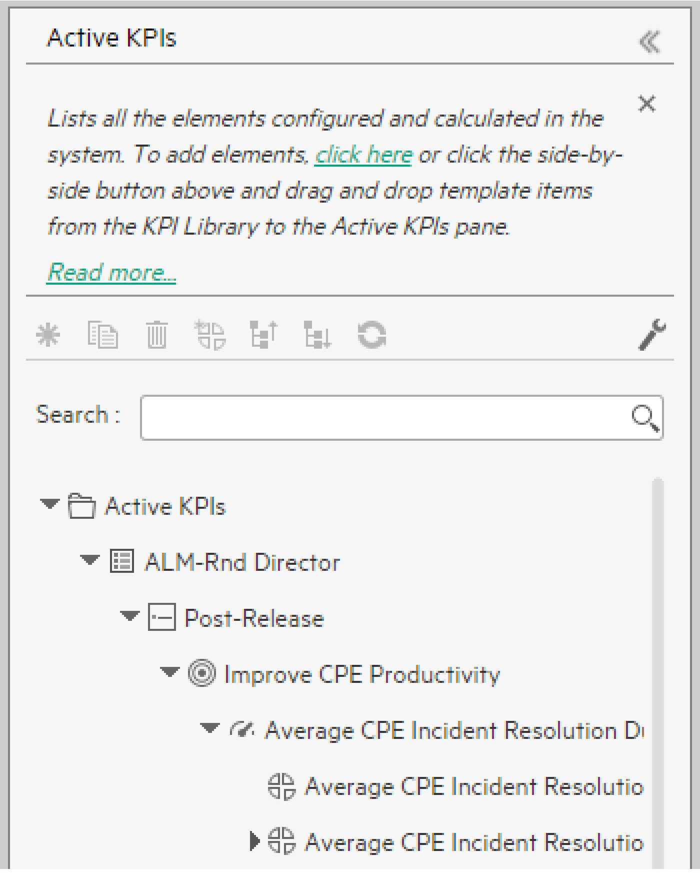
Use Case - Build a Scorecard Tree and Create a New KPI

For details, see Build a Scorecard Tree and Create a New KPI in the *Getting Started Guide*.

UI Description

Active KPIs Pane

This pane displays the tree of active Scorecards, Perspectives, Objectives, Metrics, and KPIs, as well as the **Public Metrics and KPIs** directory that includes Unassigned KPIs and Metrics.


Active KPIs
Search :
Active KPIs
ALM-Rnd Director
Post-Release
Improve CPE Productivity
Average CPE Incident Resolution D
Average CPE Incident Resolutio
Average CPE Incident Resolutio

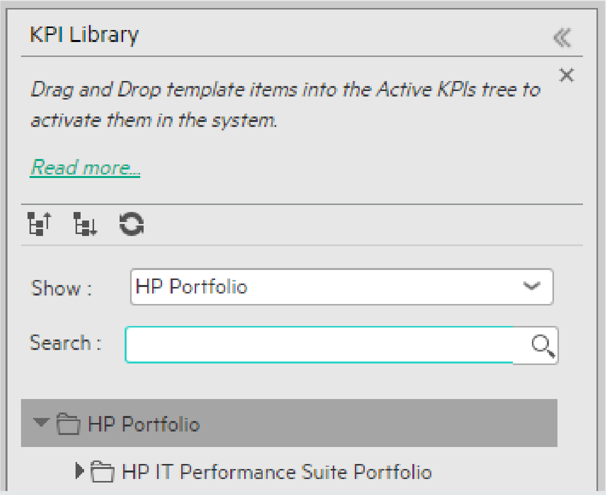
Lists all the elements configured and calculated in the system. To add elements, click here or click the side-by-side button above and drag and drop template items from the KPI Library to the Active KPIs pane.

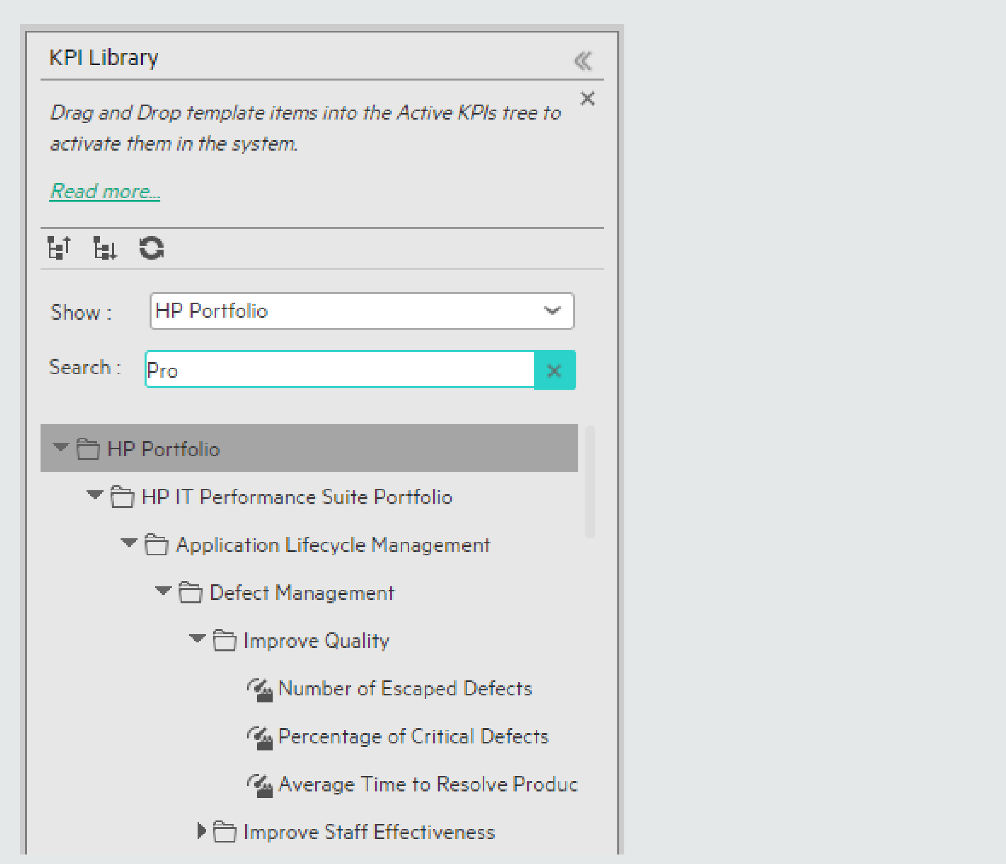
Read more...

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

UI Element	Description
KPI Library	If the KPI Library pane is closed, click the KPI Library bar. Do the same for the Active KPIs pane if it is closed. Click << in the top right corner of the pane to collapse it. Both panes can be displayed side-by-side together with the Configuration/Calculation details tabs.
✱	**Create a new entity.** Click to display a menu that enables you to select: • **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 "Scorecard Configuration Details" on page 70. • **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 "Perspective Configuration Details" on page 79. • **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 "Objective Configuration Details" on page 83. • **KPI.** A new Unassigned KPI or a KPI under a selected Objective is displayed at the 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 "KPI or Metric Configuration and Calculation Details" on page 103. • **Metric.** A new 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 "KPI or Metric Configuration and Calculation Details" on page 103.
⧉	**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)).
🗑	**Delete Currently Selected Node.** Select the Scorecard, Perspective, Objective, Metric, KPI, or KPI or Metric Breakdown you want to delete and click the button.
⊞	**Create KPI or Metric Breakdown.** The list of available entities for the KPI or Metric is displayed.

UI Element	Description
	To create a KPI Breakdown or Metric you can do one of the following: • 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. To understand KPI/Metric Breakdowns, see "KPI Breakdowns" on page 163 or "Metric Breakdowns" on page 171.
🔧	**Calculation options.** Displays the calculation options: Calculate now **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 "Calculation" on page 144. Recalculate **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 "Recalculation" on page 148. Schedule Context Calculation **Schedule context calculation.**Opens the Business Context Calculation Scheduling dialog box where you can schedule the context calculation. For details, see "Calculation Scheduling" on page 152. Calculation monitoring **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 "Calculation and Recalculation Monitoring" on page 156.
↑	Collapses the tree nodes.
↓	Expands the tree nodes.
⟳	**Refresh the tree.** Click to refresh the display of the tree.
Search	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. The filter returns the section of tree from the root down to the element whose name

UI Element	Description
	includes the specified string (path). It does not include elements that are not directly part of that path. The child sub-tree of the element is collapsed and displayed under the element. If more than one element includes the specified string, the paths to these elements are also displayed. **Example** If the tree is as follows:  KPI Library Drag and Drop template items into the Active KPIs tree to activate them in the system. Read more... Show : HP Portfolio Search : HP Portfolio HP IT Performance Suite Portfolio After searching for the string: **pro**, the resulting tree is as follows:

UI Element	Description
	 KPI Library *Drag and Drop template items into the Active KPIs tree to activate them in the system.* *Read more...* Show : HP Portfolio Search : Pro HP Portfolio HP IT Performance Suite Portfolio Application Lifecycle Management Defect Management Improve Quality Number of Escaped Defects Percentage of Critical Defects Average Time to Resolve Produc Improve Staff Effectiveness
<tree>	The pane displays the active tree with the relevant Scorecards, Perspectives, Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, and in the **Public Metrics and KPIs** directory, standalone KPIs, and Metrics. • 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 Unassigned KPI to an Objective, but you cannot drag a KPI assigned to an Objective to change it into an Unassigned KPI. • When you are performing a drag and drop operations: ◦ The ⊘ icon indicates that the drop is not allowed.

UI Element	Description
	◦ A box with the name of the element you want to drag and drop appears when the drop is allowed. **Note about the Public Metrics and KPIs directory:** The KPIs and Metrics under this directory are public and any modification done on one or more may affect other users. If you want to use a standalone KPI and assign it to a Scorecard, clone it before assigning it. You can then modify it to fit your requirements.

Scorecard Configuration Details

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 Tasks UI Description

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?	For details about Perspectives, see "Perspectives" on page 48. A Scorecard can include one or more Perspectives.

Scorecard Element	Key Performance Question	More Information and Example
		Example Operational excellence.
Objective	What is the objective trying to achieve?	For details about Objectives, see "Objectives" on page 49. 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 "Activate Scorecards, Perspectives, Objectives, Metrics, or KPIs Using Templates" on page 47. 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 47.

Active Scorecards, Perspectives, Objectives, and KPIs display real data in the Dashboard. For details, see "Active KPIs Pane" on page 64.

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).

Impact of changes to configurations in the Studio on the display in Dashboard and the EXPLORER tab

Changes in the STUDIO have impacts on the display in Dashboard and EXPLORER. For details, see "Synchronization of Changes in the Studio with Display in the Dashboard and the EXPLORER tab" on page 161.

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.

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.

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?

Tasks

This section includes:

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

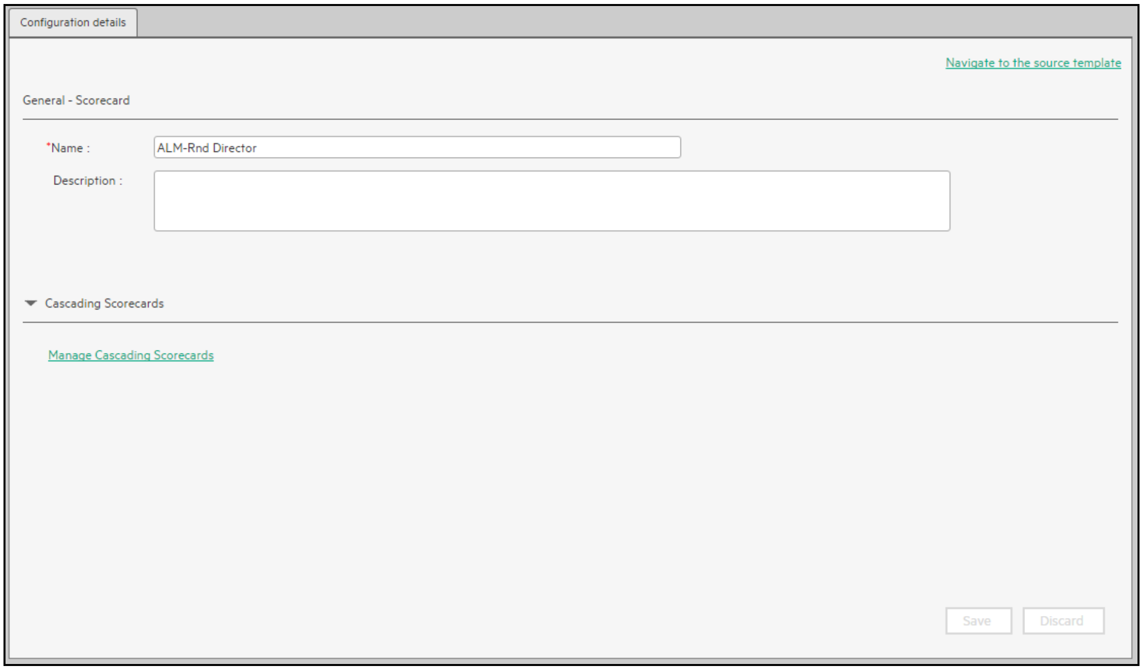
1. Click the **Studio** button (top right corner) to open the Studio.
2. In the **Active KPIs** pane, select the relevant node. Its details are displayed in the Configuration Details pane.
3. You can also populate the node by adding or removing the following nodes:
    a. Perspectives. For details, see "Perspective Configuration Details" on page 79.
    b. Objectives. For details, see "Objective Configuration Details" on page 83.
    c. KPIs. For details, see "KPI or Metric Configuration and Calculation Details" on page 103.
    d. KPI Breakdowns. For details, see "KPI Breakdowns" on page 163.

UI Description

Configuration Details Tab for a Scorecard

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

Changes in the STUDIO have impacts on the display in Dashboard and EXPLORER. For details, see "Synchronization of Changes in the Studio with Display in the Dashboard and the EXPLORER tab" on page 161.



*Name : ALM-Rnd Director

Description :

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.
Discard	Click to discard the changes you have made since the last Save operation.
Help ↻ ×	Click the refresh button, in the top right corner, to refresh the display.
General - Scorecard	
Name	The name of the active Scorecard. **Limitations:** - The characters: \ / : * ? " < > | are not supported. - The maximum number of characters is 240.
Description	The description of the Scorecard.

UI Element	Description
	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 > Settings > BA 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 > Settings > BA Settings**, and in **Debug Mode**, select the **Application Debug Mode** setting.
Cascading Scorecards	
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 "Cascading Scorecards" on page 187.
Name	The name of the Cascading Scorecard.
Remove	Click the relevant **Remove** 🗑 button to remove the selected Scorecard from the list of Cascading Scorecards.

Perspective Configuration Details

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 | Tasks | UI Description

Learn More

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).

Impact of changes to configurations in the Studio on the display in Dashboard and the EXPLORER tab

Changes in the STUDIO have impacts on the display in Dashboard and EXPLORER. For details, see "Synchronization of Changes in the Studio with Display in the Dashboard and the EXPLORER tab" on page 161.

Tasks

This section includes:

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

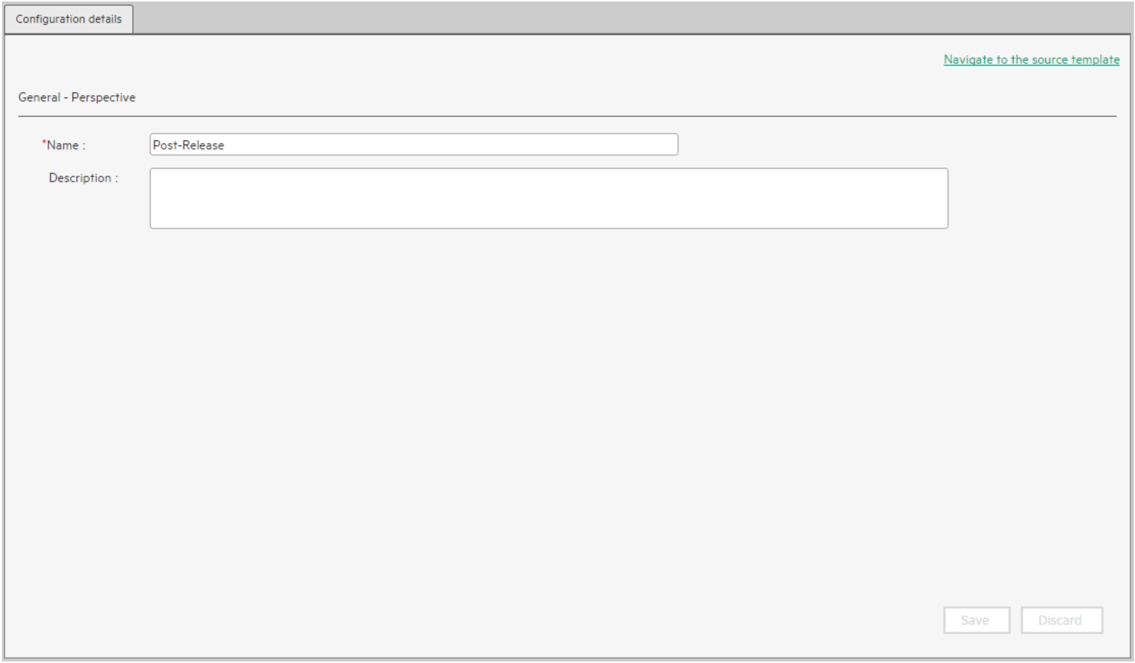
1. Click the **Studio** button (top right corner) to open the Studio.

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 "Objective Configuration Details" on page 83.
    b. KPIs. For details, see "KPI or Metric Configuration and Calculation Details" on page 103.
    c. KPI Breakdowns. For details, see "KPI Breakdowns" on page 163.

UI Description

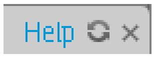
Configuration Details Tab for a Perspective

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



*Name : Post-Release

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	
Name	The name of the active Perspective. **Limitations:** • The characters: \ / : * ? " < > | are not supported. • The maximum number of characters is 240.
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 > Settings > BA 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 > Settings > BA Settings**, and in **Debug Mode**, select the **Application Debug Mode** setting.

Objective Configuration Details

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 | Tasks | UI Description

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 at the same hierarchical level. 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).

Impact of changes to configurations in the Studio on the display in Dashboard and the EXPLORER tab

Changes in the STUDIO have impacts on the display in Dashboard and EXPLORER. For details, see "Synchronization of Changes in the Studio with Display in the Dashboard and the EXPLORER tab" on page 161.

Tasks

This section includes:

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 "KPI or Metric Configuration and Calculation Details" on page 103.

       You might consider sharing KPIs between Objectives. For details, see "Shared KPIs" on page 92.

    b. KPI Breakdowns. For details, see "KPI Breakdowns" on page 163.

Use Case - Configure the calculation rule for an Objective

1. Click the **Studio** button (top right corner) to open the Studio.
2. In the **Active KPIs** pane, select the Objective whose calculation rule you want to configure.
3. In the right pane, in the **Configuration Details** tab in the **Calculate using** field, select one of the available calculation rules:
    - BEST_CHILD – if you want to base the Objective calculation of the child KPI with the best score.
    - WORST_CHILD – if you want to base the Objective calculation of the child KPI with the worst score.
    - WEIGHTED_AVERAGE – if you want to base the Objective calculation of the average of the child KPI's scores.
4. You can specify the weights of specific KPIs to increase their influence on the calculation.
5. Click **Save** to save your configuration and to perform the calculation of the Objective to reflect its changes in the Dashboard.

Movie: To display the relevant movie, open the ITBA application, click **Help** in the top right corner of the application main page and select the **Movies** option. Select the relevant movie. For details, see Access Movies.

Change a KPI or an Objective Calculation Period

The calculation result of an Objective is based on its KPIs, so the Calculation Period of an Objective and of its KPIs must be the same. If an Objective has KPIs you cannot change its Calculation Period and you cannot change its KPIs Calculation Period directly. To change the Calculation Period of the Objective or of its KPIs, go to STUDIO:

1. In the Active KPIs, unassign the KPI from the Objective as follows:
    a. Right-click the KPI and select **Delete**.
    b. Select **Un-assign this specific KPI from the Objective**, and click **Yes**.

The KPI is then moved to the Public Metrics and KPIs folder.

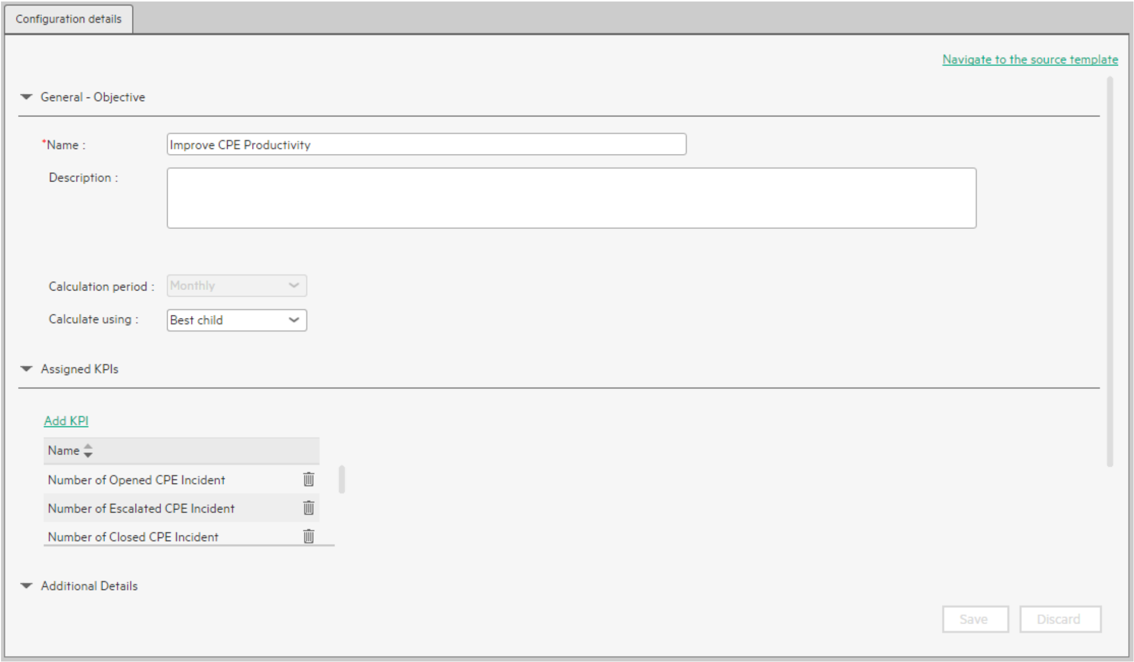
2. Change the Calculation Period of either the Objective or of the KPI to match.
3. Click the Objective and click **Add KPI**. Select the relevant KPI and click the arrow to move the KPI to **Assigned KPIs**, and click **OK**.

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



*Name : Improve CPE Productivity

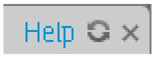
Description :

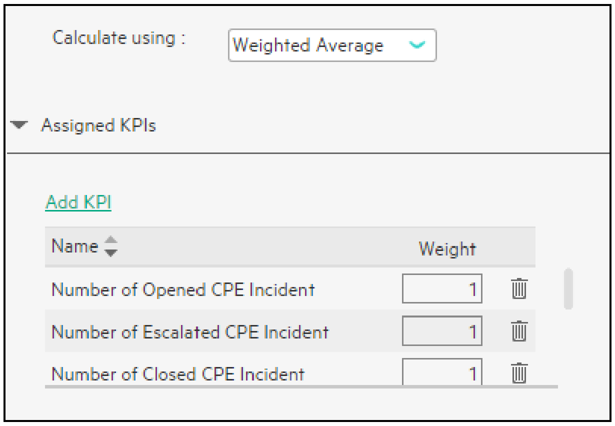
Calculation period : Monthly

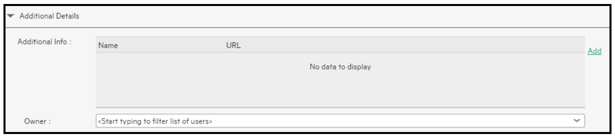
Calculate using : Best child

Name
Number of Opened CPE Incident
Number of Escalated CPE Incident
Number of Closed CPE Incident

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.
Discard	Click to discard the changes you have made since the last Save operation.
	Click to refresh the display.
General - Objective	
Name	The name of the active Objective. **Limitations:** - The characters: \ / : * ? " < > | are not supported. - The maximum number of characters is 240.
Description	The description of the Objective. **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 > Settings > BA 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 > Settings > BA Settings**, and in **Debug Mode**, select the **Application Debug Mode** setting.
Calculation Period	The calculation period of the Objective. 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.
Calculate Using	The type of rule to use to calculate the Objective's score according to the scores of its children. You can select: - **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.

UI Element	Description
	- **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 multiplied by the relevant weights, or if the Objective has child Objectives, the average of the scores of the child Objectives multiplied by the relevant weights. When you select this rule in the Studio, 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. Lists the KPIs assigned to the selected active Objective.	
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 "Objective KPIs" on page 91.
<Table>	The table lists: - **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**.  Calculate using : Weighted Average Name | Weight Number of Opened CPE Incident | 1 Number of Escalated CPE Incident | 1 Number of Closed CPE Incident | 1 - 🗑 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	

UI Element	Description
Additional Info	Lists the additional information available for the Objective. It can be links to BO or Xcelcius reports, external links, or links to Dashboard pages.  Additional Details Additional Info : Name URL Add No data to display Owner : <Start typing to filter list of users> The table includes: - **Name**.The name of the link, the Dashboard page, the reports, or the name of the URL. - **URL**. The hyperlink to access additional external information. Click the link to open the Edit Info Link dialog box where you can edit the selected additional information. For details, see "KPI or Objective Additional Information" on page 183. - 🗑 Click to delete the selected additional information.
Owner	The owner of the active Objective. The list of available owners corresponds to the users that were defined in **ADMIN** > **Users and Roles** > **User Management**. For details, see User Management in the *Administrator Guide*.
Add Info	Click to open the **Add Info Link** dialog box where you can add additional information for the Objective. For details, see "KPI or Objective Additional Information" on page 183.

Objective KPIs

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 | Tasks | UI Description

Learn More

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.

For details about KPIs and Objectives, see "Objectives" on page 49

Impact of changes to configurations in the Studio on the display in Dashboard and the EXPLORER tab

Changes in the STUDIO have impacts on the display in Dashboard and EXPLORER. For details, see "Synchronization of Changes in the Studio with Display in the Dashboard and the EXPLORER tab" on page 161.

Shared KPIs

When you create a KPI, the KPI is displayed in the **Public Metrics and KPIs** directory in the Active KPIs pane.

When you assign that KPI to an Objective, the KPI is removed from the **Public Metrics and KPIs** directory in the Active KPIs pane.

You can assign the same KPI to another Objective, instead of cloning it. Such a KPI becomes a shared KPI.

Using shared KPIs instead of cloning them also provides better performance as a shared KPI is calculated once for all the Objectives to which it is assigned. It is also easier to update to the next version as you update the shared KPI once instead of updating each clone of the KPI.

Note that you cannot use shared KPIs for Scorecards that are created by users with different GEN_ <Scorecard name> roles. For details, see Role Management in the *Administrator Guide*.

Tasks

This section includes:

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.

   You might consider sharing KPIs between Objectives. For details, see "Shared KPIs" on the previous page.
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.

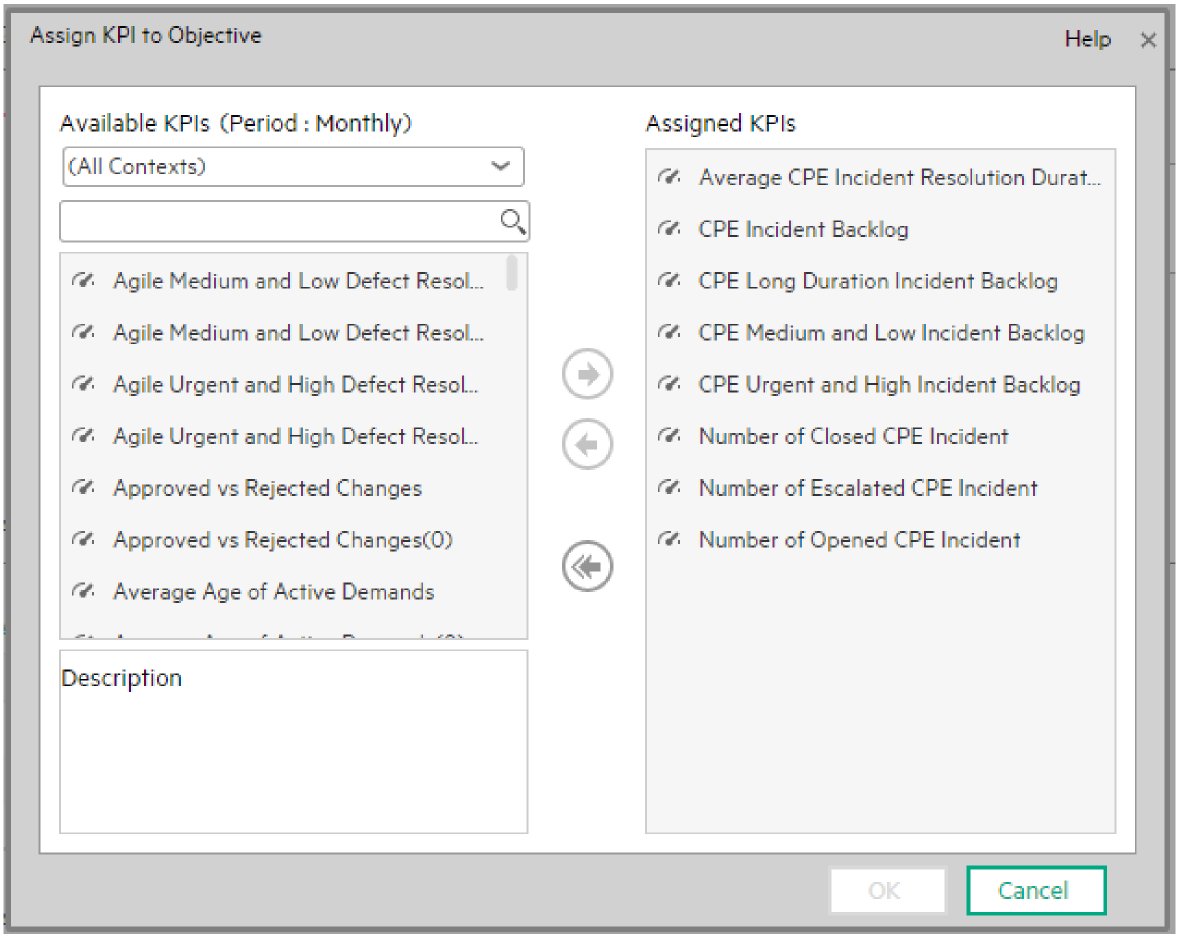
Unassign a KPI from an Objective

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


Assign KPI to Objective
Help
Available KPIs (Period : Monthly)
(All Contexts)
Agile Medium and Low Defect Resol...
Agile Medium and Low Defect Resol...
Agile Urgent and High Defect Resol...
Agile Urgent and High Defect Resol...
Approved vs Rejected Changes
Approved vs Rejected Changes(0)
Average Age of Active Demands
Description
Assigned KPIs
Average CPE Incident Resolution Durat...
CPE Incident Backlog
CPE Long Duration Incident Backlog
CPE Medium and Low Incident Backlog
CPE Urgent and High Incident Backlog
Number of Closed CPE Incident
Number of Escalated CPE Incident
Number of Opened CPE Incident
OK
Cancel

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

UI Element	Description
Available KPIs	Lists the KPIs available to be assigned to the Objective. You can: • Select the relevant context in the **<All Contexts>** list to display the KPIs relevant

UI Element	Description
	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	Lists the KPIs that you want to assign to the Objective.
Description	The description of the KPI selected in the Available KPIs area.
→ ← ⇇	Select the relevant KPI and move it to the relevant field using the buttons.
OK	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**.

Delete a Node

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

For details on deleting a KPI, see "Delete a KPI" on page 63.

Tasks

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.

      > **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 move to the **Public Metrics and KPIs** directory if they don't exist in any other subtrees.

    > **Note:** When you delete a KPI, the historical data is not deleted. So a Dashboard component that includes the deleted KPI will still show the historical data if the component is not refreshed. The component is persistent and its configuration includes the KPI, so it will show the KPI historical data only; the current data is deleted, until it is reconfigured.

2. When you are prompted to approve the deletion, click **Yes**. The tree is immediately updated.

KPI and Metric Formulas, Filter, Threshold, Value, Trend, Score, and Decimal Precision

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

Key Performance Indicators (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. **Trends.** The direction of the performance of the KPI, either “up,” “down,” or “static.”

> **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.

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.

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.

A complete list of KPIs and Metrics is available in KPI Library in Excel format.

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 49.

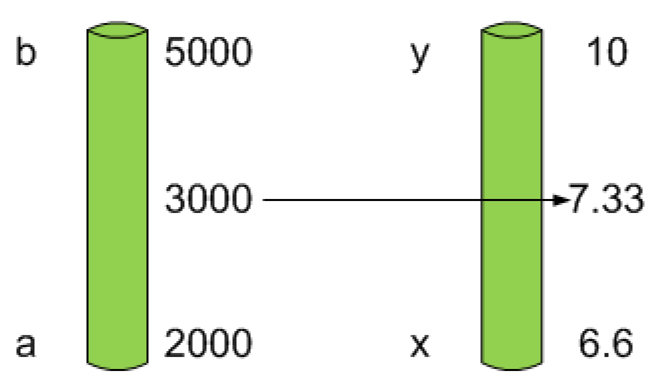
> **Example** A KPI calculates a percentage (%) and its thresholds are Good from 90% and up. When the KPI has a value of 90%-100%, the KPI's status is Good. The score for 85% is higher than the score for 65%, and the score for 97% is higher than the score for 93% even though the status is the same, this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

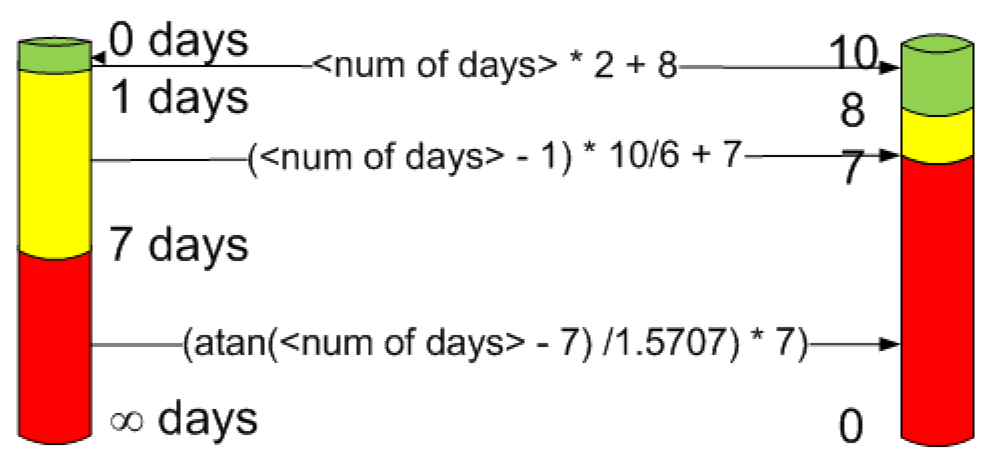
Any value on the MTTR scale needs to be transformed into the score scale by linear or exponential transform.Since the lower threshold is not set (it is equal to ∞), the formula is different:

Lets check the Score based on the following Results :

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

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

10 days →F(10) = (atan(10 - 7) / 1.5707))* (7-0) = 4.43 (the score is 4.43)


0 days
<num of days> * 2 + 8
10
1 days
8
(<num of days> - 1) * 10/6 + 7
7
7 days
(atan(<num of days> - 7) /1.5707) * 7)
∞ days
0

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.

Decimal Precision

The decimal precision used in displays in ITBA is as follows:

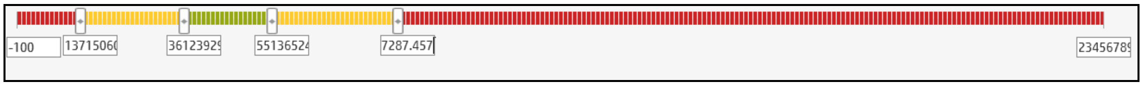
- **Studio/Dashboard/Explorer.** By default, the values of KPIs and Metrics are displayed with a maximum of 6 digits (default) (for example: 123456) and if needed a decimal point (123.456).

  Digits after the decimal point are rounded to 5 digits maximum by default. For example: 4.567893 is rounded to 4.56789.

  Digits before the decimal point are rounded to 3 digits maximum. If there are more than 3 digits before the decimal point, K, M, or T are used to indicate the correct value. For example: 3300122.111 is displayed as 3.300 M, and 999999 is displayed as 999.999 K.

- **Thresholds in Studio.**

  Because the threshold fields in the Studio are where you enter the threshold values, the thresholds display all the digits before the decimal point. Nevertheless, if you configure a KPI threshold with more than 3 digits after the decimal point, they are rounded to 3 digits. For example:



-100
1371506
3612392
5513652
7287.457
2345678

The Administrator can change the default using one of the following options:

- in **Admin > Settings > Dashboard Settings**, you can specify a total number of digits (up to 6) in the **Total number of digits displayed for KPI/Metric results** setting. Note that the number of digits before the decimal point is always 3 with a K, M, or T indication when needed.

- in **Admin > Settings > Dashboard Settings**, you can specify the number of digits (up to 5) after the decimal point in the **Max number of digits after decimal point** setting.

  Note that the two settings must work together. The **Total number of digits displayed for KPI/Metric results** setting decides the total number of digits that is displayed while the **Max**

number of digits after decimal point setting provides the number of digits that is displayed after the decimal point depending on the number of digits of the number.

Settings	Number		
	123.123456	**1.123456**	**12345.123456**
Total number of digits displayed for KPI/Metric results = 6 Max number of digits after decimal point = 5	123.123	1.12345	12.3451 K
Total number of digits displayed for KPI/Metric results = 3 Max number of digits after decimal point = 5	123	1.12	12.3 K
Total number of digits displayed for KPI/Metric results = 6 Max number of digits after decimal point = 2	123.12	1.12	12.34 K

For details, see Dashboard Settings in the *Administrator Guide*.

KPI or Metric Configuration and Calculation Details

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 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 56.

For details about KPIs, see "KPI and Metric Formulas, Filter, Threshold, Value, Trend, Score, and Decimal Precision" on page 97.

To learn about Shared KPIs, see "Shared KPIs" on page 92.

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 | Tasks | UI Description

Learn More

Impact of changes to configurations in the Studio on the display in Dashboard and the EXPLORER tab

Changes in the STUDIO have impacts on the display in Dashboard and EXPLORER. For details, see "Synchronization of Changes in the Studio with Display in the Dashboard and the EXPLORER tab" on page 161.

Tasks

This section includes:

Use Case - Display and modify a KPI or a Metric properties

In this section, you will learn how to modify a KPI configuration. Click the Studio to open the Studio.

1. Click the **Studio** button (top right corner) to open the Studio.
2. In the **Active KPIs** pane, select the KPI you'd like to modify.
3. In the **Configuration Details** pane:
    a. In the **General – KPI** area, you can change the KPI name, you can select a different unit or enter a custom unit. You can change the Calculation period.

    b. In the **Result Threshold** area, you can change the threshold direction, include the marginal status, and set the threshold boundaries by dragging the handles.

    c. In the **Additional Details** area, you can add to the KPI, additional information that will be shown in the Dashboard and the Explorer tab. In the Business Motivation enter the relevant motivation.

    d. In the **Additional Info** area, you can add information that will be displayed with the KPI. It can be a URL, a Dashboard page, or a report.

       You can also set an owner for the KPI. The owner will receive the annotations set for the KPI in the Dashboard page or in the Explorer tab.

    e. Save your changes.
4. In the right pane, click the **Calculation Details** tab.
    a. Click **Open Formula Builder** to modify the KPI formula.

       How to modify the formula is detailed in another section.

    b. Click **Open Formula Filter** to modify the KPI filter.

    c. In the Comments field, add any additional information.
5. Remove the current formula and start creating your own formula.
6. Click **Save** to save your changes.

7. 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 relevant movie, open the ITBA application, click **Help** in the top right corner of the application main page and select the **Movies** option. Select the relevant movie.

Use Case - 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 **Public Metrics and KPIs** directory 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 "KPI or Metric Configuration and Calculation Details" on page 103.
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 "Calculation" on page 144.

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

Movie: To display the relevant movie, open the ITBA application, click **Help** in the top right corner of the application main page and select the **Movies** option. Select the relevant movie.

Change a KPI or an Objective Calculation Period

The calculation result of an Objective is based on its KPIs, so the Calculation Period of an Objective and of its KPIs must be the same. If an Objective has KPIs you cannot change its Calculation Period and you cannot change its KPIs Calculation Period directly. To change the Calculation Period of the

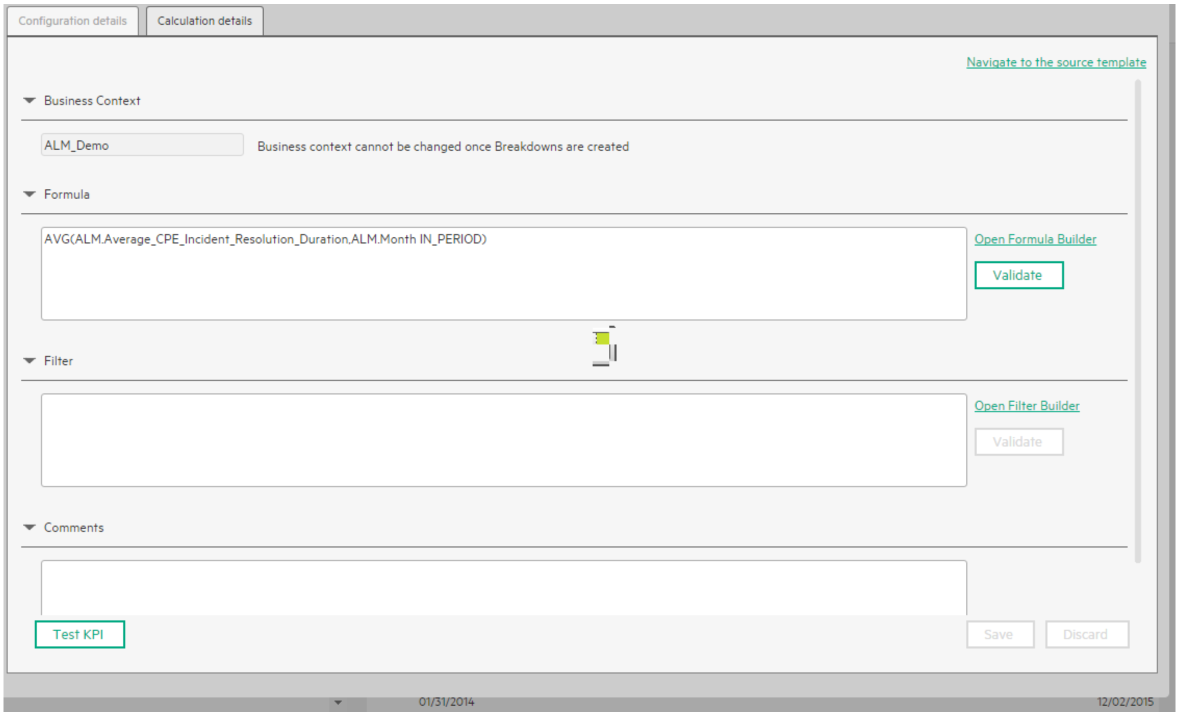
Objective or of its KPIs, go to STUDIO:

1. In the Active KPIs, unassign the KPI from the Objective as follows:
    a. Right-click the KPI and select **Delete.**
    b. Select **Un-assign this specific KPI from the Objective**, and click **Yes**.

       The KPI is then moved to the Public Metrics and KPIs folder.
2. Change the Calculation Period of either the Objective or of the KPI to match.
3. Click the Objective and click **Add KPI**. Select the relevant KPI and click the arrow to move the KPI to **Assigned KPIs**, and click **OK**.

UI Description

Calculation Details Tab

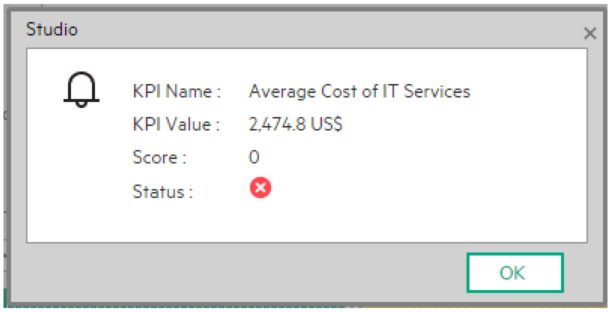


ALM_Demo

Business context cannot be changed once Breakdowns are created

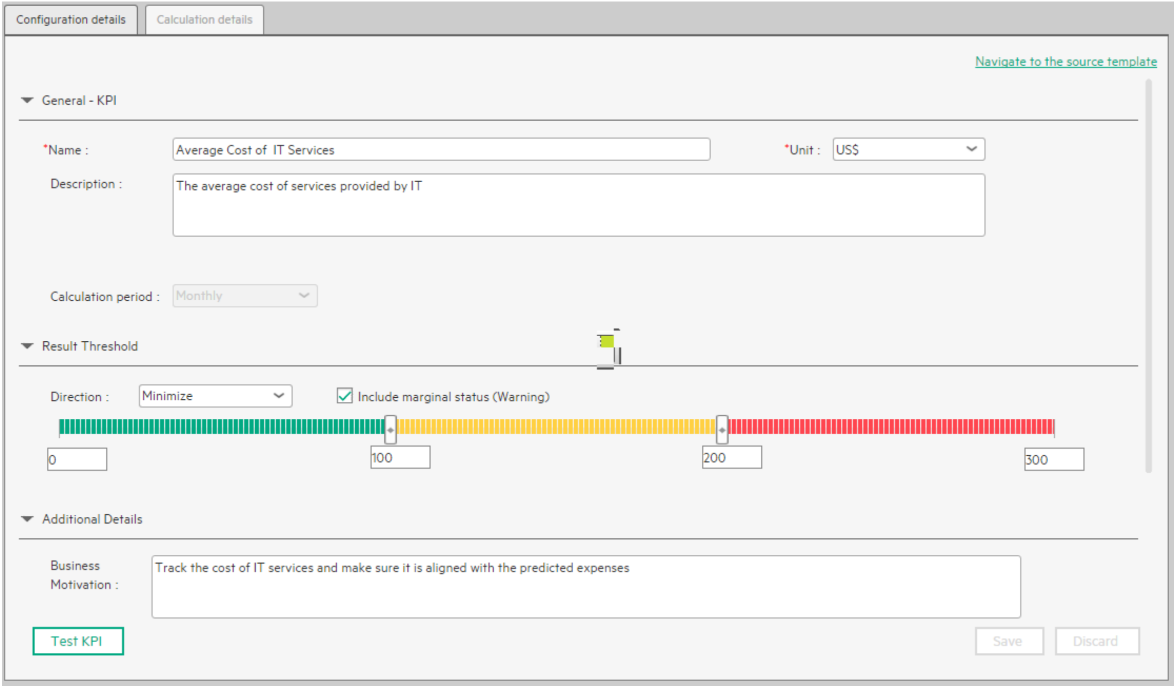
AVG(ALM.Average_CPE_Incident_Resolution_Duration,ALM.Month IN_PERIOD)

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.
Test KPI	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.  Studio KPI Name : Average Cost of IT Services KPI Value : 2,474.8 US$ Score : 0 Status : ⊗ 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.
Help ⟳ ×	Click to refresh the display.
Business context	The box displays the Context you selected. You can use additional variables and entities by creating Contexts using Context Designer. For details, see "Semantic Layer - Context Designer" on page 1 in the *Content Developer Guide*. **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.
Select business context	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 "SAP BusinessObjects Enterprise Contexts (Universes)" on page 1 in the *Administrator Guide*. 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.

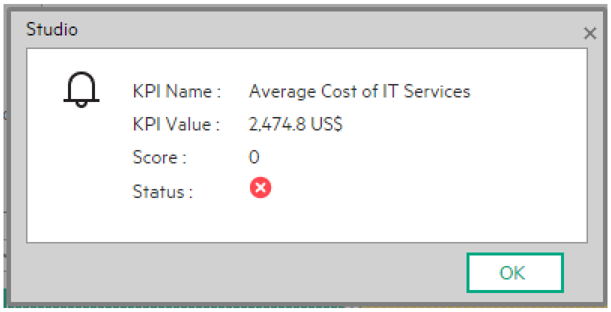
UI Element	Description
Formula	The formula used to calculate the value of the KPI.
Open Formula Builder	Click to open the **Formula Builder** dialog box where you can build the relevant formula to calculate the value of the KPI. For user interface details, see "KPI or Metric Formula" on page 113
Validate	Click to validate the formula that appears in the Formula box.
Filter	Specify the filter to limit the range of data used for the KPI's calculation.
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 "KPI or Metric Filter" on page 133
Validate	Click to validate the filter.
Comments	Enter a description of the formula and its purpose in your own words.

Configuration Details Tab



*Name : Average Cost of IT Services
*Unit : US$
Description : The average cost of services provided by IT
Calculation period : Monthly
Direction : Minimize
☑ Include marginal status (Warning)
0
100
200
300
Business Motivation : Track the cost of IT services and make sure it is aligned with the predicted expenses

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

<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr><td><b>Navigate to the source template</b></td><td>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.</td></tr>
<tr><td><b>Test KPI/Metric</b></td><td>After you change the KPI/Metric configuration, click <b>Save</b> to save your changes. The <b>Test KPI/Metric</b> 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.

Studio
KPI Name : Average Cost of IT Services
KPI Value : 2,474.8 US$
Score : 0
Status : ✖
OK
<b>Note:</b> The button is disabled for KPI/Metric Breakdowns.
For details on calculations, see "Activate Scorecards, Perspectives, Objectives, Metrics, or KPIs Using Templates" on page 47.</td></tr>
<tr><td><b>Save</b></td><td>Click to save the changes.</td></tr>
<tr><td><b>Discard</b></td><td>Click to discard the changes you have made since the last <b>Save</b> operation.</td></tr>
<tr><td>Help ⟳ ×</td><td>Click to refresh the display.</td></tr>
<tr><td><b>General - KPI Name</b></td><td><table><tr><td><b>Name</b></td><td>The name of the KPI/Metric or of the KPI/Metric template.
<b>Limitations:</b>
• The characters: \ / : * ? " < > | are not supported.
• The maximum number of characters is 240.
<b>Tip:</b>
• If you change the name of a KPI that has KPI Breakdowns or</td></tr></table></td></tr>
</table>

<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr><td></td><td>
<table>
<tr><td></td><td>the name of a Metric that has Metric Breakdowns, you must perform a new calculation to update names of their overrides. For details about overrides, see "KPI and Metric Breakdown Overrides" on page 177.
• The names of the KPI or Metric Breakdowns are not automatically updated after you change the name of the KPI or Metric parent even after a new calculation. You must access the Studio and manually change the names of the KPI or Metric Breakdowns to match the new parent KPI or Metric names.</td></tr>
<tr><td><b>Unit</b></td><td>The unit of the KPI/Metric value.</td></tr>
<tr><td><b>Description</b></td><td>The description of the KPI/Metric.
<b>Limitations:</b> The maximum number of characters is 1000.</td></tr>
<tr><td><b>Calculation Period</b></td><td>The time period used to calculate the value of the KPI/Metric (using the formula specified in the Calculation details tab). It can be: <b>Yearly</b>, <b>Quarterly</b>, <b>Monthly</b>, <b>Weekly</b>, or <b>Daily</b>.
If you select <b>Daily</b> for the Calculation Period of a KPI/Metric, and if the KPI/Metric formula contains <b>in_period(-XX)</b>, <b>end_period(-XX)</b>, or <b>Period_entity = Period (-XX)</b>, XX must be less than or equal to <b>365</b>.
The calculation result of an Objective is based on its KPIs, so their Calculation Period must be the same. To change the Calculation Period of an Objective or of a KPI when the Objective is assigned the KPI, see "KPI or Metric Configuration and Calculation Details" on page 103.</td></tr>
<tr><td><b>Id</b></td><td>The ID of the KPI/Metric. It is automatically assigned.
This information is displayed only when in debug mode. To set the debug mode, click <b>ADMIN > Settings > BA Settings</b>, and in <b>Debug Mode</b>, select the <b>Application Debug Mode</b> setting.</td></tr>
</table>
</td></tr>
<tr><td><b>Result Threshold</b></td><td><b>Note:</b> This section is not relevant for Metrics.
<table>
<tr><td><b>Direction</b></td><td>Select:
• <b>Centralize.</b> 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.</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr><td></td><td>
<table>
<tr><td></td><td>

- **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.

Example

- 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**.

</td></tr>
<tr><td>**Threshold**</td><td>

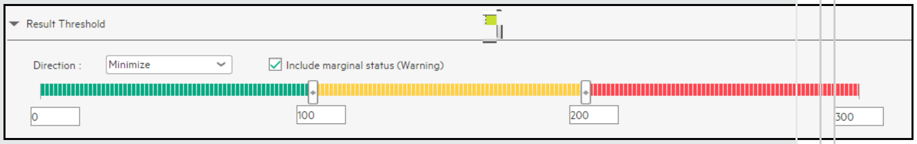
Slide the arrows to select the relevant thresholds in the boxes attached to the arrows. The threshold is used to assign a status to the KPI. For details on statuses, see "Activate Scorecards, Perspectives, Objectives, Metrics, or KPIs Using Templates" on page 47.

You can also enter the value by typing text in the box. The slider adjusts automatically.

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.

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.

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).



Direction : Minimize

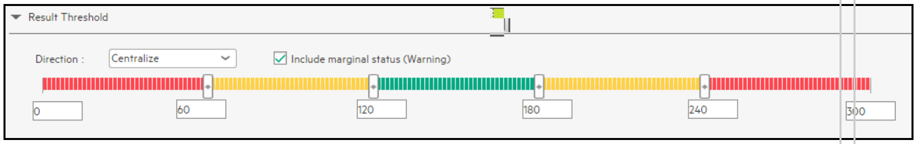
☑ Include marginal status (Warning)

0 100 200 300

The Threshold fields are validated when you enter values. The values must increase from left to right.

For details about the decimal precision, see "KPI and Metric Formulas, Filter, Threshold, Value, Trend, Score, and Decimal Precision" on page

</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr><td></td><td>
<table>
<tr><td></td><td>97.</td></tr>
<tr><td><b>Include marginal status (Warning)</b></td><td>Select when the status of the KPI can be <b>Good</b>, <b>Warning</b>, or <b>Error</b>.
Clear when the status of the KPI is either <b>Good</b>, or <b>Error</b>.
When you select <b>Direction=Centralize</b> and the <b>Include marginal status (yellow)</b> option, the thresholds include two warning areas as follows:

Result Threshold
Direction : Centralize
☑ Include marginal status (Warning)
0
60
120
180
240
300
The Threshold fields are validated when you enter values. The values must increase from left to right.</td></tr>
</table>
</td></tr>
<tr><td><b>Additional Details</b></td><td>
<table>
<tr><td><b>Business Motivation</b></td><td>Enter the business motivation of the KPI.
This section is not relevant for Metrics.</td></tr>
<tr><td><b>Additional Info</b></td><td>Lists the additional information available for the KPI. It can be links to BO or Xcelsius reports, external links, or links to Dashboard pages.
The table includes:
• <b>Name</b>.The name of the link or the reports.
• <b>URL</b>. The hyperlink to access additional external information.
• Click the link to open the Edit Info Link dialog box where you can edit the selected additional information. For details, see "KPI or Objective Additional Information" on page 183.
• 🗑 Click to delete the selected additional information.</td></tr>
<tr><td><b>Owner</b></td><td>The owner of the active KPI.
The list of available owners corresponds to the users that were defined in <b>ADMIN</b> > <b>Users and Roles</b> > <b>User Management</b>. For details, see "Users and Roles - User Management" on page 1 in the <i>Administrator Guide</i>.</td></tr>
<tr><td><b>Add</b></td><td>Click to open the <b>Add Info Link</b> dialog box where you can add additional information for the KPI. For details, see "KPI or Objective Additional Information" on page 183.</td></tr>
</table>
</td></tr>
</table>

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 "KPI or Metric Filter" on page 133.

To learn about Shared KPIs, see "Shared KPIs" on page 92.

To access:

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

Learn More | Tasks | UI Description

Learn More

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

For details about KPI and Metric formulas, filter, values, decimal precision, thresholds, status, score, and trend, see "KPI and Metric Formulas, Filter, Threshold, Value, Trend, Score, and Decimal Precision" on page 97.

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).

- During calculation, formulas are converted into SQL queries that run on the database.

You can use additional variables and entities by creating business contexts using Context Designer. For details, see Semantic Layer - Context Designer in the *Content Developer Guide*.

KPI Breakdown Formula Limitation

When you configure the formula of a KPI for which you will set up Breakdowns, make sure that you do not use multiple entities.

> **Example of a correct formula**, the formula uses the same entity for the numerator and denominator
>
> PERCENTAGE_MATH(SUM(CostAmount,CostExpenseType = 'CAPEX' and PERIOD_ENTITY=Period),SUM(CostAmount,CostExpenseType = 'OPEX' and PERIOD_ENTITY=Period),100)
>
> **Example of an incorrect formula**; the formula uses two different entities for the numerator and denominator and that might cause the Breakdown calculations to be incorrect.
>
> PERCENTAGE_MATH(SUM(CostAmount,CostExpenseType = 'CAPEX' and PERIOD_ENTITY=Period),SUM(Cost,CostExpenseType = 'OPEX' and PERIOD_ENTITY=Period),100)

Impact of changes to configurations in the Studio on the display in Dashboard and the EXPLORER tab

Changes in the STUDIO have impacts on the display in Dashboard and EXPLORER. For details, see "Synchronization of Changes in the Studio with Display in the Dashboard and the EXPLORER tab" on page 161.

Link between Contexts and KPI or Metric Formulas

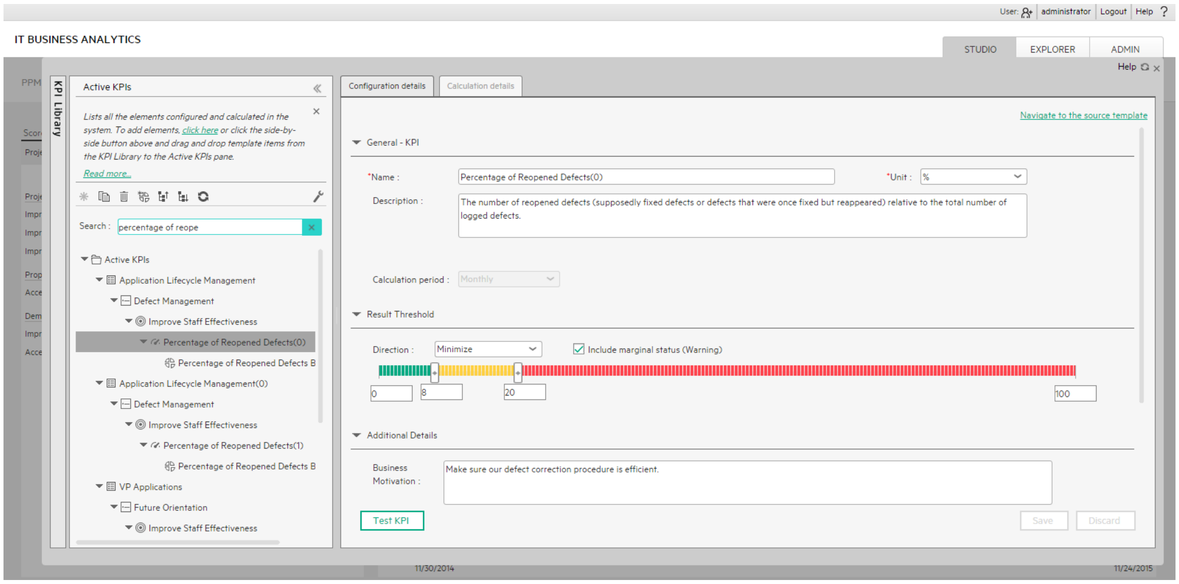
When you create a Context, you select tables, create links between the tables, and select the relevant columns in the tables to be part of the Context. For details, see Semantic Layer - Context Designer.

When you create a KPI or a Metric you assign them a Context in the Studio. The Context tables become variables that you can use when creating KPI or Metric formulas, and the table columns become the variable entities.

For example the **% of Reopened Defects** KPI has the following formula:

RATIO_MATH(COUNT_DISTINCT(DefectHist.Defect , DefectHist.ReopenFlag =1 And Defect.Status <> 'Closed') , COUNT(Defect ,Defect.DefectSummary<> 'INVALID' And Defect.DefectSummary<> 'UNKNOWN'),0)*100

Its definition is:


User: administrator | Logout | Help ?
IT BUSINESS ANALYTICS
STUDIO
EXPLORER
ADMIN
Help
KPI Library
Active KPIs
Configuration details
Calculation details
Read more...
Active KPIs
Application Lifecycle Management
Defect Management
Improve Staff Effectiveness
Percentage of Reopened Defects(0)
Percentage of Reopened Defects B
Application Lifecycle Management(0)
Defect Management
Improve Staff Effectiveness
Percentage of Reopened Defects(1)
Percentage of Reopened Defects B
VP Applications
Future Orientation
Improve Staff Effectiveness
Navigate to the source template
General - KPI
Result Threshold
Additional Details
Test KPI
Save
Discard
11/30/2014
11/24/2015

Lists all the elements configured and calculated in the system. To add elements, click here or click the side-by-side button above and drag and drop template items from the KPI Library to the Active KPIs pane.

Search : percentage of reope

*Name : Percentage of Reopened Defects(0)

*Unit : %

Description : The number of reopened defects (supposedly fixed defects or defects that were once fixed but reappeared) relative to the total number of logged defects.

Calculation period : Monthly

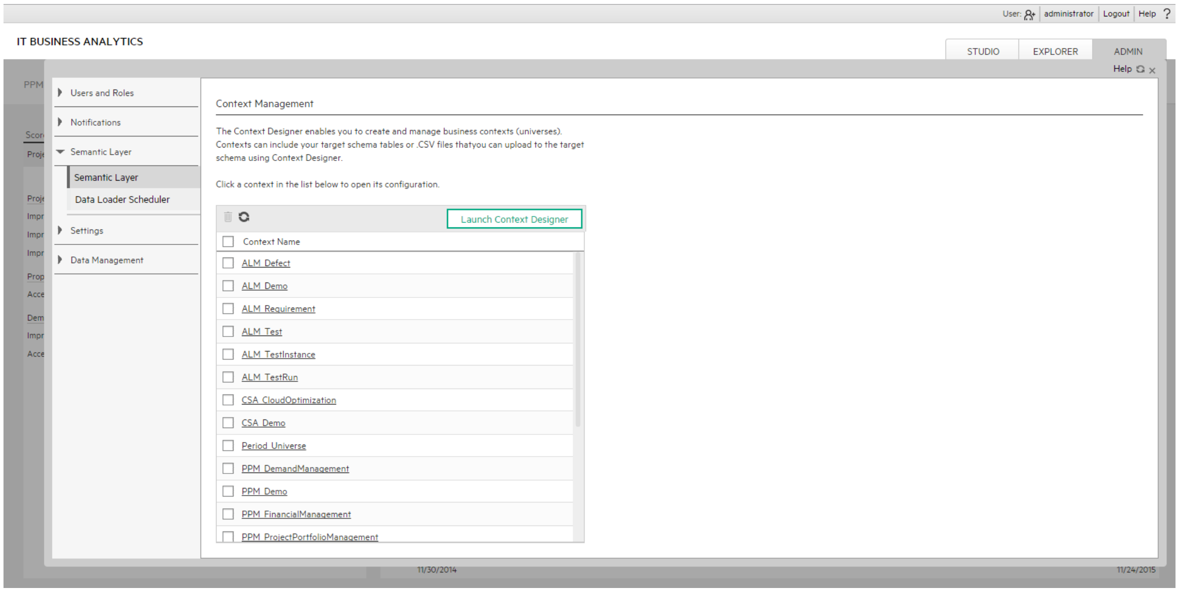
Direction : Minimize

☑ Include marginal status (Warning)

0 | 8 | 20 | 100

Business Motivation : Make sure our defect correction procedure is efficient.

The Business Context is ALM_Defect. Click **Admin > Semantic Layer** and open the ALM_Defect Context:



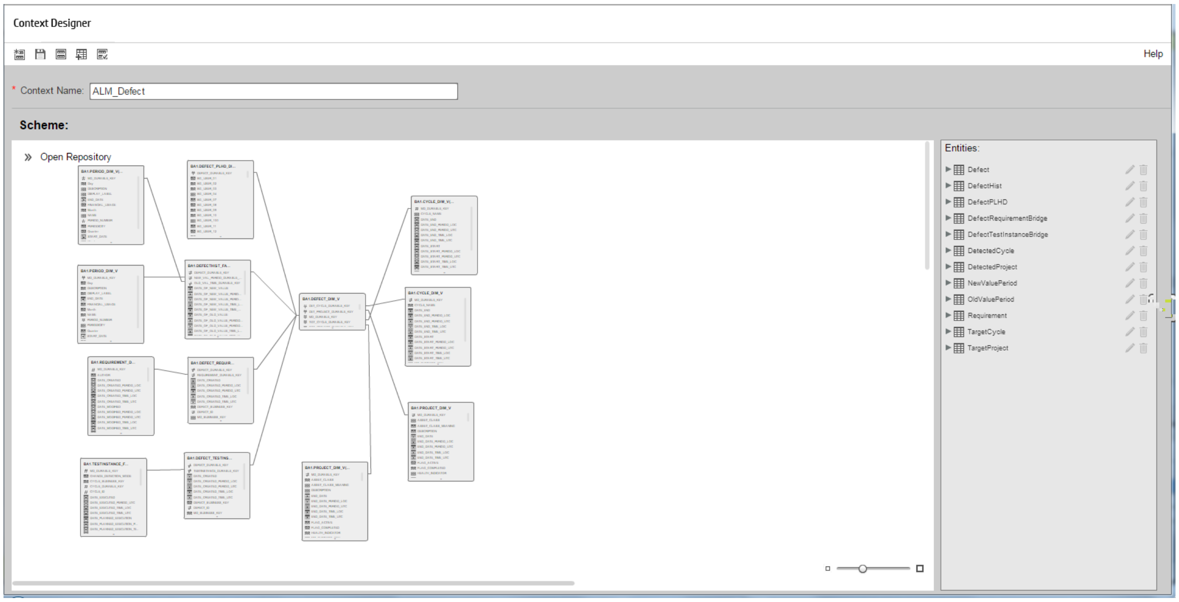
Context Management

The Context Designer enables you to create and manage business contexts (universes). Contexts can include your target schema tables or .CSV files thatyou can upload to the target schema using Context Designer.

Click a context in the list below to open its configuration.

☐ Context Name
☐ ALM_Defect
☐ ALM_Demo
☐ ALM_Requirement
☐ ALM_Test
☐ ALM_TestInstance
☐ ALM_TestRun
☐ CSA_CloudOptimization
☐ CSA_Demo
☐ Period_Universe
☐ PPM_DemandManagement
☐ PPM_Demo
☐ PPM_FinancialManagement
☐ PPM_ProjectPortfolioManagement

The contents of the Context including the ALM tables is displayed:



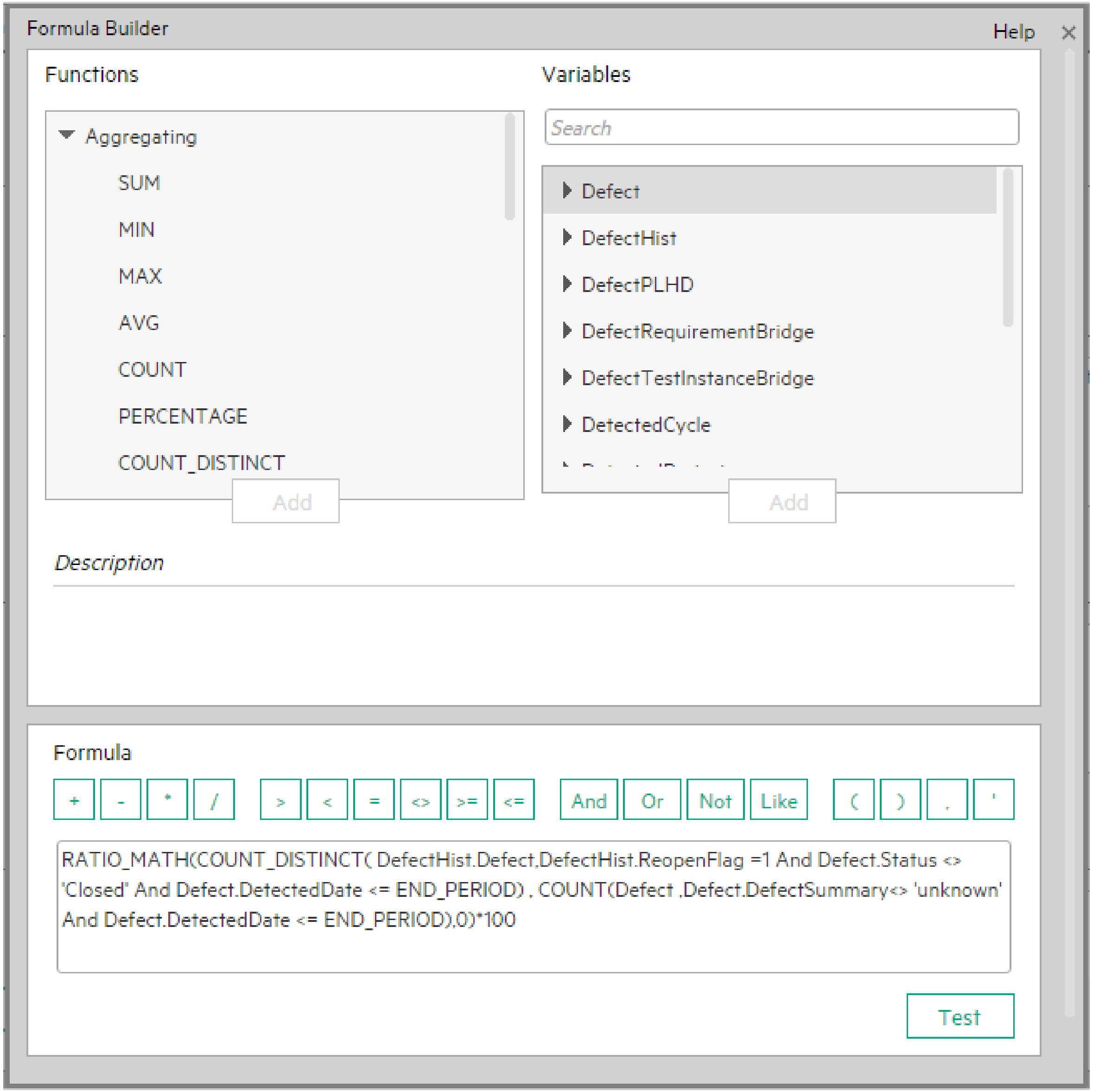
* Context Name: ALM_Defect

In the Entities area on the right, you can see the tables and the table columns that were selected to be part of the ALM_Defect Context itself.

It is recommended that the person who creates the KPI or Metric formula should be familiar with the ALM entities that are used in the ALM_Defect context:

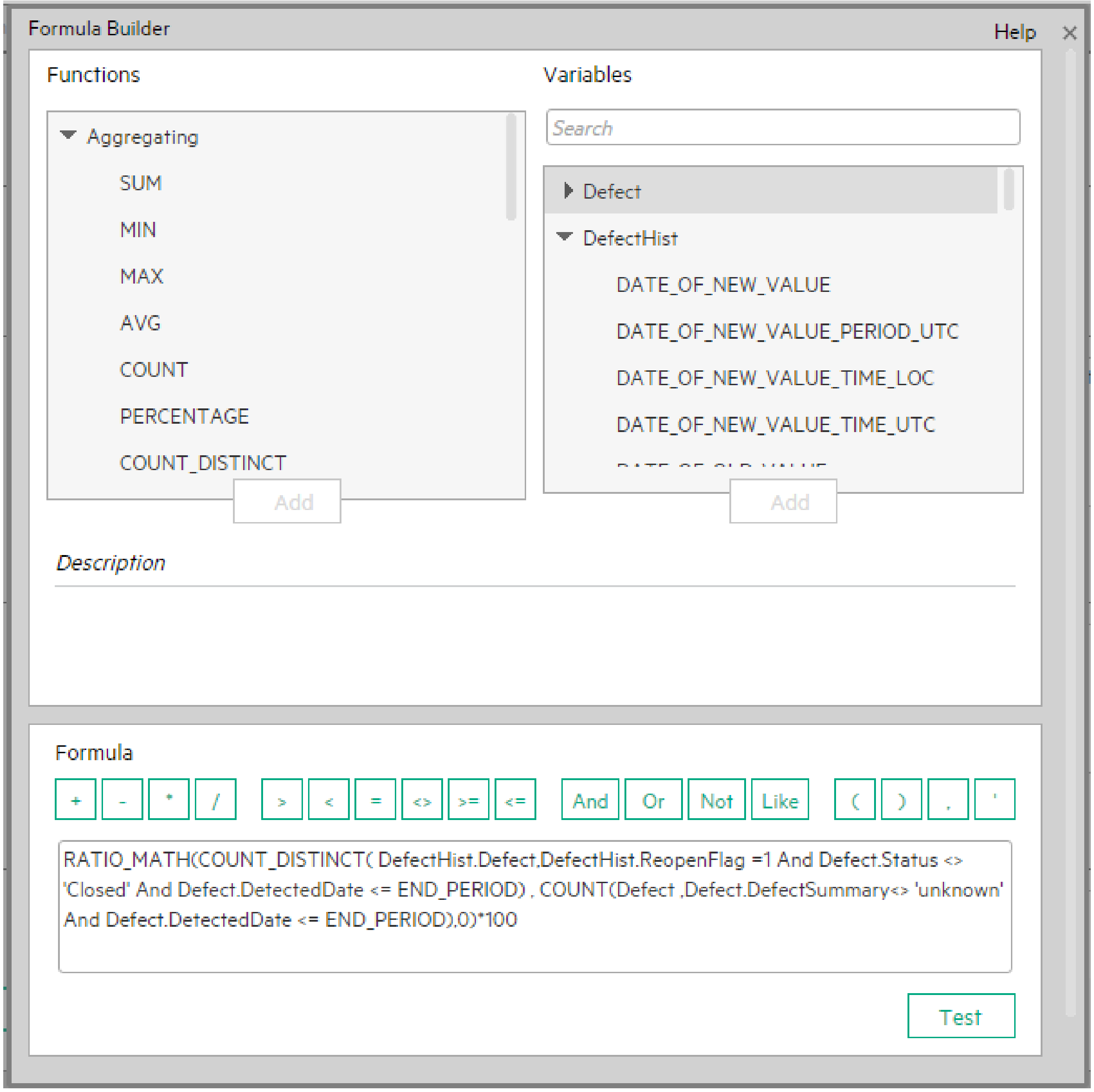
The **Defect_Hist** table corresponds to one of the entities (**DefectHist**) that appears in the list of Variables that can be used when creating or modifying the formula of a KPI based on the **ALM_Defect** context. To access the KPI or Metric formula, click **Studio**, highlight the relevant KPI (**% of Reopened Defects** for example), click the **Calculation Details** tab, and then click **Open Formula builder**.

The variables you see in the formula builder correspond to the Entities in the Context Designer (above) and correspond to the <EntityName> in the syntax of the formulas (as explained in KPI or Metric Formula in the *Business Analyst Guide*.)



```
RATIO_MATH(COUNT_DISTINCT( DefectHist.Defect,DefectHist.ReopenFlag =1 And Defect.Status <>
'Closed' And Defect.DetectedDate <= END_PERIOD) , COUNT(Defect ,Defect.DefectSummary<> 'unknown'
And Defect.DetectedDate <= END_PERIOD),0)*100
```

When you expand a variable, the items you see below correspond to the fields (in the Context Designer) and correspond to the <FieldName> items in the formulas syntax (as explained in KPI or Metric Formulain the *Business Analyst Guide*.)



```
RATIO_MATH(COUNT_DISTINCT( DefectHist.Defect,DefectHist.ReopenFlag =1 And Defect.Status <>
'Closed' And Defect.DetectedDate <= END_PERIOD) , COUNT(Defect ,Defect.DefectSummary<> 'unknown'
And Defect.DetectedDate <= END_PERIOD),0)*100
```

Tasks

This section includes:

Use Case - 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.
5. Click **Validate** to make sure that the syntax is correct.
6. Click **OK** to close the dialog and click **Save** to save the changed formula.
7. 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.

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’)**

Movie: To display the relevant movie, open the ITBA application, click **Help** in the top right corner of the application main page and select the **Movies** option. Select the relevant movie. For details, see Access Movies.

Use-Case for IN_PERIOD

The IN_PERIOD formula is: <EntityName>.<FieldName> IN_PERIOD

You use IN_PERIOD 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.

If, for example, you want to count the number of incidents that occur per month using the Incident KPI which is a monthly KPI, you can use the following formulas:

Formulas	**Results for**			
	June	**July**	**August**	**September**
COUNT (INCIDENT, *)	20	25	12	17
COUNT(INCIDENT, INCIDENT.OPEN_DATE = IN_PERIOD)	20	25	12	17

When performing a Calculation on the Context related to the INCIDENT KPI, the results stay the same.

Formulas	**Results for**			
	June	**July**	**August**	**September**
COUNT (INCIDENT, *)	22	23	13	16
COUNT(INCIDENT, INCIDENT.OPEN_DATE = IN_PERIOD)	22	23	13	16

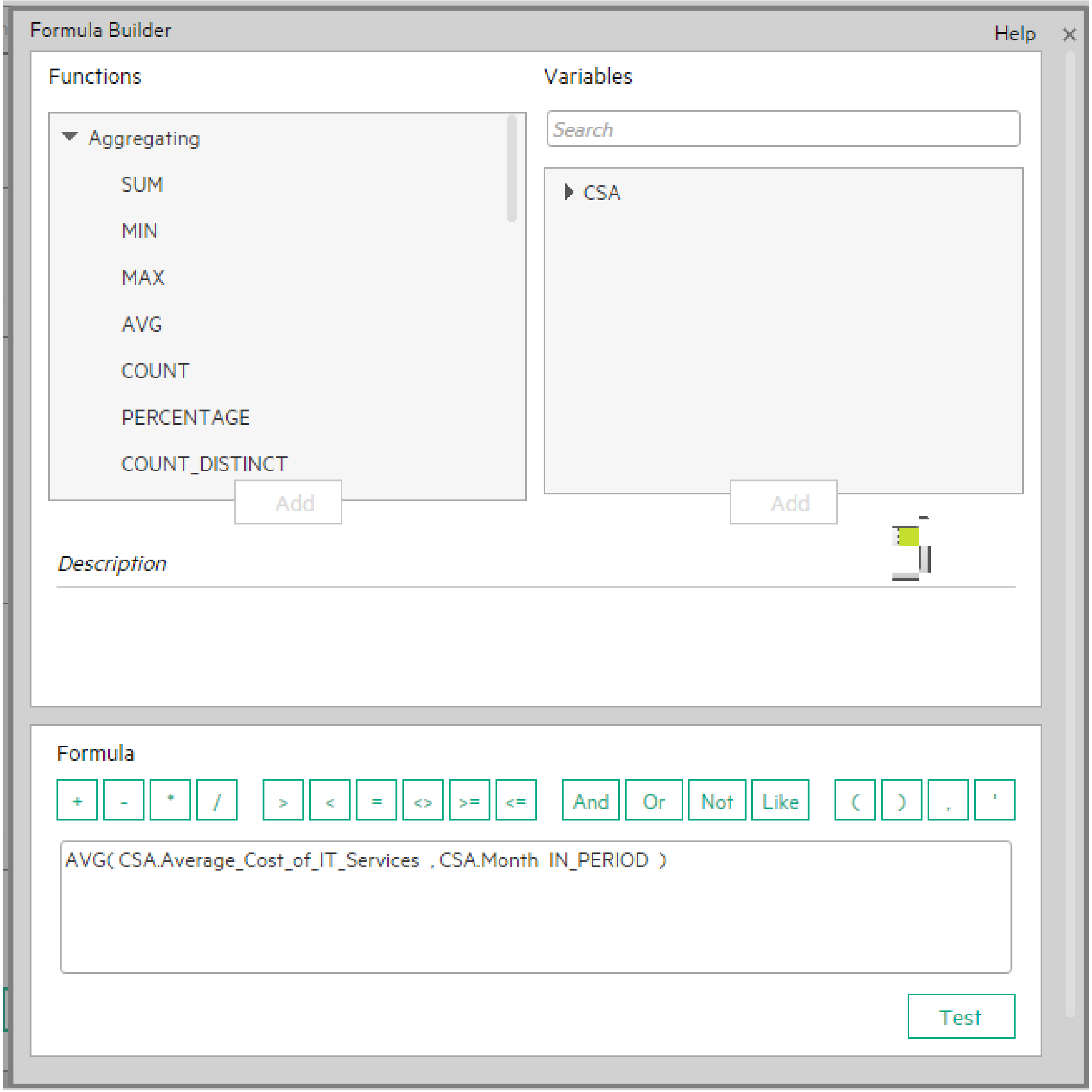
When performing a Recalculation on the Context related to the INCIDENT KPI:

- The results for COUNT(INCIDENT, INCIDENT.OPEN_DATE IN_PERIOD) are correct because the values are recalculated for each month separately.
- The results for COUNT (INCIDENT, *) are incorrect, as the formula counts ALL the incidents in the system without any time filtering (for example: 90) and replaces the values for each one of the months above with 90.

	Results for			
Formulas	**June**	**July**	**August**	**September**
COUNT (INCIDENT, *)	90	90	90	90
COUNT(INCIDENT, INCIDENT.OPEN_DATE = IN_PERIOD)	20	19	10	10

UI Description

Formula Builder Dialog Box



AVG(CSA.Average_Cost_of_IT_Services , CSA.Month IN_PERIOD)

Note about the order of operations in formulas:

If more than one operator is used in a formula, ITBA follows a specific order to perform these mathematical operations. This order of operations can be changed by adding brackets to the equation. The order of operations is:

1. Functions (aggregations and others)
2. Brackets
3. Division
4. Multiplication
5. Addition
6. Subtraction

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

<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr><td><b>Functions</b></td><td>The list of functions you can use in the KPI or Metric formula.
<table>
<tr><td><b>Aggregating</b></td><td>The list of aggregating functions you can use in the KPI or Metric formula. For details, see "Aggregating Functions" on page 125.</td></tr>
<tr><td><b>Mathematical</b></td><td>The list of mathematical functions you can use in the KPI or Metric formula. For details, see "Mathematical Functions" on page 128.</td></tr>
<tr><td><b>Date Constants</b></td><td>The list of date constants you can use in the KPI or Metric formula. For details, see "Date constant" on page 129.</td></tr>
<tr><td><b>Add</b></td><td>Click to add the selected function to the formula box at the end of the current expression.</td></tr>
</table></td></tr>
<tr><td><b>Variables</b></td><td>The list of variables you can use in the KPI or Metric formula.
<table>
<tr><td><b><Variables></b></td><td>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 .
<b>Note:</b> When a list of specific values has been assigned to a variable in SAP BusinessObjects Enterprise, and the auto-complete feature is enabled for the variable,then when you select the variable and one of the conditional operators in the formula or filter, 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 displayed values is a</td></tr>
</table></td></tr>
</table>

<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr><td></td><td>
<table>
<tr><td></td><td>configured parameter and is limited, for example, to 50 or 100.</td></tr>
<tr><td><b><Search></b></td><td>Enter a string to filter for the entities and fields whose name includes the string.</td></tr>
<tr><td><b>Add</b></td><td>Click to add the selected variable to the formula box at the end of the current expression.</td></tr>
</table>
</td></tr>
<tr><td><b>Description</b></td><td>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.</td></tr>
<tr><td><b>Formula</b></td><td>
<table>
<tr><td>+ - * /</td><td>Use these buttons to enter the relevant regular operations into the formula.</td></tr>
<tr><td>> < = <> >= <=</td><td>Use these buttons to enter the relevant conditional operators into the formula. The conditional operators are:
<ul>
<li>= (equal)
<b>Syntax:</b> op1 = op2</li>
<li>> (greater than)
<b>Syntax:</b> op1 > op2</li>
<li>< (smaller than)
<b>Syntax:</b> op1 < op2</li>
<li>>= (greater than or equal to)
<b>Syntax:</b> op1 >= op2</li>
<li><= (smaller than or equal to)
<b>Syntax:</b> op1 <= op2</li>
<li><> (not equal)
<b>Syntax:</b> op1 <> op2</li>
</ul></td></tr>
<tr><td>And Or Not Like</td><td>Use these buttons to enter the relevant logical operators into the formula. The logical operators are:
<ul>
<li><b>like Syntax:</b> operand like char %
Matches a specific pattern. % is a wildcard character meaning `match any characters'. Applicable on string type operand.</li>
<li><b>AND</b>. Logical AND.</li>
</ul></td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr><td></td><td>
<table>
<tr><td></td><td><b>Syntax:</b> (expr1) AND (expr2)<ul><li><b>OR</b>. Logical OR.
<b>Syntax:</b> (expr1) OR(expr2)</li><li><b>NOT</b>. Returns the opposite of a boolean expression.
<b>Syntax:</b> NOT (expr)</li></ul></td></tr>
<tr><td>( ) , '</td><td>Use these buttons to enter the corresponding elements into the formula.</td></tr>
<tr><td><b><Formula box></b></td><td>The formula appears as you are building it using the variables, functions and buttons.</td></tr>
</table>
</td></tr>
<tr><td><b>Test</b></td><td>Click to validate and test the formula and the filter.
The system first performs the validation of both the formula and the filter together. It then tests the KPI or Metric and displays the result.</td></tr>
<tr><td><b>OK/Cancel</b></td><td>Click:<ul><li><b>OK</b> to transfer the selected formula to the <b>Formula</b> box of the Calculation details tab.</li><li><b>Cancel</b> to cancel the changes.</li></ul><b>Note:</b> In the Calculation details tab, the <b>Save</b> and <b>Discard</b> buttons become enabled and you can click <b>Save</b> to save the changes.</td></tr>
</table>

- ### Aggregating Functions

  The aggregating functions are as follows:

UI Element	Description
SUM	**Formula:** SUM(<EntityName>.<FieldName>, <Filter Expression>) Returns the sum of the field values of the entities that satisfy the condition specified in the Filter Expression. **Example** `SUM(Cost.Amount, Cost.CostType=”Actual”)` **Note:** If you want to filter a calculation using all the possible values of the raw data, you can replace <Filter Expression> with a “*” (star).

UI Element	Description
	Example If the Cost Type values are **Actual** and **Planned**, instead of **SUM(Cost.Amount, Cost.CostType="Actual" or Cost.CostType="Planned")** write **SUM(Cost.Amount, *)**.
MIN	**Formula:** MIN(<EntityName>.<FieldName>, <Filter Expression>) Returns the lowest value of the field values of the entities that satisfy the condition specified by the Filter Expression. **Example** `MIN(Cost.Amount, Cost.CostType="Actual")` **Note:** If you want to filter a calculation using all the possible values of the raw data, you can replace <Filter Expression> with a "*" (star). **Example** If, for example, the Cost Type values are **Actual** and **Planned**, instead of **MIN(Cost.Amount, Cost.CostType="Actual" or Cost.CostType="Planned")** write **MIN(Cost.Amount, *)**.
MAX	**Formula:** MAX(<EntityName>.<FieldName>, <Filter Expression>) Returns the highest value of the field values of the entities that satisfy the condition specified by the Filter Expression. **Example** `MAX(Cost.Amount, Cost.CostType="Actual")` **Note:** If you want to filter a calculation using all the possible values of the raw data, you can replace <Filter Expression> with a "*" (star). **Example** If the Cost Type values are **Actual** and **Planned**, instead of **MAX(Cost.Amount, Cost.CostType="Actual" or Cost.CostType="Planned")** write **MAX(Cost.Amount, *)**.
AVG	**Formula:** AVG (<EntityName>.<FieldName>, <Filter Expression>) Returns the average of the field values of the entities that satisfy the condition specified by the Filter Expression. **Example** `AVG(Cost.Amount, Cost.CostType="Actual")` **Note:** If you want to filter a calculation using all the possible values of the raw data, you can replace <Filter Expression> with a "*" (star). **Example** If the Cost Type values are **Actual** and **Planned**, instead of **AVG(Cost.Amount, Cost.CostType="Actual" or Cost.CostType="Planned")** write **AVG(Cost.Amount, *)**.

UI Element	Description
COUNT	**Formula:** COUNT (<Entity Name>, <Filter Expression>) Returns the number of entities that satisfy the condition specified by the Filter Expression. **Example** `COUNT(Cost, Cost.CostType ='Actual')` **Note:** If you want to filter a calculation using all the possible values of the raw data, you can replace <Filter Expression> with a "*" (star). **Example** If the Cost Type values are **Actual** and **Planned**, instead of **COUNT(Cost.Amount, Cost.CostType="Actual" or Cost.CostType="Planned")** write **COUNT(Cost.Amount, *)**.
COUNT_ DISTINCT	**Formula:** COUNT_DISTINCT (<Entity Name>.<Field Name>, <Filter Expression>) Returns the number of distinct values of the field in all the entities that satisfy the condition specified by the Filter Expression. **Example** `COUNT_DISTINCT(Service.Name, Service.Name <> 'UNKNOWN')` **Note:** If you want to filter a calculation using all the possible values of the raw data, you can replace <Filter Expression> with a "*" (star). **Example** If the Cost Type values are **Actual** and **Planned**, instead of **COUNT_DISTINCT(Cost,Cost.CostType="Actual" or Cost.CostType="Planned")** write **COUNT(Cost,*)**.
PERCENTAGE	**Formula:** PERCENTAGE (<Entity Name>, <Filter Expression1>, <Filter Expression2>,defaultValue) 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. **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. **Example** `PERCENTAGE(Cost, Cost.CostType ="Actual", Cost.CostType ="Planned", 0)` **Note:** If you want to filter a calculation using all the possible values of the raw data, you can replace <Filter Expression> with a "*" (star).

UI Element	Description
	Example If the Cost Type values are **Actual** and **Planned**, instead of **PERCENTAGE(Cost, Cost.CostType=”Actual”, Cost.CostType ="Actual" or Cost.CostType=”Planned”, 0)** write **PERCENTAGE (Cost, Cost.CostType=”Actual”, * , 0)**.

- ### Mathematical Functions

  The mathematical functions are as follows:

UI Element	Description
SUM_MATH	**Formula:** SUM_MATH (arg1, arg2, arg3, …) Returns the sum of the set of arguments. **Example** `SUM_MATH(6.36, 11.02, 51, -2.44, MAX(Cost.Amount, Cost.CostType='Actual'))`
MIN_MATH	**Formula:** MIN_MATH (arg1, arg2, …) Returns the lowest value of the set of arguments. **Example** `MIN_MATH(SUM(Cost.Amount, Cost.CostType ='Actual'), SUM(Cost.Amount, Cost.CostType ='Planned'))`
MAX_MATH	**Formula:** MAX_MATH (arg1, arg2, …) Returns the highest value of the set of arguments. **Example** `MAX_MATH(COUNT(Incident, Incident.Status='Open'), COUNT(Incident, Incident.Status='Reopened'))`
AVG_MATH	**Formula:** AVG_MATH (arg1, arg2, …) Returns the arithmetic average of the set of arguments. **Example** `AVG_MATH(6.36, 11.02, 51, -2.44, SUM(Cost.Amount, Cost.CostType='Actual'))`
PERCENTAGE_ MATH	**Formula:** PERCENTAGE_MATH(numerator,denominator, defaultValue) Returns the ratio, expressed as percentage of arguments: (numerator / denominator) * 100. defaultValue is optional and can be either an integer of a float number. By default, the defaultValue is 0; this is the value that is returned if the

UI Element	Description
	denominator equals 0. You can change the default value. **Example** `PERCENTAGE_MATH(Defect, Defect.severity = “High” , *)`
RATIO_MATH	**Formula:** RATIO_MATH(numeratorVal,denominatorVal, defaultValue) 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 of 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. **Example** `RATIO_MATH(SUM (Cost.Amount,Cost.CostType='Actual'), SUM(Cost.Amount,Cost.CostType='Planned'),0)`
DATE_ CONVERT	**Formula:** DATE_CONVERT(<sourceFormat>, <destinationFormat>, <Mathematical Date Function>) Converts the results of <Mathematical Date Function> from the source format into the destination format. Source Format can be one of the following: 'MS', 'S', 'M', 'H'. Destination Format can be one of the following: 'S', 'M', 'H', 'D'. 'MS' = Millisecond, 'S' = Second, 'M' = Minute, 'H' = Hour, 'D' = Day **Example** `DATE_CONVERT('MS','H', AVG(Incident.OutageEnd, PERIOD_ENTITY=OutageStartPeriod) - AVG(Incident.OutageStart,PERIOD_ENTITY=OutageStartPeriod) )`

- ### Date constant

The dates are as follows:

UI Element	Description
IN _PERIOD	**Formula:** <EntityName>.<FieldName> IN_PERIOD 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. If you select **Daily** for the Calculation Period of a KPI/Metric, and if the

UI Element	Description
	KPI/Metric formula contains **in_period(-XX)**, **end_period(-XX)**, or **Period_ entity = Period (-XX)**, XX must be less than or equal to **365**. **Example** ◦ `COUNT(Incident, Incident.CreateTime IN_PERIOD)` The incidents that are counted are those that were created during the current time period. If the KPI time frame is 'Weekly', the formula counts only the incidents created per week. ◦ `COUNT(Defect,Defect.Open_In_Date IN_PERIOD)- COUNT (Defect,Defect.Open_In_Date IN_PERIOD(-12))` Counts the number of defects in the current period and subtracts the number of defects that occurred during the 12 previous periods. For example, in case of 'monthly' periodicity, the formula calculates the number of defects that occurred in 01/13 and subtracts the number of defects that occurred in 01/12.
IN_ CURRENT_ YEAR	**Formula:** <EntityName>.<FieldName> IN_CURRENT_YEAR Use in Filter expressions to specify the condition relative to the current year during the calculation. **Example** `SUM(Period.PeriodNumber , Period.Year IN_CURRENT_ YEAR)` In recalculation of the KPI a couple of years back, the Period.Year is replaced with the year for which the calculation is performed at each given time. The value of the field Period.Year should be String and should fit the pattern: FYxxxx.<br>For example: FY2011 or FY2009.
END_PERIOD	**Formula:** <EntityName>.<FieldName> conditional operator END_PERIOD 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. If you select **Daily** for the Calculation Period of a KPI/Metric, and if the KPI/Metric formula contains **in_period(-XX)**, **end_period(-XX)**, or **Period_ entity = Period (-XX)**, XX must be less than or equal to **365**. **Examples** ◦ `COUNT(Incident, Incident.CreateTime <= END_PERIOD)` The incidents that are counted are those that were created before the current time period ended. If the KPI time frame is 'Weekly', the formula counts only the incidents created up to the end of that week ◦ `COUNT(Defect,Defect.Open_In_Date END_PERIOD)- COUNT (Defect,Defect.Open_In_Date END_PERIOD(-12))` Counts the

UI Element	Description
	number of defects created till the completion of the current period and subtracts the number of defects that occurred in the past 12 periods. For example, in case of 'monthly' periodicity, the formula counts the defects that occurred from the beginning of the calculation period up to 01/13 and subtracts the number of defects that occurred from the beginning of the calculation period up to the 12 months before 01/13.
PERIOD_ ENTITY	**Formula:** PERIOD_ENTITY=Period Use in Filter expressions to specify the entity that represents the PERIOD table that calculation are based on. 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. If you select **Daily** for the Calculation Period of a KPI/Metric, and if the KPI/Metric formula contains **in_period(-XX)**, **end_period(-XX)**, or **Period_ entity = Period (-XX)**, XX must be less than or equal to **365**. **Examples** ◦ `COUNT(Incident, PERIOD_ENTITY = CreateTimePeriod)` ◦ `COUNT(SLAStatus,PERIOD_ENTITY = Period(-12))` In this case the period is shifted 12 periods back. 01/13 is shifted to 01/12.
KPI_ PERIODICITY_ TYPE	**Formula:** KPI_PERIODICITY_TYPE=Period A constant that is replaced by the specific KPI or Metric Calculation Period that is to be used for the calculation. For details, see "KPI or Metric Configuration and Calculation Details" on page 103. **Example** `COUNT(Incident, CreateTimePeriod.Periodicity = KPI_PERIODICITY_TYPE)`
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 represents one hour. **Example** `COUNT(Incident, NOW - Incident.CreateTime > 5*HOUR)`
DAY	A constant that represents one day.

UI Element	Description
	Example `COUNT(Incident, NOW - Incident.CreateTime > 5*DAY)`
WEEK	A constant that represents one week. **Example** `COUNT(Incident, NOW - Incident.CreateTime > 5*WEEK)`

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 "KPI or Metric Formula" on page 113.

To learn about Shared KPIs, see "Shared KPIs" on page 92.

To access:

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

Learn More | **Tasks** | **UI Description**

Learn More

Case-sensitivity and Other 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 Semantic Layer - Context Designer in the *Content Developer Guide*.

KPI, Metrics, Formulas, Filters, Thresholds, Values, Trend, Score, and Decimal Precision

For details about KPI and Metric formulas, filter, values, decimal precision, thresholds, status, score, and trend, see "KPI and Metric Formulas, Filter, Threshold, Value, Trend, Score, and Decimal Precision" on page 97.

Impact of changes to configurations in the Studio on the display in Dashboard and the EXPLORER tab

Changes in the STUDIO have impacts on the display in Dashboard and EXPLORER. For details, see "Synchronization of Changes in the Studio with Display in the Dashboard and the EXPLORER tab" on page 161.

Tasks

This section includes:

Modify a KPI or Metric filter

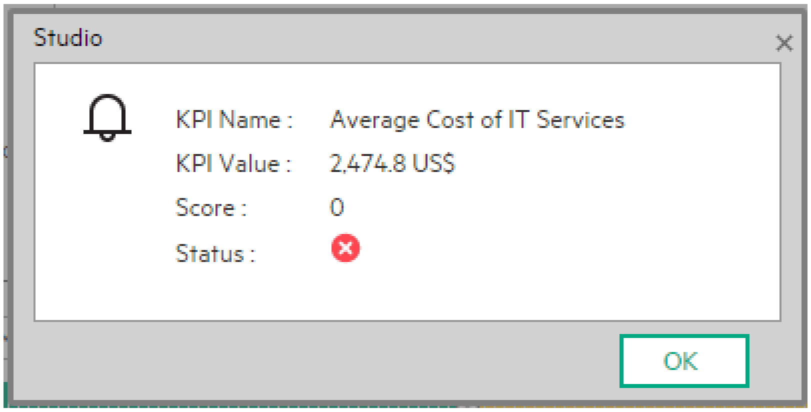
1. In the Active KPIs pane, select the relevant KPI or Metric. The Configuration Details and Calculation Details tabs are displayed.
2. Click the **Calculations details** tab.

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.

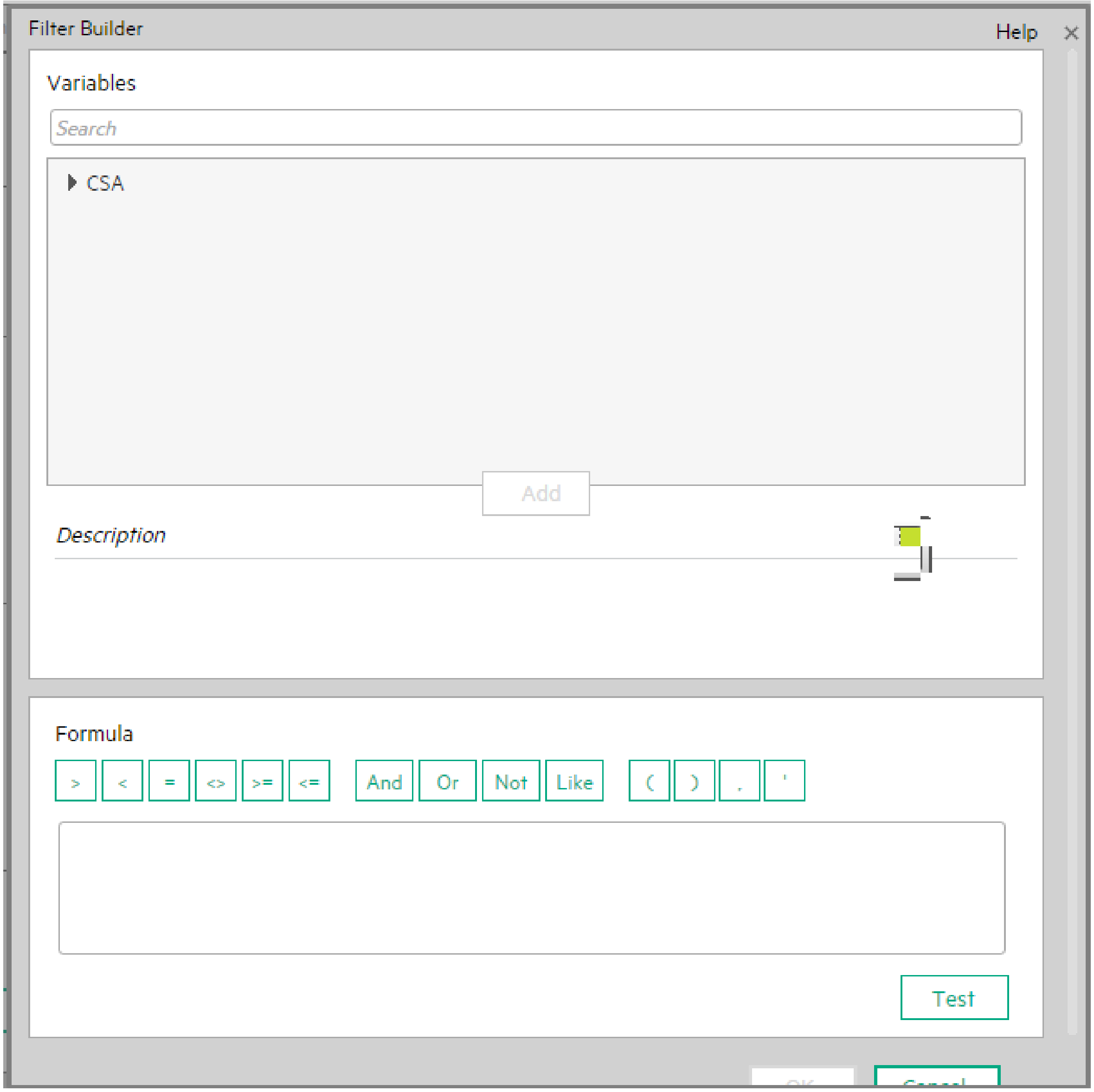


KPI Name : Average Cost of IT Services
KPI Value : 2,474.8 US$
Score : 0
Status : ✗

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	The list of variables you can use in the KPI or Metric filter. 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. **Note:** When a list of specific values has been assigned to a variable in SAP BusinessObjects Enterprise, and the auto-complete feature is enabled for the variable,then when you select the variable and one of the conditional operators in the formula or filter, 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 displayed values is a configured parameter and is limited, for example, to 50 or 100.
<Search>	Enter a string to filter for the entities and fields whose name includes the string.
Description	A description of the variable you have selected in the Variables area.
> < = <> >= <=	Use these buttons to enter the corresponding conditional operators in the filter. The condition operators are: • = (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
And Or Not Like	Use these buttons to enter the corresponding logical operators into the filter. The logical operators are: • **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.

UI Element	Description
( ) . '	Use these buttons to enter the corresponding elements into the filters.
<Filter box>	The filter appears as you are building it using the variables, functions and buttons.
Test	Click to validate and test the formula and the filter. The system first performs the validation of both the formula and the filter together. It then tests the KPI or Metric and displays the result.
OK/Cancel	Click: • **OK** to transfer the selected formula to the **Filter** box of the Calculation details tab. **Note:** In the Calculation details tab, the **Save** and **Discard** buttons become enabled and you can click **Save** to save the changes. • **Cancel** to cancel the changes.

KPI or 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.

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 Metric to the new business context. For details, see SAP BusinessObjects Enterprise Contexts (Universes) in the *Administrator Guide*.

To access:

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

Learn More | Tasks | UI Description

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 IT Business Analytics.

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 IT Business Analytics engine and the Studio.

IT Business Analytics 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 Semantic Layer - Context Designer.

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 the KPI and Metric Library in Excel format, in the relevant integration sections or Content Acceleration Pack (CAP) sections in the *OOTB Content Guide*.

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

Impact of changes to configurations in the Studio on the display in Dashboard and the EXPLORER tab

Changes in the STUDIO have impacts on the display in Dashboard and EXPLORER. For details, see

"Synchronization of Changes in the Studio with Display in the Dashboard and the EXPLORER tab" on page 161.

Tasks

This section includes:

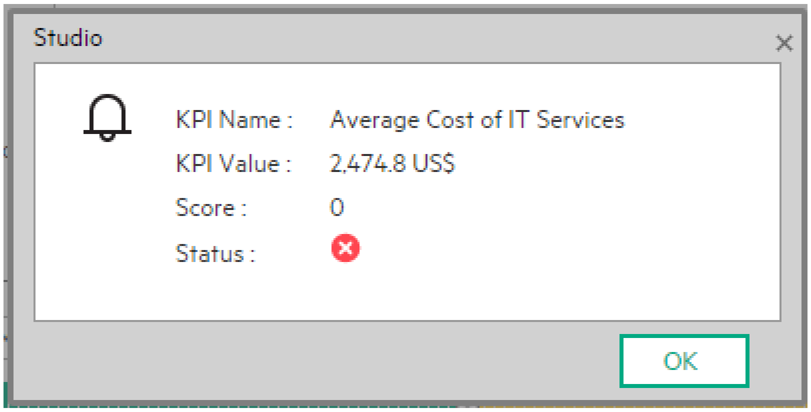
Change the business context of a KPI

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 "KPI or Metric Formula" on page 113 or "KPI or Metric Filter" on page 133.

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.



KPI Name : Average Cost of IT Services

KPI Value : 2,474.8 US$

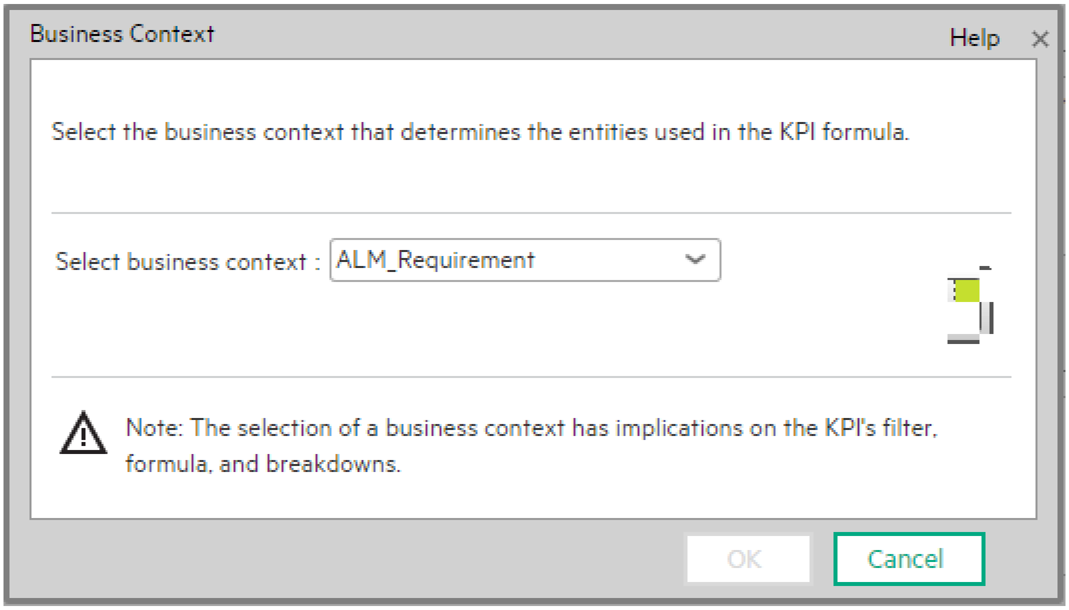
Score : 0

Status : ☒

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

UI Description

Select Business Context Dialog Box



Select the business context that determines the entities used in the KPI formula.

Select business context : ALM_Requirement

Note: The selection of a business context has implications on the KPI's filter, formula, and breakdowns.

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.

Calculation

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, 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.

> - The total number of KPI Breakdowns (STUDIO and on-Demand) is limited to 5000 per dimension.
> - If the calculation of a KPI or Metric ends in error, check the engine.log for a number of Breakdowns being larger than the default value. You can update the default value in **$HPBA_ Home\glassfish\glassfish\domains\BTOA\config\settings\engine-settings.xml** to be more or less 5000. 5000 is the recommended breakdown size. Larger numbers may bring performance and stabilization issue.

To access:

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

Tasks | UI Description | Reference

Tasks

Perform a Calculation After Configuration Change

This task includes the following steps:

1. **Prerequisite**

   You have created or modified the formula, filter, or threshold definition of a KPI. For details, see "KPI or Metric Formula" on page 113 or "KPI or Metric Filter" on page 133.

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 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:

      - In **Universe/context for recalculation**, select the relevant context (data source) you want to use for the recalculation.
      - Select the **I understand the implications of this process and would like to proceed with the calculation** option to proceed with the calculation.

      > **Limitations:** You perform the calculation for the current period of each KPI within the selected business context.

   c. Click **Calculate**.

      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.

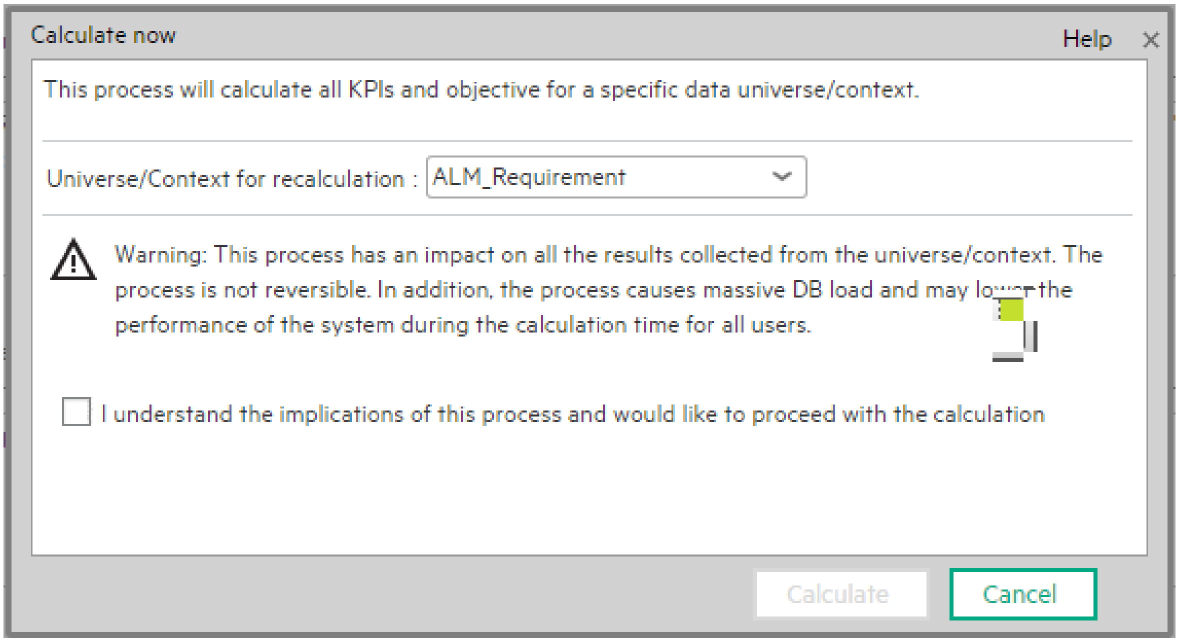
3. **Results**

   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 values, trends, and statuses, for the selected business context and for the time period of each KPI within the same business context.



This process will calculate all KPIs and objective for a specific data universe/context.

Universe/Context for recalculation : ALM_Requirement

Warning: This process has an impact on all the results collected from the universe/context. The process is not reversible. In addition, the process causes massive DB load and may lower the performance of the system during the calculation time for all users.

☐ I understand the implications of this process and would like to proceed with the calculation

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

UI Element	Description
	KPI within the selected business context.

Recalculation

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, , 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 | Tasks | UI Description

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" on the next page
- "Recalculate historical information" on the next page
- "Results" on the next page

1. **Prerequisite**

   You have created or modified the formula, filter, or threshold definition of a KPI. For details, see "KPI or Metric Formula" on page 113 or "KPI or Metric Filter" on page 133.

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 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 recalculation start date, 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.

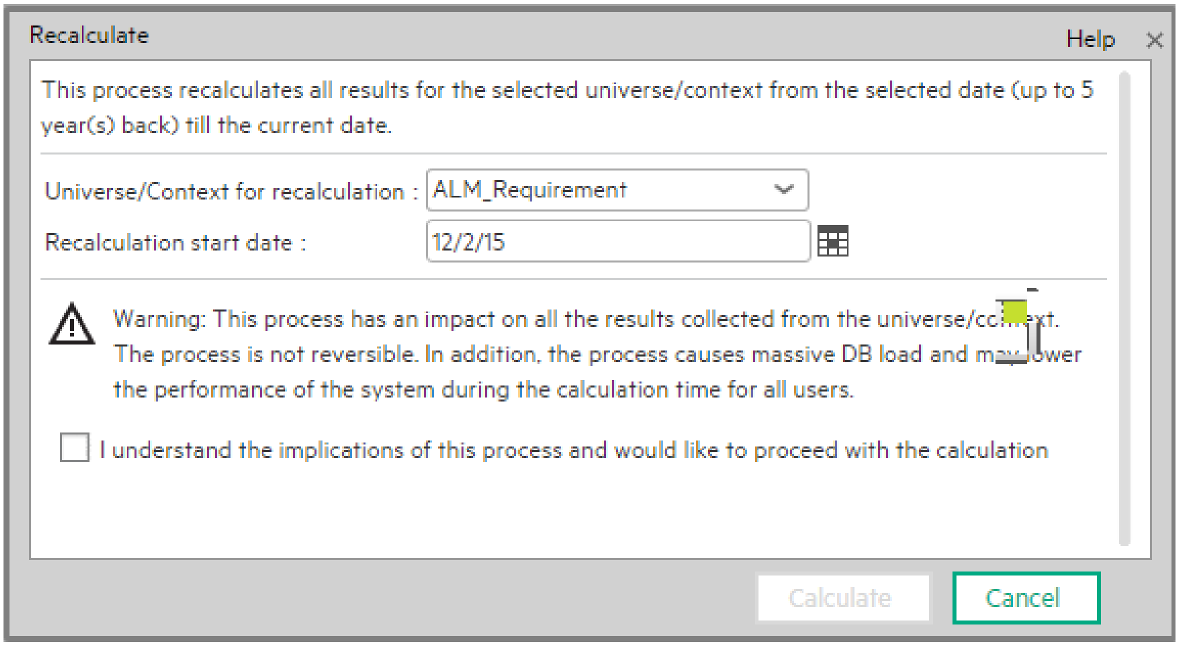
3. **Results**

   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, 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.



This process recalculates all results for the selected universe/context from the selected date (up to 5 year(s) back) till the current date.

Universe/Context for recalculation : ALM_Requirement

Recalculation start date : 12/2/15

⚠ Warning: This process has an impact on all the results collected from the universe/context. The process is not reversible. In addition, the process causes massive DB load and may lower the performance of the system during the calculation time for all users.

☐ I understand the implications of this process and would like to proceed with the calculation

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**.

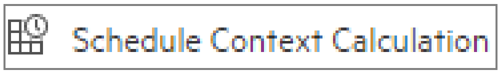
UI Element	Description
	• If the KPI or Metric period is Daily, then the recalculation time frame is by default 30 days from the date you specified in the **Recalculation Start Date**. The default can be modified; for details, see Engine Settings in the *Administrator Guide*.
I understand the implications of this process and would like to proceed with the calculation	Select this option to proceed with the recalculation.
Calculate	Click to start the recalculation. **Limitations:** You perform the calculation for the selected period of each KPI within the selected business context.

Calculation Scheduling

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 | Tasks | UI Description

Learn More

How does it work?

At the scheduled time, the following processes take place:

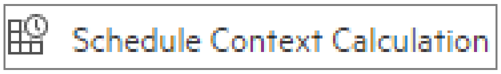
- The calculations of the KPIs associated with the business context are performed for the current period.
- The Objectives including these KPIs are also calculated for the current period.
- The Scorecards and components that include these KPIs are refreshed when you open the Dashboard.

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  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.

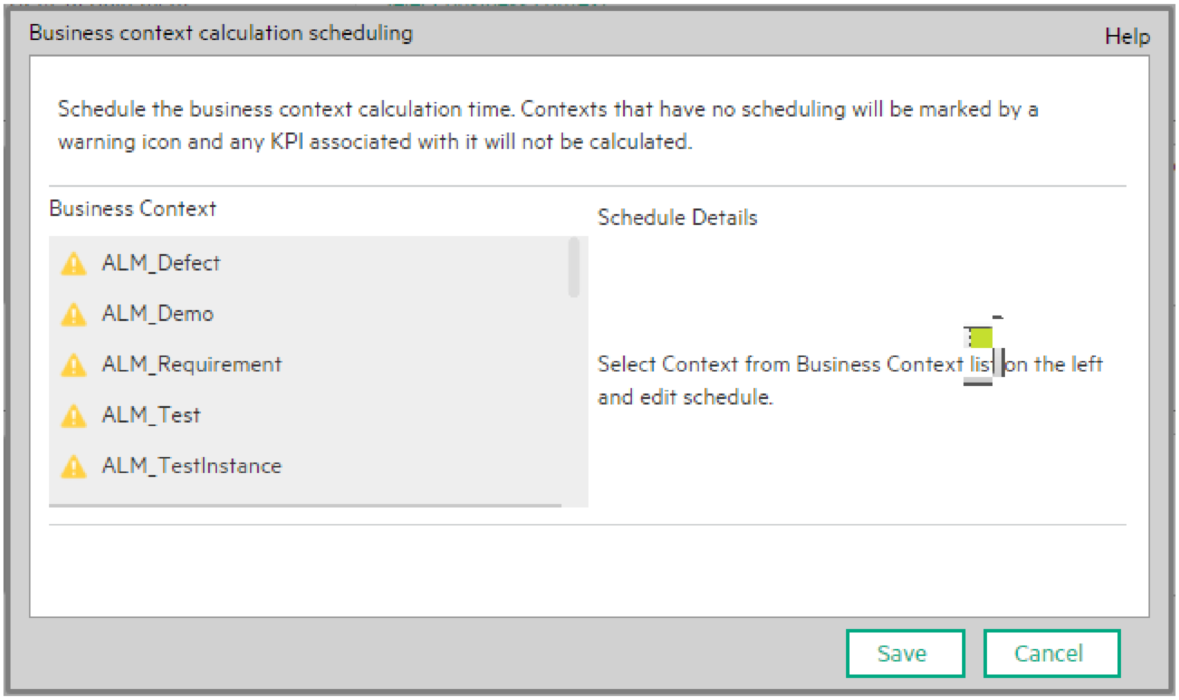
At the scheduled time, the following processes take place:

- 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 relevant movie, open the ITBA application, click **Help** in the top right corner of the application main page and select the **Movies** option. Select the relevant movie. For details, see Access Movies.

UI Description

Business Context Calculation Scheduling Dialog Box



Business context calculation scheduling

Schedule the business context calculation time. Contexts that have no scheduling will be marked by a warning icon and any KPI associated with it will not be calculated.

Business Context

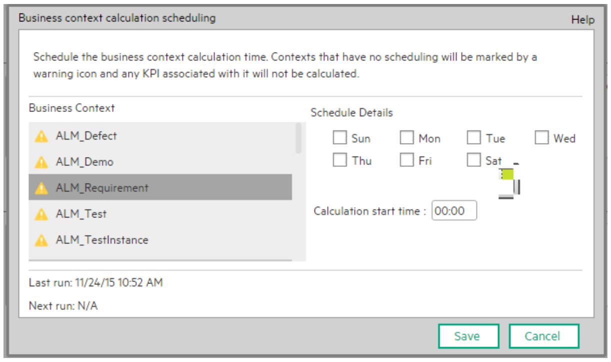
- ⚠ ALM_Defect
- ⚠ ALM_Demo
- ⚠ ALM_Requirement
- ⚠ ALM_Test
- ⚠ ALM_TestInstance

Schedule Details

Select Context from Business Context list on the left and edit schedule.

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

UI Element	Description
Business context	In the list of business contexts, select the business context for which you want to schedule the calculations. **Note:** Contexts that have not been assigned a calculation schedule have a ⚠ icon. Their KPIs have not been calculated. The Schedule details area is displayed as follows:

UI Element	Description
	 Business context calculation scheduling Schedule the business context calculation time. Contexts that have no scheduling will be marked by a warning icon and any KPI associated with it will not be calculated. Business Context ALM_Defect ALM_Demo ALM_Requirement ALM_Test ALM_TestInstance Schedule Details ☐ Sun ☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat Calculation start time : 00:00 Last run: 11/24/15 10:52 AM Next run: N/A
Schedule details	Select the days of the week when you want to perform the business context calculations. **Note:** If you configure the triggering of the same Business Context from the calculation scheduler in the STUDIO, or in the Engine Automatic Calculation Settings dialog box in Content Flow Management, there could be a situation when the engine tries to calculate the same Business Context at the same time. When the triggering is manual, the system notifies you that the calculation of this business context is running and to try again later. When the scheduling is automatically triggered, the engine runs the calculation of the Business Context only after the previous was run ended. For details, see Run ETL - Content Flow Management in the *Administrator Guide*.
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.

Calculation and Recalculation Monitoring

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 **Calculation monitoring** option.

Tasks | UI Description

Tasks

This section includes:

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 **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.

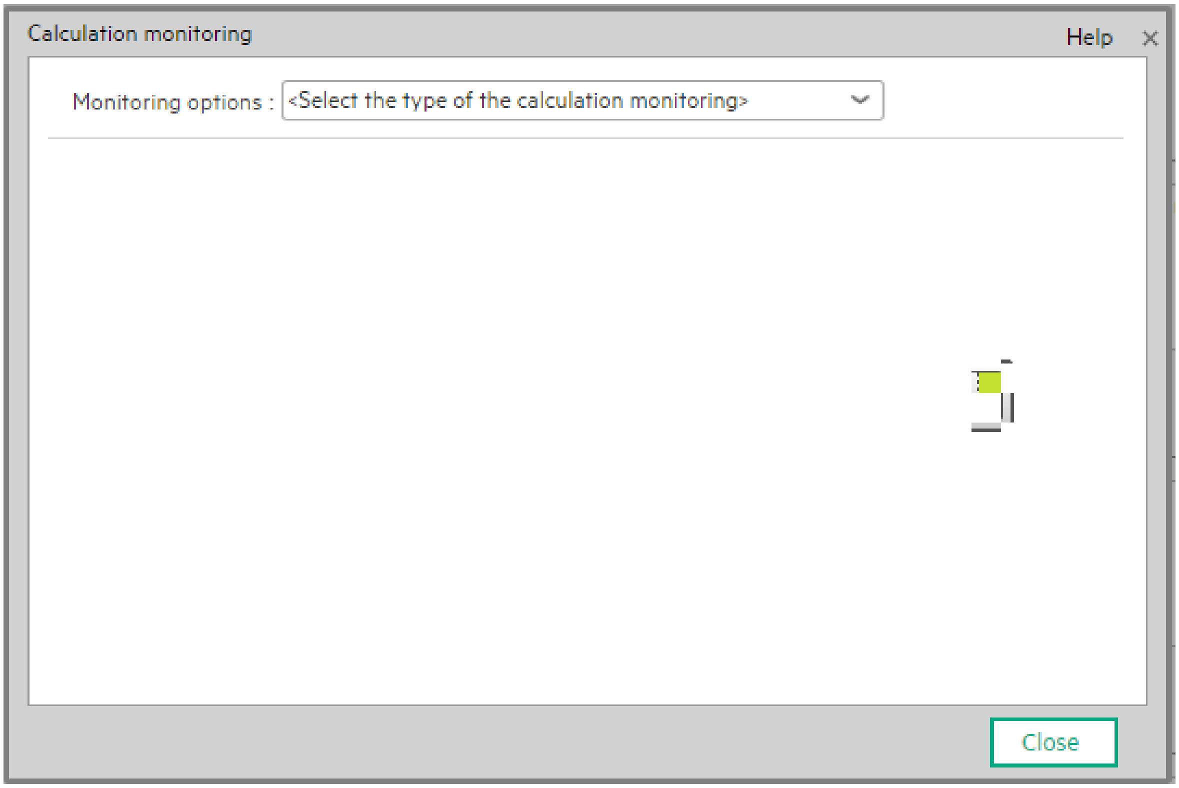
2. In the Calculation Monitoring Dialog Box, select **Calculations running now**.

   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**, **Weekly**, or **Daily**) 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

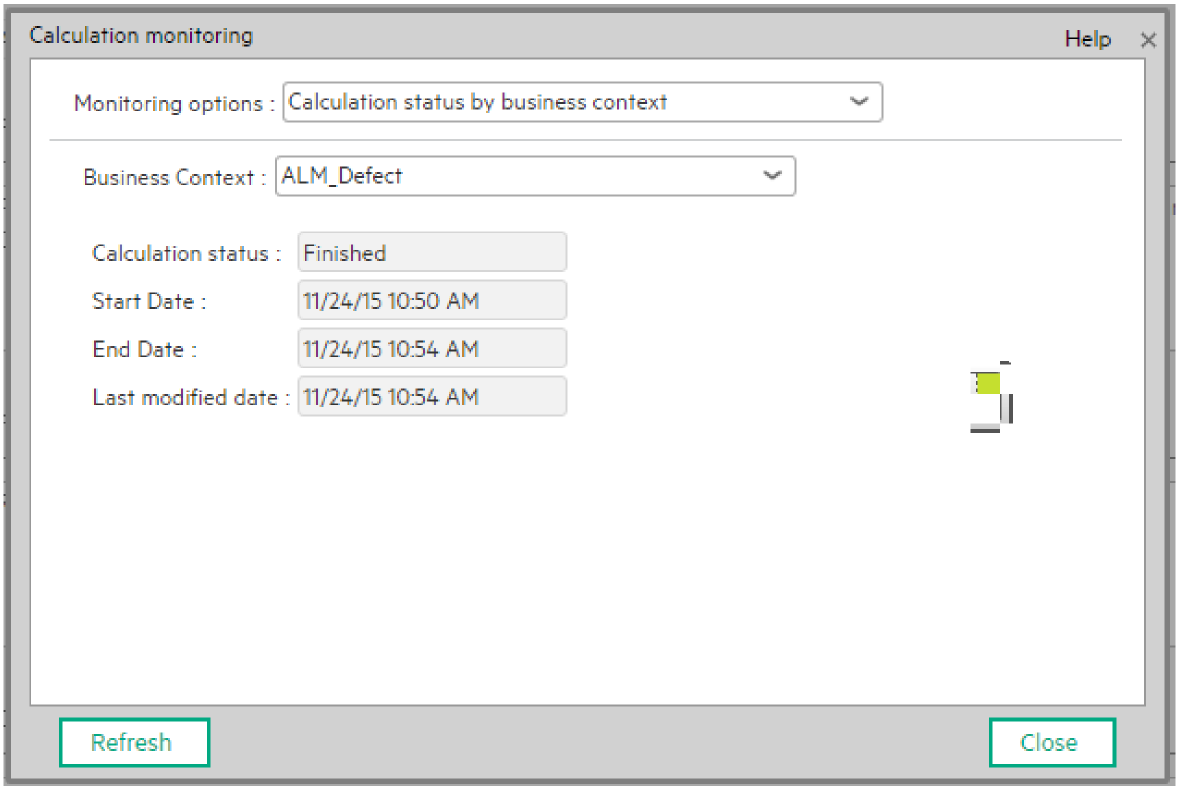
Use the dialog box to monitor the calculation or recalculation history for each Business Context, or to view the Business Contexts that are currently being calculated or recalculated.



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

UI Element	Description
Monitoring options	Select: - **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 the next page. - **Calculations running now.** To view the Business Contexts that are currently being calculated or recalculated. For details, see "<Calculations running now>" on page 160.
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>



Monitoring options : Calculation status by business context

Business Context : ALM_Defect

Calculation status : Finished

Start Date : 11/24/15 10:50 AM

End Date : 11/24/15 10:54 AM

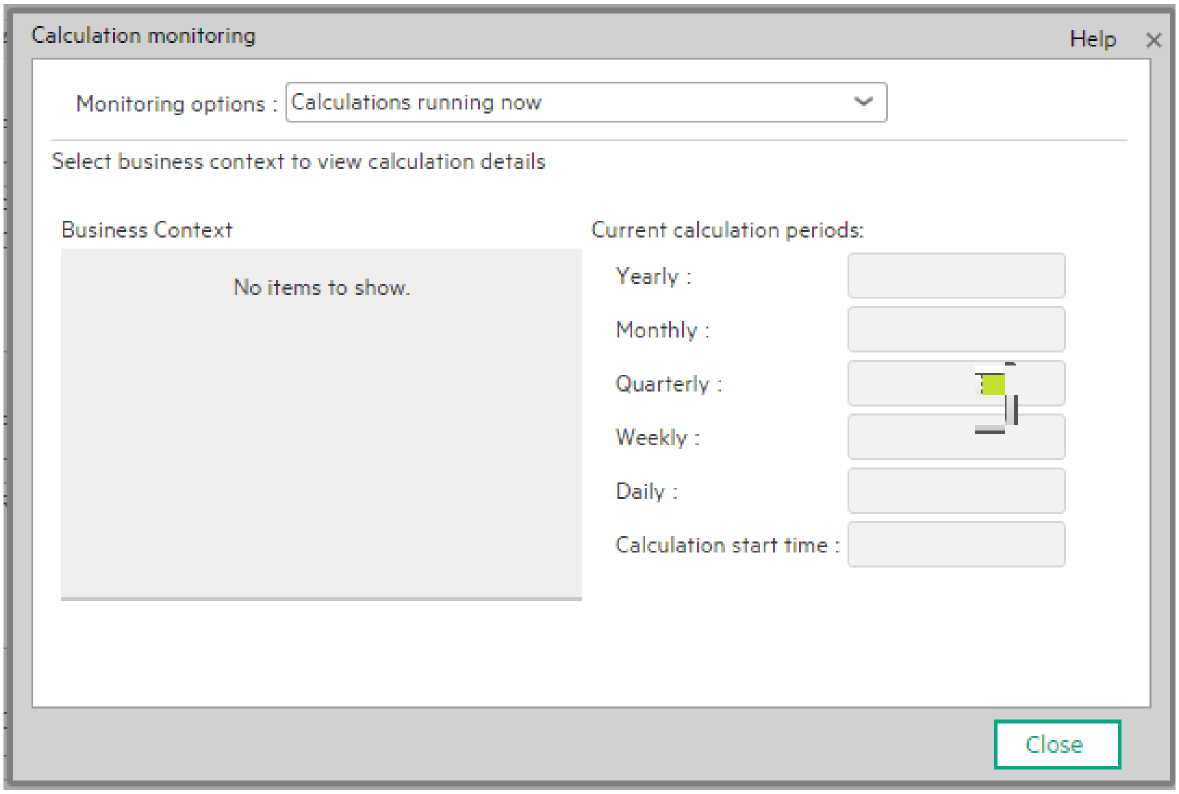
Last modified date : 11/24/15 10:54 AM

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. **Note:** The start time is the start of the period of the calculation or recalculation.
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 running now>



Monitoring options : Calculations running now

Select business context to view calculation details

Business Context

No items to show.

Current calculation periods:

Yearly :

Monthly :

Quarterly :

Weekly :

Daily :

Calculation start time :

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	This area displays the calculation periods (**Yearly**, **Monthly**, **Quarterly**, **Weekly**, or **Daily**) 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. **Calculation start time.** The date and time when the calculation or recalculation started.

Synchronization of Changes in the Studio with Display in the Dashboard and the EXPLORER tab

When you make a change in the Active KPIs pane in the Studio, the changes immediately affect the Dashboard and the Explorer. The effect depends on the type of change performed in the Studio as follows:

- The following changes need a calculation to be performed for the modified KPI, Metric, or Objective to display data in the EXPLORER tab or the Dashboard tab, so the modified KPI, Metric, or Objective value is **Pending** in these tabs until the calculation is completed:
  - Changing the context, formula, filter, threshold, threshold direction, marginal status (Warning), and calculation period of a KPI.
  - Changing the context, formula, filter, and calculation period of a Metric.
  - Modifying an Objective:
    - Assigning (or un-assigning) KPIs.
    - Changing its rules (Best Child, Worst Child, and more) and the weights for the assigned sub-Objectives or KPIs.
- The following changes are considered minor changes, don't involve calculation, and are immediately displayed in the Dashboard and the Explorer:
  - Scorecard, Perspective, Objective, KPI, Metric, or KPI or Metric Breakdowns name and description change.
  - Changes to Cascading Scorecards.
  - Changes the Business Motivation, Comments, Owner, Additional Info, or Unit.

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 "Cascading Scorecards" on page 187.
- Creating breakdowns of KPIs or Metrics to obtain more detailed information about the KPI or Metric measurements. For details, see "KPI Breakdowns" on the next page or "Metric Breakdowns" on page 171
- 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 "KPI and Metric Breakdown Overrides" on page 177.
- Provide additional information for a KPI, such as links to other pages, BO or Xcelsius reports, or external URLs. For details, see "KPI or Objective Additional Information" on page 183.
- Adding Cascading Scorecards to track performance measurement in a top-down approach based on Scorecard objective ownership.For details, see "Cascading Scorecards" on page 187.

KPI Breakdowns

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

> - The total number of KPI Breakdowns (STUDIO and on-Demand) is limited to 5000 per dimension.
> - If the calculation of a KPI or Metric ends in error, check the engine.log for a number of Breakdowns being larger than the default value. You can update the default value in **$HPBA_Home\glassfish\glassfish\domains\BTOA\config\settings\engine-settings.xml** to be more or less 5000. 5000 is the recommended breakdown size. Larger numbers may bring performance and stabilization issue.

To access:

Select a KPI Breakdown in the Active KPIs pane.

Learn More | Tasks | UI Description

Learn More

About KPI Breakdowns

A KPI represents all or part of 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.

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.

- 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.

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 drill down 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 sub-menus. 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.

The list of fields that are available for breakdowns is configured in the Context Designer. By default,numeric fields are not dimensions, therefore they are not available for breakdowns. If you want them to be available for breakdown, open the Context Designer and in the Entities area, click ⊞ to enable the creation of Breakdowns. For details, see Semantic Layer - Context Designer in the *Content Developer Guide*.

Date fields are not available for breakdowns.

> **Tip:**
>
> - If you change the name of a KPI that has KPI Breakdowns or the name of a Metric that has Metric Breakdowns, you must perform a new calculation to update names of their overrides. For details about overrides, see "KPI and Metric Breakdown Overrides" on page 177.
> - The names of the KPI or Metric Breakdowns are not automatically updated after you change the name of the KPI or Metric parent even after a new calculation.You must access the Studio and manually change the names of the KPI or Metric Breakdowns to match the new parent KPI or Metric names.

Impact of changes to configurations in the Studio on the display in Dashboard and the EXPLORER tab

Changes in the STUDIO have impacts on the display in Dashboard and EXPLORER. For details, see "Synchronization of Changes in the Studio with Display in the Dashboard and the EXPLORER tab" on page 161.

Dimension Permissions

The administrator can provide permissions at the level of a dimension and its entities (Breakdown and its values). An end-user with such a permission can view data in the Dashboard and Explorer only at the level of the specific Breakdown. For details, see Dimension Permissions in the *Administrator Guide*.

Example: An end-user should be able to view only the results of KPI\Metric Breakdowns for the EMEA location and not from other locations. That end-user should not even have the option to select other locations. In the Dashboard page, after the end-user selects to view the results by Location: EMEA, the entire page is refreshed filtered for the Location:EMEA entity.

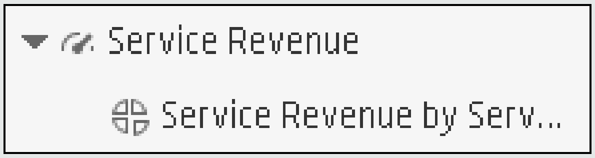
Tasks

This section includes:

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 A typical KPI Breakdown:

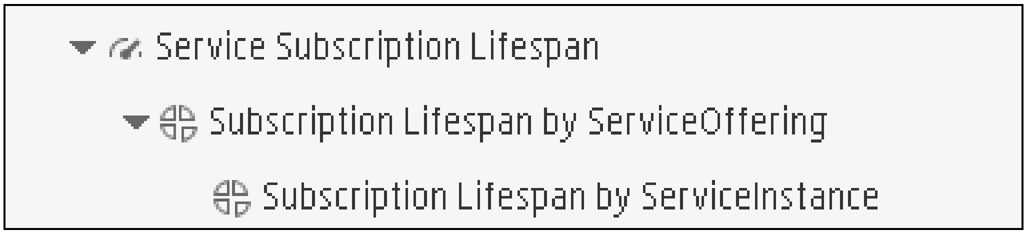
5. You can add more than one breakdown.

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 A KPI Breakdown of a KPI Breakdown:



- Service Subscription Lifespan
  - Subscription Lifespan by ServiceOffering
    - Subscription Lifespan by ServiceInstance

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:

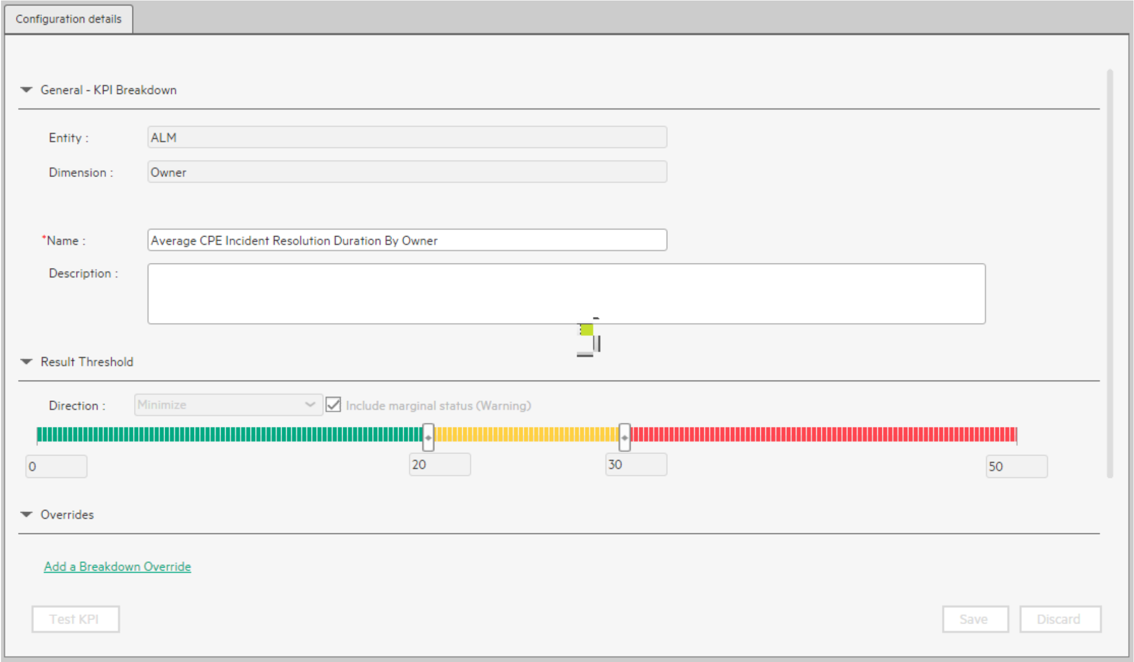
1. Click the **Studio** button (top right corner) to open the Studio.
2. In the Active KPIs pane, perform one of the following actions:
   - Select the relevant KPI Breakdown, and click the **Delete the currently selected node** 🗑 button in the toolbar.
   - Right-click the relevant KPI Breakdown, and 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.

Use Case - Create KPI Breakdowns and Configure Breakdown Override

For details, see Create KPI Breakdowns and Configure Breakdown Override in the *Getting Started Guide*.

UI Description

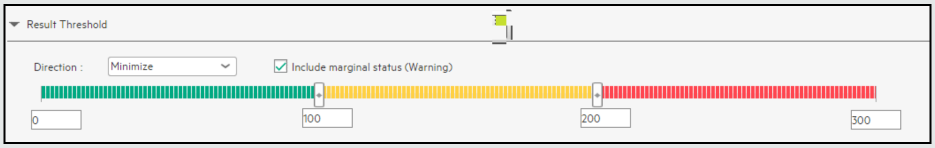
Configuration Details Tab for a KPI Breakdown



Entity : ALM
Dimension : Owner
*Name : Average CPE Incident Resolution Duration By Owner
Description :
Direction : Minimize ☑ Include marginal status (Warning)
0 20 30 50

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

UI Element	Description
General - KPI Breakdown	
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.

UI Element	Description
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 > Settings > BA 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 > Settings > BA Settings**, and in **Debug Mode**, select the **Application Debug Mode** setting.
Result Threshold	
Direction	Displays the threshold direction selected for the parent KPI. For details, see "KPI or Metric Configuration and Calculation Details" on page 103. **Example** - 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.
Threshold	Displays the threshold values selected for the parent KPI. For details, see "KPI or Metric Configuration and Calculation Details" on page 103. 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 "Activate Scorecards, Perspectives, Objectives, Metrics, or KPIs Using Templates" on page 47. **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).  Result Threshold Direction : Minimize ☑ Include marginal status (Warning) 0 100 200 300
Include marginal status (Warning)	Displays whether you selected this option or not when you configured the parent KPI. For details, see "KPI or Metric Configuration and Calculation Details" on page 103.
Overrides	

UI Element	Description
Add a breakdown override	Click to open the Add a Breakdown Override dialog box. For details, see "KPI and Metric Breakdown Overrides" on page 177.
Name	The name of the override you just created. Its format is: <KPI_name>: <result_kpi_to_override>
✎	**Edit.** Click to edit the selected override. For details, see "KPI and Metric Breakdown Overrides" on page 177.
🗑	**Remove.** Click to delete the selected override.
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.

Metric Breakdowns

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

> - The total number of KPI Breakdowns (STUDIO and on-Demand) is limited to 5000 per dimension.
> - If the calculation of a KPI or Metric ends in error, check the engine.log for a number of Breakdowns being larger than the default value. You can update the default value in **$HPBA_Home\glassfish\glassfish\domains\BTOA\config\settings\engine-settings.xml** to be more or less 5000. 5000 is the recommended breakdown size. Larger numbers may bring performance and stabilization issue.

To access:

Select a Metric Breakdown in the Active KPIs pane.

Learn More | Tasks | UI Description

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 sub-menus. 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.

The list of fields that are available for breakdowns is configured in the Context Designer. By default,numeric fields are not dimensions, therefore they are not available for breakdowns. If you want them to be available for breakdown, open the Context Designer and in the Entities area, click ⊞ to enable the creation of Breakdowns. For details, see Semantic Layer - Context Designer in the *Content Developer Guide*.

Date fields are not available for breakdowns.

> **Tip:**
>
> - If you change the name of a KPI that has KPI Breakdowns or the name of a Metric that has Metric Breakdowns, you must perform a new calculation to update names of their overrides. For details about overrides, see "KPI and Metric Breakdown Overrides" on page 177.
> - The names of the KPI or Metric Breakdowns are not automatically updated after you change the name of the KPI or Metric parent even after a new calculation.You must access the Studio and manually change the names of the KPI or Metric Breakdowns to match the new parent KPI or Metric names.

Impact of changes to configurations in the Studio on the display in Dashboard and the EXPLORER tab

Changes in the STUDIO have impacts on the display in Dashboard and EXPLORER. For details, see "Synchronization of Changes in the Studio with Display in the Dashboard and the EXPLORER tab" on page 161.

Tasks

This section includes:

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 Metric** 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.

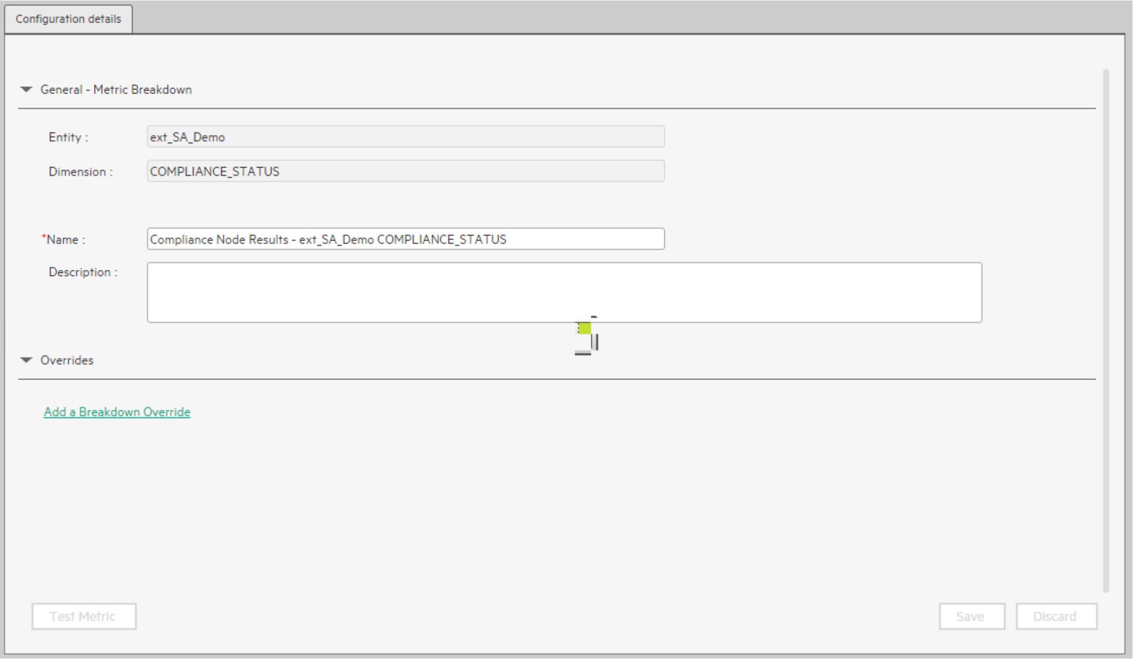
Remove a Breakdown

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



Entity : ext_SA_Demo
Dimension : COMPLIANCE_STATUS
*Name : Compliance Node Results - ext_SA_Demo COMPLIANCE_STATUS
Description :

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

UI Element	Description
General - Metric Breakdown	
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.
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.

UI Element	Description
Overrides	
Add a breakdown override	Click to open the Add a Breakdown Override dialog box. For details, see "KPI and Metric Breakdown Overrides" on the 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 "KPI and Metric Breakdown Overrides" on the next page.
🗑	**Remove.** Click to delete the selected override.
Test Metric	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.

KPI and Metric Breakdown Overrides

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

To access:

To create a new override: In the Configuration details tab of a KPI Breakdown or Metric 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 or Metric Breakdown, click the **Edit** ✎ button.

Learn More | Tasks | UI Description

Learn More

Overrides

When you configure a KPI Breakdown or a Metric Breakdown, its configuration (for example, formula, or period) is the same as the parent KPI's configuration. For details on KPI Breakdowns or Metric Breakdowns, see "KPI Breakdowns" on page 163.

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

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** or in **Metric result to override.**

Override configurations are not propagated to:

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

> **Tip:**
>
> - If you change the name of a KPI that has KPI Breakdowns or the name of a Metric that has Metric Breakdowns, you must perform a new calculation to update names of their overrides. For details about overrides, see "KPI and Metric Breakdown Overrides" on page 177.
> - The names of the KPI or Metric Breakdowns are not automatically updated after you change the name of the KPI or Metric parent even after a new calculation.You must access the Studio and manually change the names of the KPI or Metric Breakdowns to match the new parent KPI or Metric names.

Impact of changes to configurations in the Studio on the display in Dashboard and the EXPLORER tab

Changes in the STUDIO have impacts on the display in Dashboard and EXPLORER. For details, see "Synchronization of Changes in the Studio with Display in the Dashboard and the EXPLORER tab" on page 161.

Tasks

This section includes:

Manage Overrides

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

The override enables the end-user to add, in the Explorer page, annotations for the owner of the KPI Breakdown or Metric Breakdown instead of for the owner of the parent KPI or Metric. The parent KPI or Metric 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:

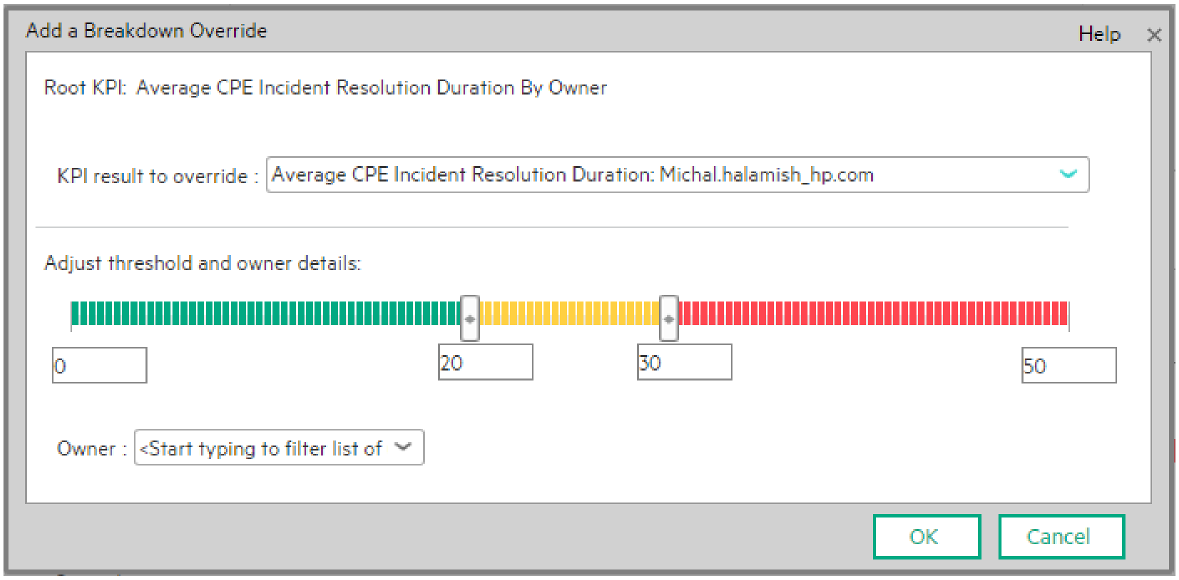
1. Select in the Active KPI pane, the relevant KPI Breakdown or Metric Breakdown.
2. In the Configuration details pane for that KPI or Metric, click **Add a Breakdown Override** link in the Override area.
3. In the Add Breakdown Override dialog box that opens, select the relevant **KPI result to override** or **Metric 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 or Metric Breakdown.
5. To save the change, click **Save** in the Configuration details pane.

Use Case - Create KPI Breakdowns and Configure Breakdown Override

For details, see Create KPI Breakdowns and Configure Breakdown Override in the *Getting Started Guide*.

UI Description

Add or Edit a Breakdown Override Dialog Box



Root KPI: Average CPE Incident Resolution Duration By Owner

KPI result to override : Average CPE Incident Resolution Duration: Michal.halamish_hp.com

Adjust threshold and owner details:

0
20
30
50

Owner : <Start typing to filter list of

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 or Metric.
KPI result to override/ Metric result to override	The field lists the values of the dimension you selected for the KPI Breakdown or Metric Breakdown. You can assign a different threshold, and a different owner for each one of the dimension's values.
Adjust threshold and owner details	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. **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

UI Element	Description
	structure (minimize, maximize, centralize, or Include marginal status (yellow) can only be configured at the level of the parent KPI. For details on statuses, see "Activate Scorecards, Perspectives, Objectives, Metrics, or KPIs Using Templates" on page 47.
Owner	Select the owner of the override.
OK	Click to save the changes. The override information is added to the **Overrides** area in the Configuration details tab of the KPI Breakdown or Metric Breakdown. The changes are saved only after you click the **Save** button in that tab. After you save the change, the KPI Breakdown or Metric Breakdown appears in the Overrides area in the Configuration details tab. You can then edit or delete these overrides from that list.
Cancel	Click to discard the changes you have made.

KPI or Objective Additional Information

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 | Tasks | UI Description

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 lower section of the Overview tab in the EXPLORER tab.

It is also available by clicking the **Additional info** icon in KPI or Objective tooltips in the FLN dialog box. For details, see "First Level Navigation (FLN) for an Objective, a KPI, or a Metric" on page 490.

Impact of changes to configurations in the Studio on the display in Dashboard and the EXPLORER tab

Changes in the STUDIO have impacts on the display in Dashboard and EXPLORER. For details, see "Synchronization of Changes in the Studio with Display in the Dashboard and the EXPLORER tab" on page 161.

Tasks

Provide Additional Information for a KPI or an Objective

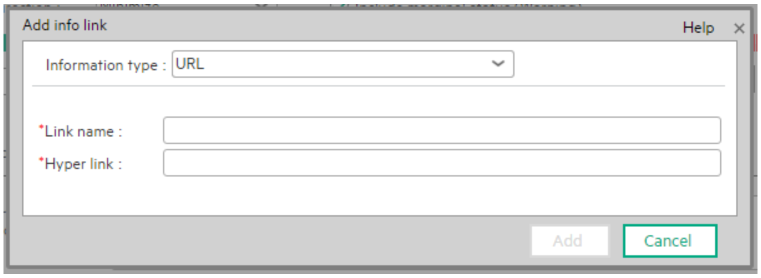
You can provide additional information for active KPIs or Objectives. That information can be links to other Dashboard pages, external pages, BO reports, or Xcelsius reports.

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 "About Explorer" on page 501.

UI Description

Add/Edit Info Link Dialog Box



Information type : URL

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

UI Element	Description
Information type	Select the type of information you want to provide: • **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	This field appears when you select **External link** in the **Information type** list. 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.
Hyper link	This field appears when you select **External link** in the **Information type** list. Enter the URL of the external page you want the user to open.
Report name	This field appears when you select **BO report** or **Xcelsius report** in the **Information type** list. • **BO report.** This option is displayed only when you have created a Webi report in

UI Element	Description
	the BOE server. The list of available reports depends on your permissions. The list of reports includes your own customized reports and out-of-the-box reports: **CSA-Showback for Cloud Services**, **CSA-Showback for Cloud Services Demo**, or Showback for Consumer Organization Admin. For details, see CSA_ Demo and CSA CAPs in the *OOTB Content Guide*. • **Xcelsius report.** This option is displayed only when you have created an Xcelsius report and have exported it to the BOE server. Select the relevant report from the list of all the reports the user has permission to see.
Dashboard page	This field appears when you select **Dashboard page** in the **Information type** list. 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.
Add/Cancel	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**.

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:

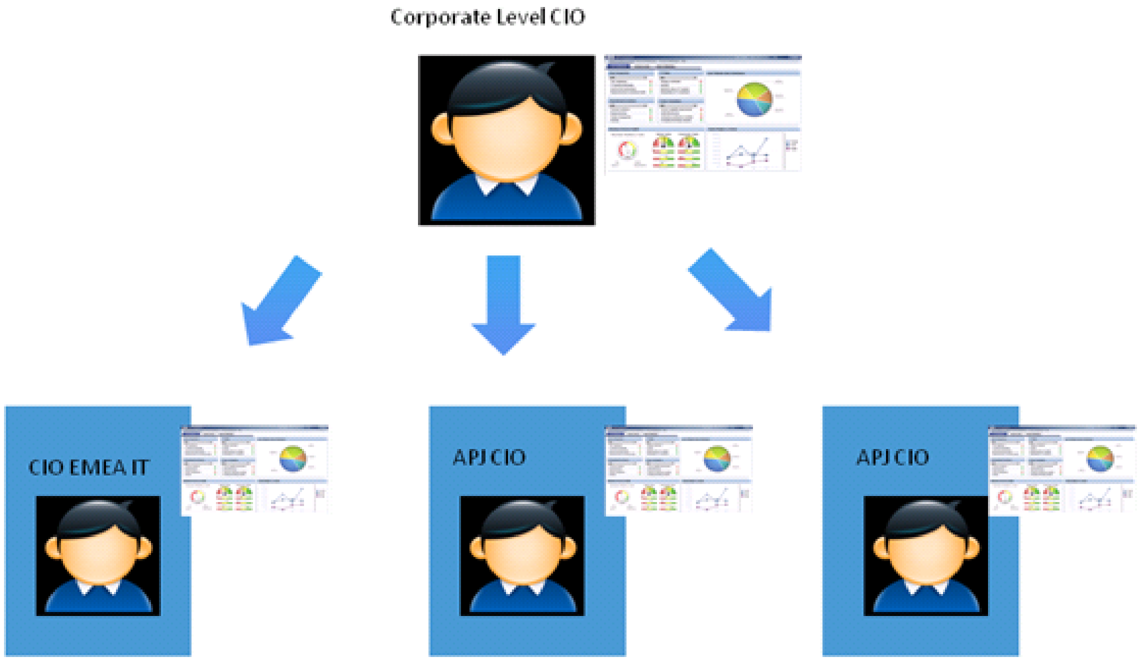
In the Configuration details tab for a Scorecard, click the **Manage Cascading Scorecards** link.

Learn More
Tasks
UI Description

Learn More

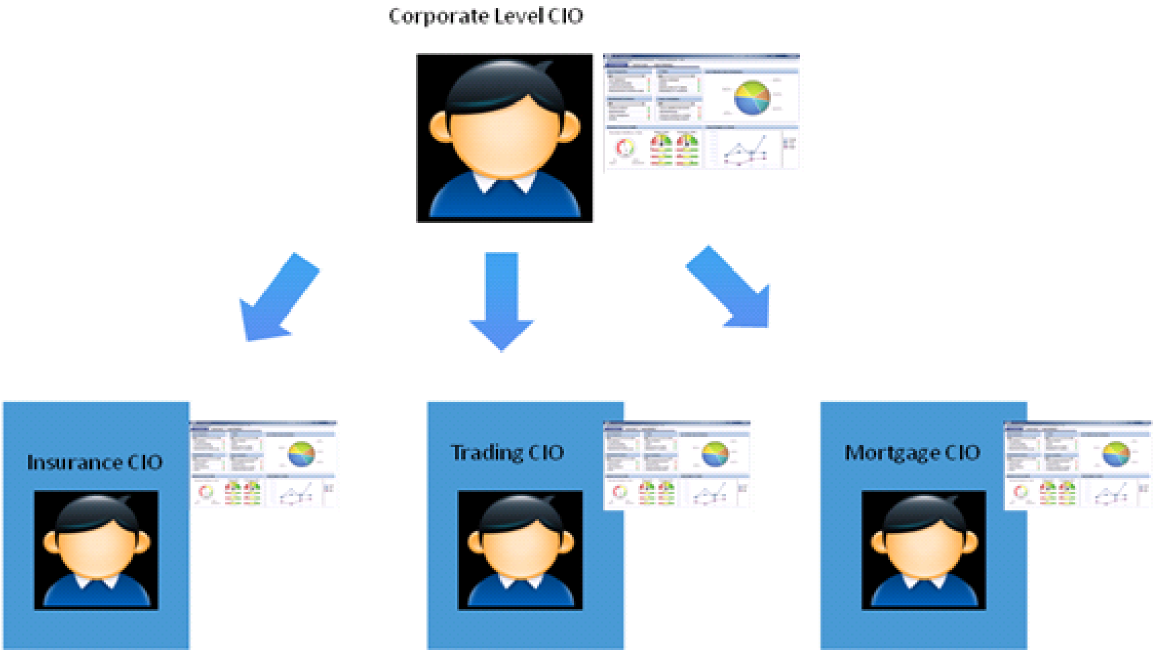
Geographical Distribution

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.



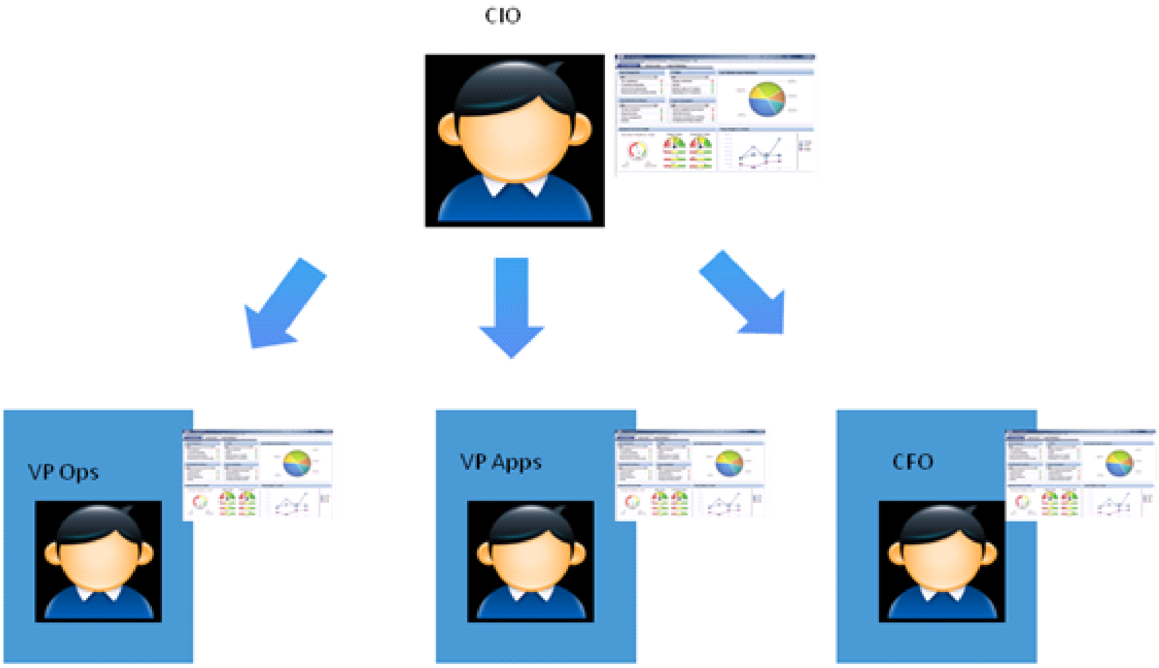
Functional Distribution of IT

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.



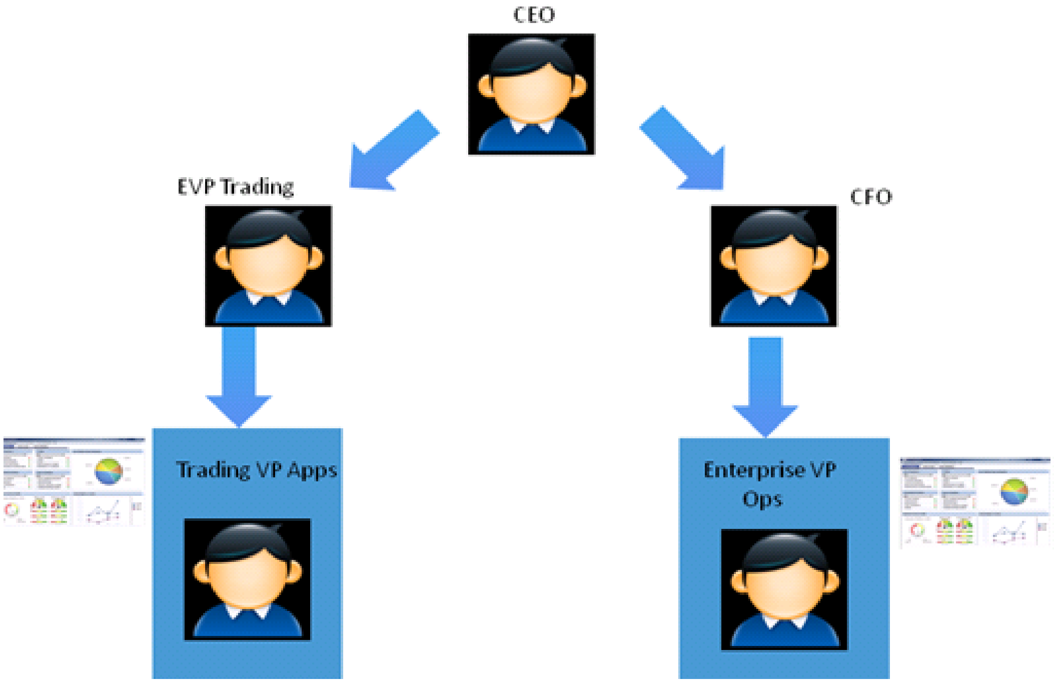
Organizational Distribution of IT

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.



Impact of changes to configurations in the Studio on the display in Dashboard and the EXPLORER tab

Changes in the STUDIO have impacts on the display in Dashboard and EXPLORER. For details, see "Synchronization of Changes in the Studio with Display in the Dashboard and the EXPLORER tab" on page 161.

Tasks

This section includes:

Use Case - 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 relevant movie, open the ITBA application, click **Help** in the top right corner of the application main page and select the **Movies** option. Select the relevant movie. For details, see Access Movies.

Remove a Cascading Scorecard

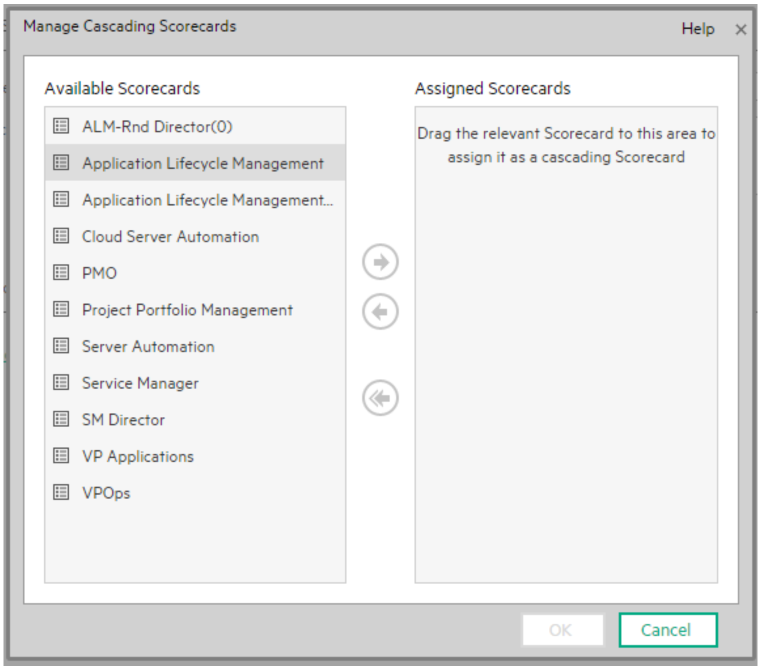
To remove a Cascading Scorecard so it is not assigned to the parent Scorecard:

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



Drag the relevant Scorecard to this area to assign it as a cascading Scorecard

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.

UI Element	Description
→ ← ⇇	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.

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.

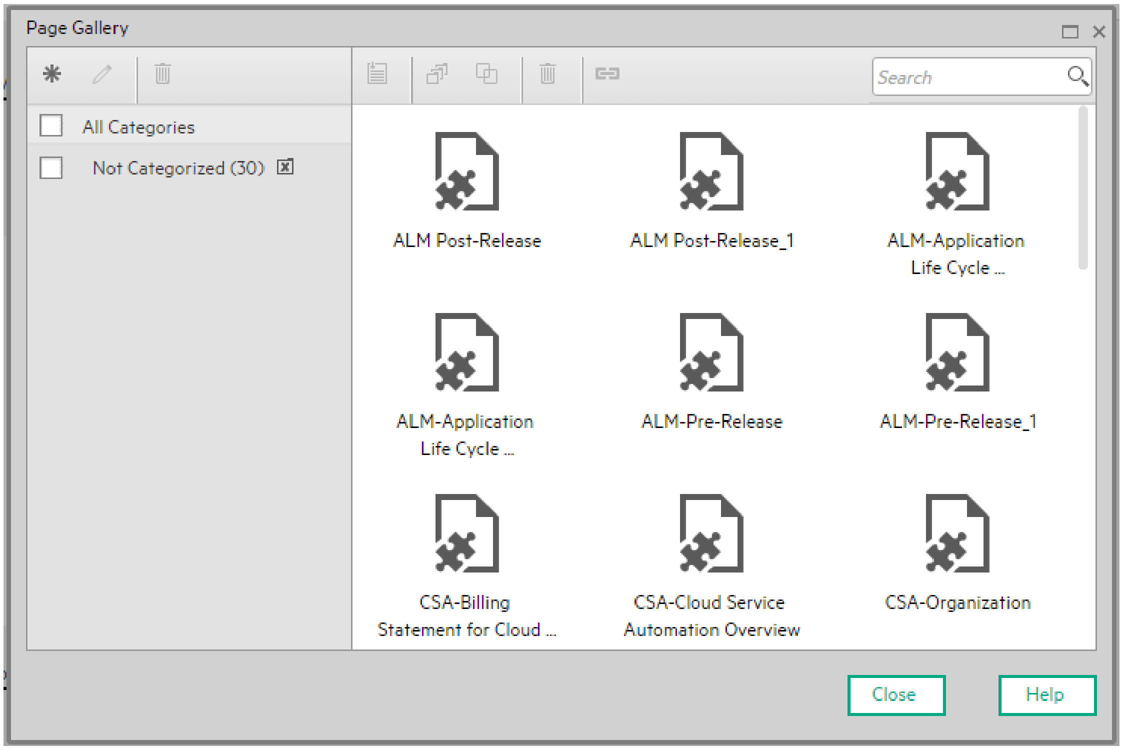
Tasks

This section includes:

Display the Out-of-the-Box Pages

ITBA provides out-of-the-box pages that you can display in Dashboard.

1. In Dashboard, click the **Page Gallery** ▦ button in the Dashboard toolbar. The Page Gallery dialog box opens and displays the list of the out-of-the-box pages.



2. Double-click the relevant page or drag it to the Dashboard and close the Page Gallery dialog box. Out-of-the-box pages and user-defined pages are displayed. For details about the out-of-the-box pages, see "Out-of-the-box Dashboard Pages Reference" on page 200.

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 "Dashboard Page" on page 200.

> **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 > Settings > Pages**. For details, see Settings - Dashboard Settings 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 "Page Layout and Components" on page 205.

> **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:
  - The Breakdown View Component
  - The Bubble Chart View Component
  - The Cluster Bar Chart View Component
  - The Forecast Component
  - "The Historical Metric View Component" on page 268
  - "The Historical View Component" on page 279
  - "The KPI List Component" on page 290
  - "The KPI Rolodex Component" on page 299
  - "The KPI View Component" on page 309
  - The Line and Bar Chart View Component
  - The Page Filter Component
  - "The Pie Chart Component" on page 344

  - "The Scorecard Component" on page 355
  - The Stacked Bar Chart View Component
  - "The SWF Report Viewer Component" on page 376
  - The US Map Component
  - "The Web Intelligence Report Viewer Component" on page 387
  - "The Web Intelligence Static Report Viewer Component" on page 394
  - The World Map Component
  - "The Xcelsius Reports Viewer (Flash) Component" on page 415
- Create components and adding them to pages. For details, see "Customized Static or Dynamic URL Component" on page 422.

> **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.

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 "Wiring Between Components" on page 429.

Personalize the Dashboard

You can personalize the Dashboard by adding a picture of the owner. For details, see "Personalize a Dashboard Page" on page 438.

Dashboard 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.

You can also add a new page to the Dashboard.

To access:

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

Learn More | Tasks | UI Description

Learn More

Out-of-the-box Dashboard Pages Reference

The out-of-the-box pages are provided by the Content Acceleration Packs. For details, see Out-of-the-Box Content Acceleration Packs (CAPs) in the *OOTB Content Guide*.

Tasks

This section includes:

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 "Dashboard" on page 441.

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 **Remove layout** button in the page tab. The page is closed in your workspace, but it is not removed from the Page Gallery. You can only delete user-defined pages. You cannot delete out-of-the-box pages.

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

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 "Page Layout and Components" on page 205.
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 "Page Layout and Components" on page 205.

Duplicate a page

To add a page, you can:

1. In the Dashboard, display the page you want to duplicate either by clicking the relevant tab or by selecting to display the page after clicking the **Page Gallery** button in the Dashboard toolbar and selecting the relevant page.

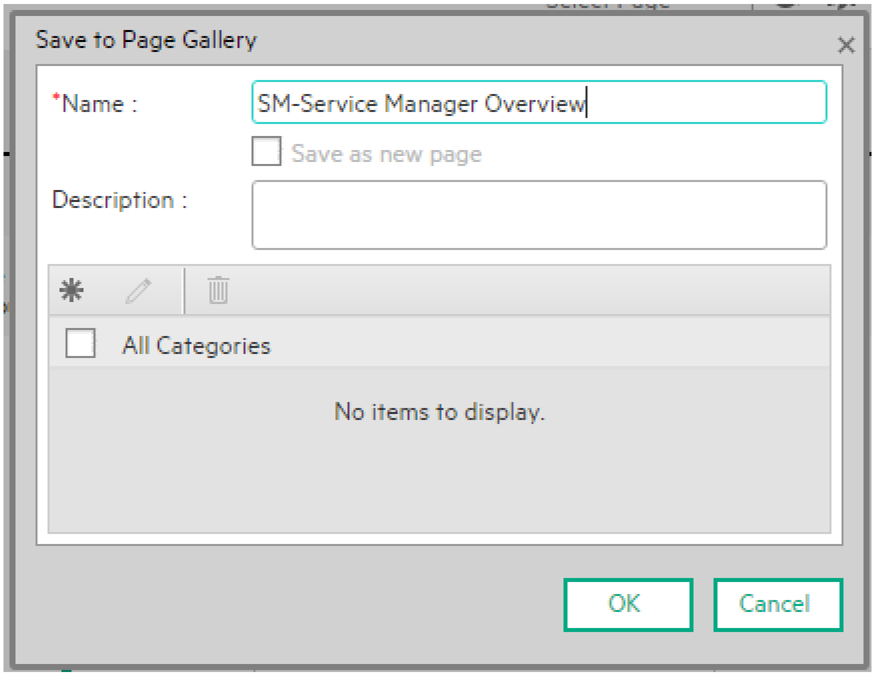
   You can also open the Page Gallery, select the relevant page and click **Clone Page** from the toolbar or the right-click menu. Note that this is the only way to duplicate an out-of-the-box page.

2. Once the page you want to duplicate is displayed, click the **Save or Save As** button.
3. In the Save to Page Gallery dialog box that opens, enter the name, description, and categories of the page and select **Save as new page**.
   The new page is now listed in the Page Gallery.

   The new page also appears in the Dashboard as a new tab.

UI Description

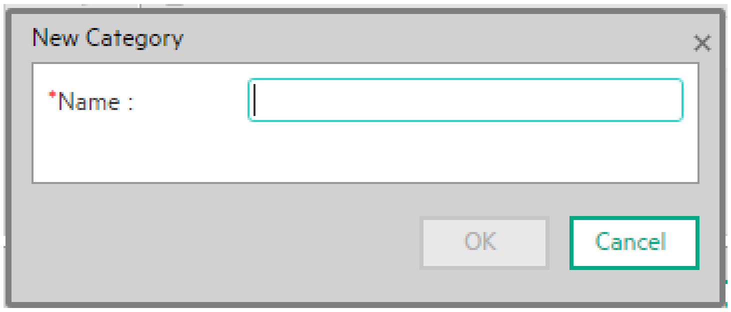
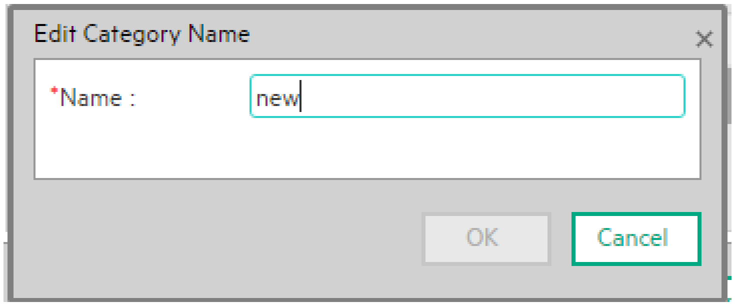
Save to Page Gallery Dialog Box



*Name : SM-Service Manager Overview

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.
Save as new page	Click to duplicate the page. It is recommended to specify the name of the duplicated page in the **Name** field before selecting this option. This option appears when you have selected an existing Dashboard page.
✱	**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.

	
✎	**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.  *Name : new
🗑	**Delete Category.** Select the relevant category, and click the button to delete it.
<List of categories>	The area lists the available categories. Select the categories where you want the page to appear. You can select more than one category. You can also create new categories. **Note:** • When you select/clear **All Categories** all categories are selected/unselected. • 🔒 indicates that you cannot edit or delete the corresponding category.

Page Layout and Components

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 on IT Business Analytics. You can also access the display by closing the other tabs.

Learn More | Tasks | UI Description

Learn More

- For a list of default pages, see "Dashboard" on page 441.
- ITBA includes default components. For a list of default components, see "Dashboard Display" on page 195.

Tasks

This section includes:

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 layout itself).

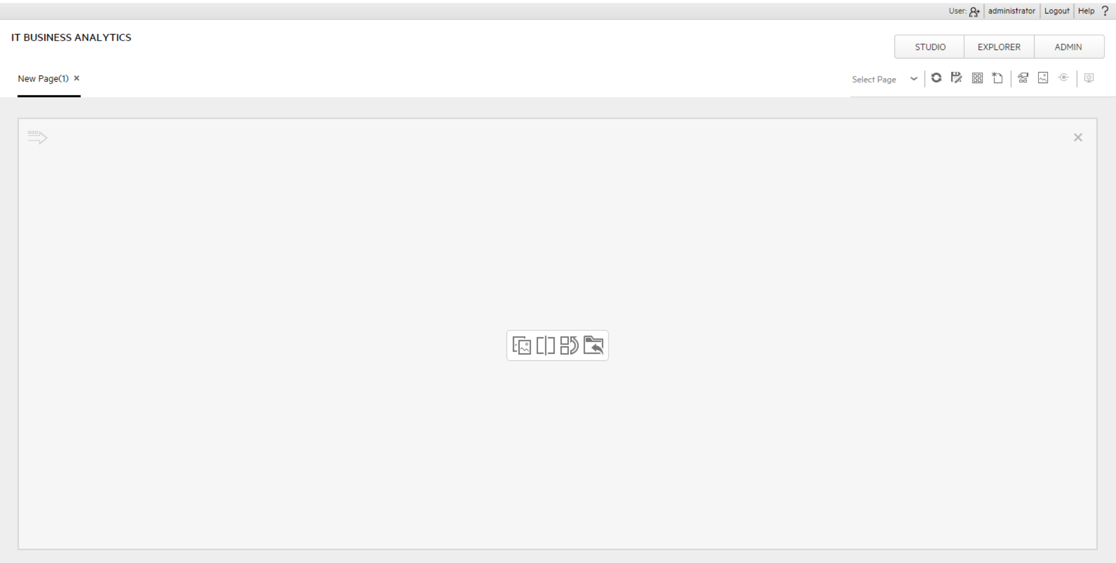
It is recommended that you plan in advance which components you want to place on your page and how they should be arranged, and then configure your page layout accordingly.

Create a Dashboard Page and Add Components to the Page

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

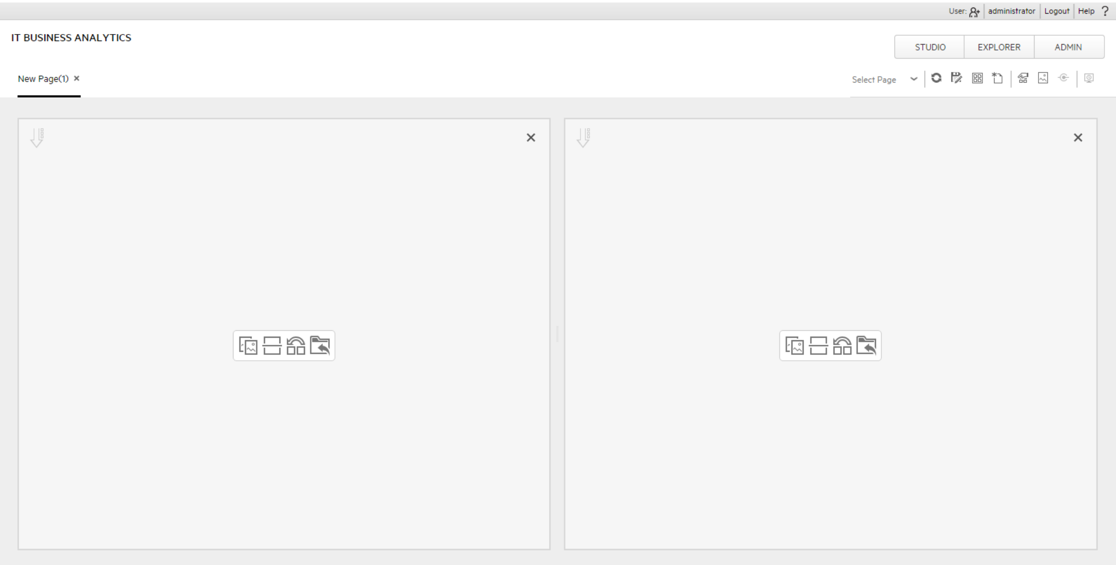
It is recommended that you plan in advance which components you want to place on your page and how they should be arranged, and then configure your page layout accordingly

1. In the application, close all tabs to open the Dashboard.
2. Click the **New Page** button in the Dashboard toolbar or in the middle of the page. An empty page appears.



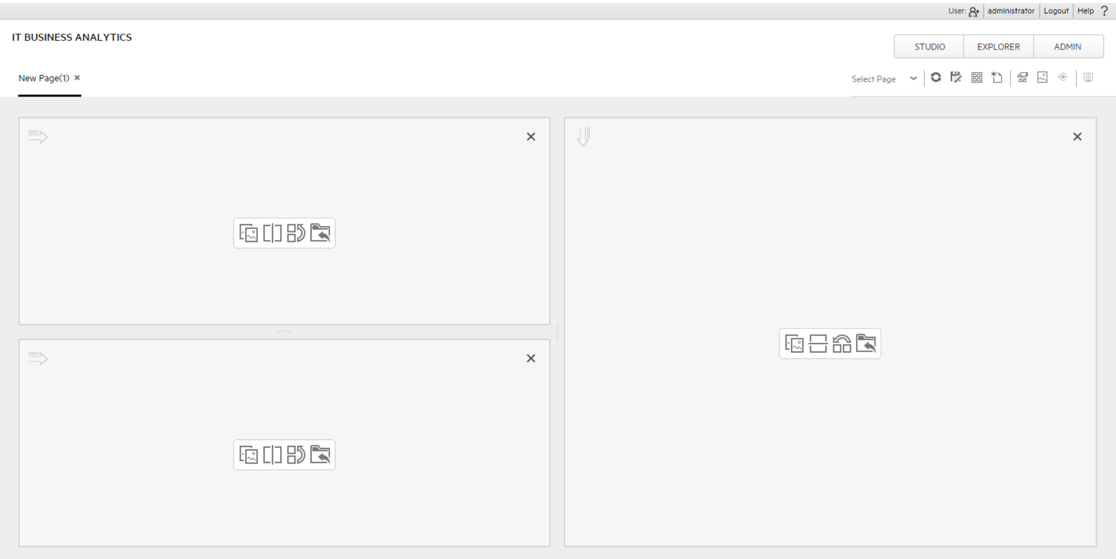
For more details, see Dashboard Page in the *Business Analyst Guide*.

3. Click ◫ to split the page into two horizontal sections.



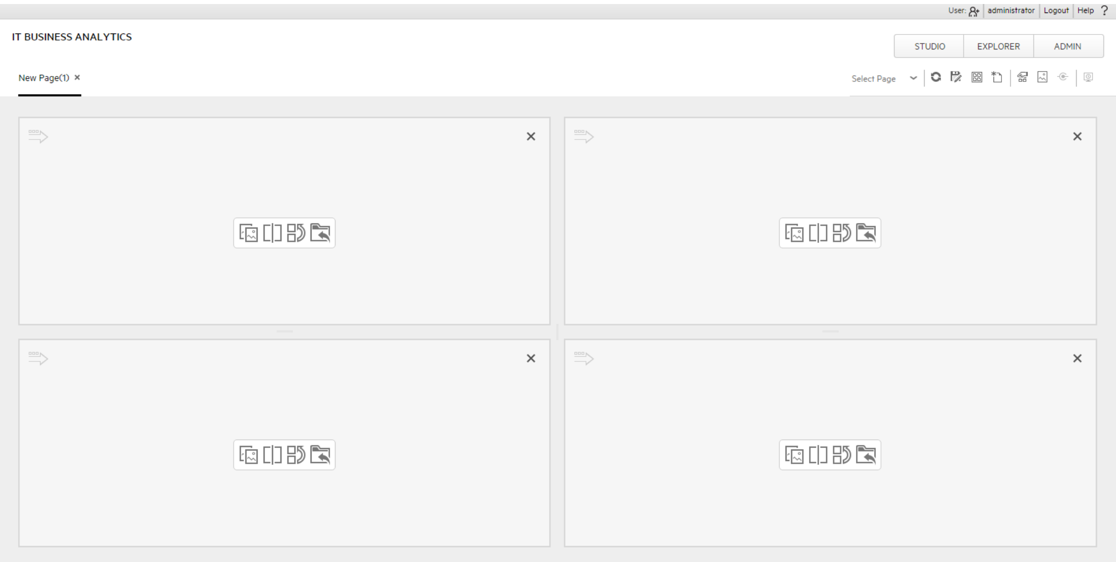
The horizontal layout displays the sections side-by-side.

4. The split icon is now horizontal. Click ⊟ on the left side to split the column vertically into two sections.



5. In the same way, click ⊟ to split the second column vertically into two vertical sections.

The page now includes 4 sections:



For more details, see Create a Dashboard Page and Add Components to the Page in the *Business Analyst Guide*.

> **Note:** To remove an area click the **Remove Layout** icon.

6. Now, add components to the page layout you created.
7. Click the '**Add component**' icon in one of the areas, or click the **Component Gallery** button in the top right menu bar to open the **Components** dialog box.
8. 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.
9. Select the component you want to add to one of the areas you created, and drag it to that area. Do the same for all the other areas.

   For more details, see Component Gallery and Component Categories in the *Business Analyst Guide*.
10. For a Tab area, drag the components you wish to add and for each component a new tab will appear.
11. After adding the relevant components to the relevant areas, save the page by clicking the **Save** icon. Enter a page name, add a description, and decide under which category the page will be saved. If you do not select a category, the page is saved in the **Non Categorized** category.

Configure Page Layout – Populate 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 a page to the Dashboard

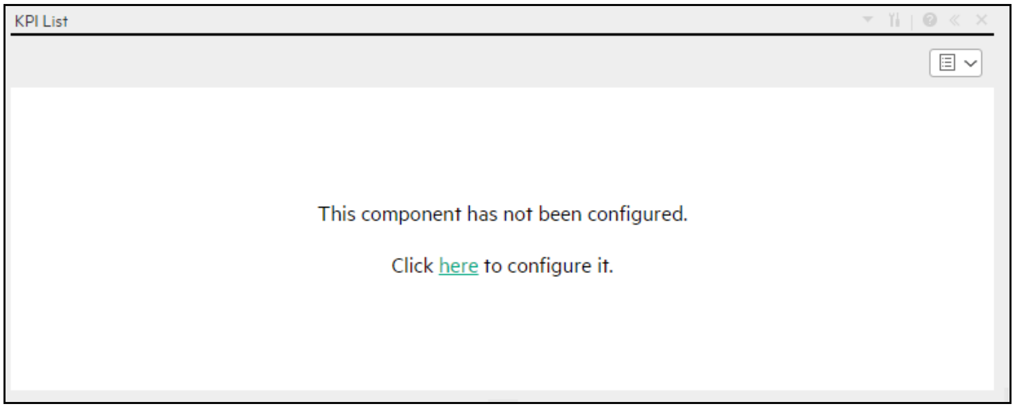
1. Add a page to the Dashboard, split it into two horizontal areas, and set the top area to tabs. For details, see "Create a Dashboard Page and Add Components to the Page" on page 206.
2. You can now format the page.

   Within the layout, you can now add components to the two areas; the components added to the upper section are displayed in tabs and the component added in the lower section of the page is displayed vertically .

   a. In the top section of the page, add the KPI List Component to the Dashboard Page

      i. Click the **Component Gallery** button.

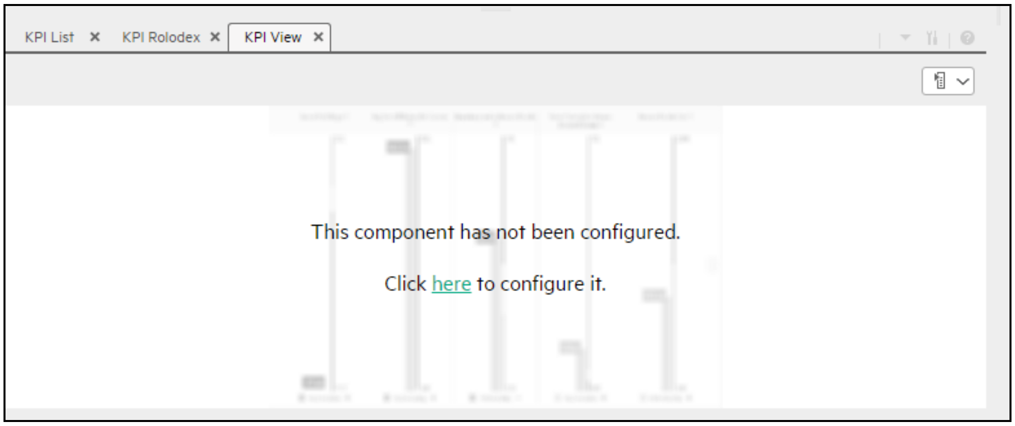
      ii. In the Component Gallery page that opens, click or double-click the **KPI List** component to place it in the layout area, or select the component and drag it to an area on the page. Click **Close** to view the results.



This component has not been configured.

Click here to configure it.

      iii. Click the **Components** button and in the same way, add more tabbed components.



This component has not been configured.

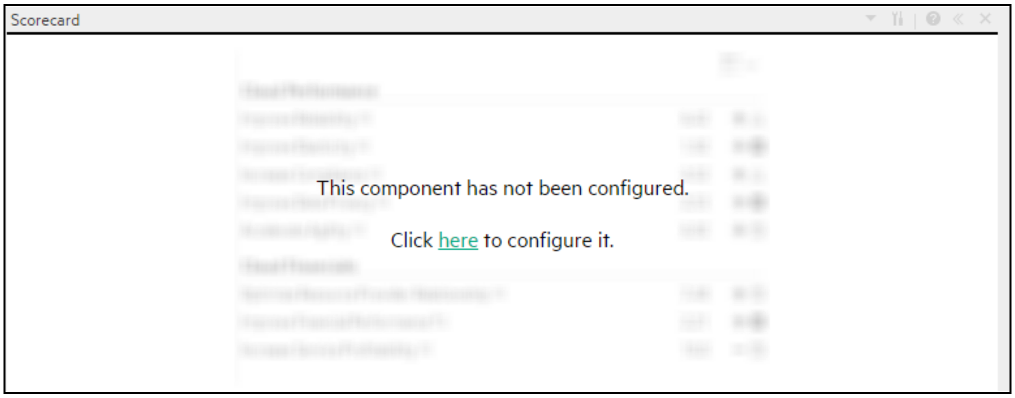
Click here to configure it.

You can now select what you want to display in each component. For details, see the relevant component sections.

b. In the lower section of the page, add the Scorecard Component to the Dashboard Page

   i. Click the **Component Gallery** button.

   ii. In the Component Gallery page that opens, click or double-click the Scorecard component to place it in the layout area, or select the component and drag it to an area on the page.



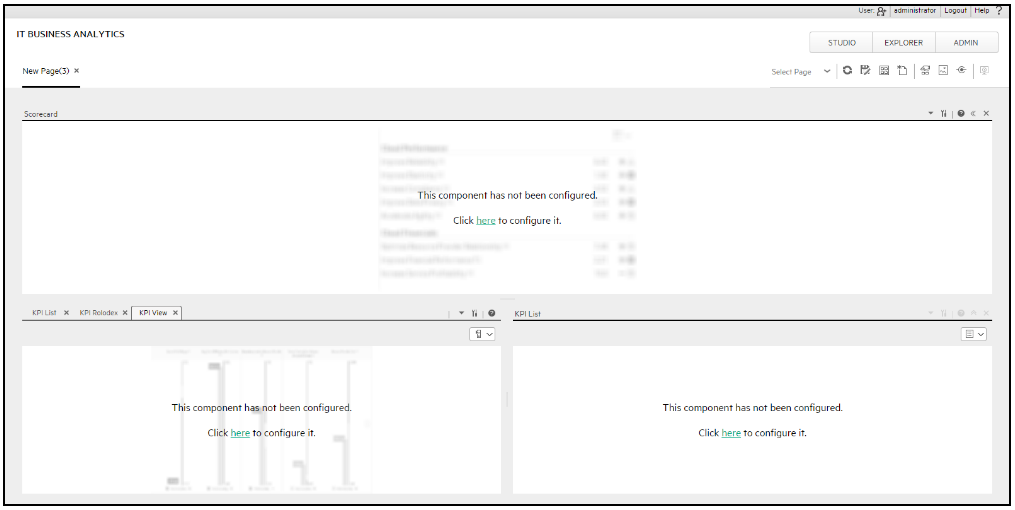
This component has not been configured.

Click here to configure it.

Note that double-click only works if you open the Component Gallery from the layout itself and not from the toolbar.

- 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.

   iii. Close the Component Gallery page. The Scorecard component appears in the page.



This component has not been configured.

Click here to configure it.

This component has not been configured.

Click here to configure it.

This component has not been configured.

Click here to configure it.

You can now select what you want to display in the component by clicking the **Configure Component** button. For details, see "The Scorecard Component" on page 355.

3. You can now save the page by clicking . 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.

4. To display the page, in Dashboard, click the **Page Gallery** button in the Dashboard toolbar and select the relevant page.

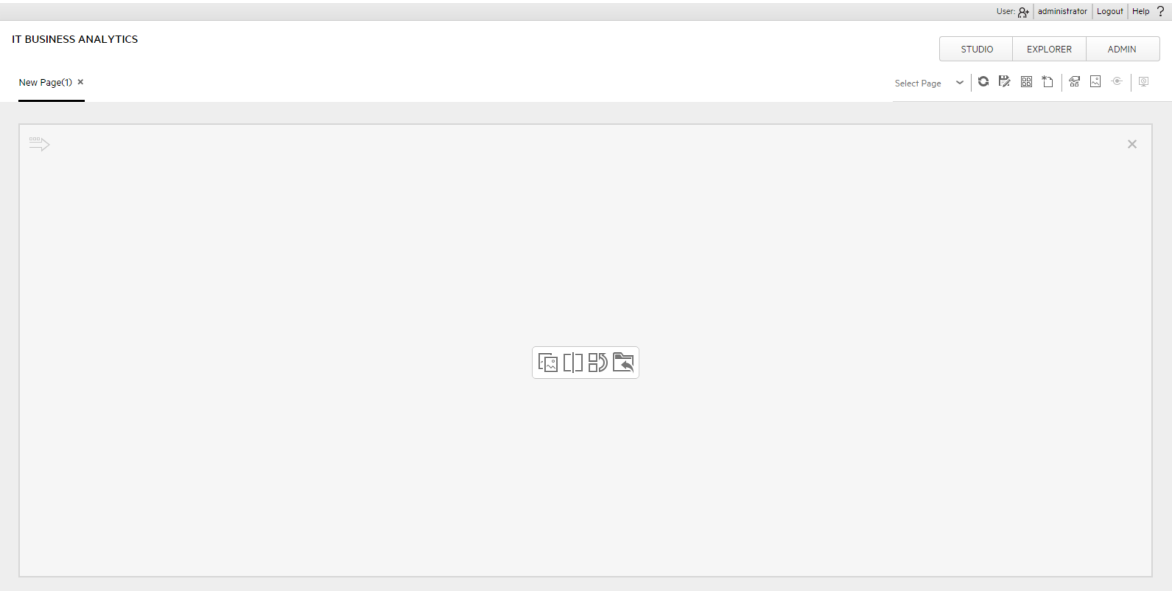
Use Case - Create a Dashboard Page and add a Scorecard Component to the Page

For details, see Create a Dashboard Page and add Components to the Page in the *Getting Started Guide*.

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.

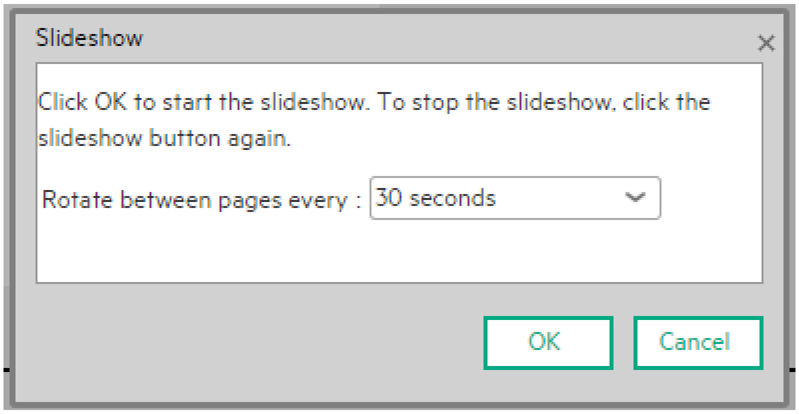


User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr><td><b><Page Management toolbar></b></td><td>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.
<table>
<tr><td><b>Select Page</b></td><td>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.</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr><td></td><td>
<table>
<tr><td>⟳</td><td><b>Refresh</b>. Click to refresh the page.</td></tr>
<tr><td>🖫</td><td><b>Save</b> or <b>Save As</b>. 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.</td></tr>
<tr><td>⊞</td><td><b>Page Gallery.</b> 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 "Page Gallery and Page Categories" on page 216.</td></tr>
<tr><td>🗋</td><td><b>New Page.</b> 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 "Dashboard Page" on page 200.</td></tr>
<tr><td>✎</td><td><b>Edit Page Layout.</b> 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 "Page Layout and Components" on page 205.

<b>Exit Editing.</b> When you are done, click this button to stop editing.</td></tr>
<tr><td>🖼</td><td><b>Component Gallery</b>. 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 "Component Gallery and Component Categories" on page 223.</td></tr>
<tr><td>⊕</td><td><b>Page Wiring.</b> Click to define the wiring between components; this determines how components interact with one another. For user interface details, see "Wiring Between Components" on page 429.</td></tr>
<tr><td>🖵</td><td><b>Start/Stop Slideshow</b>. Click to start a slideshow of open pages. A dialog box enables you to define how often the pages are rotated.</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr><td></td><td>
<table>
<tr><td></td><td>

Slideshow
Click OK to start the slideshow. To stop the slideshow, click the slideshow button again.
Rotate between pages every : 30 seconds

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.
If a slideshow is running, click this button to stop the slideshow.
</td></tr>
</table>
</td></tr>
<tr><td><b><Layout tools</b>></td><td>
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.
<table>
<tr><td>X</td><td><b>Remove Layout.</b> Click (upper-right corner) to remove a layout from the page.</td></tr>
<tr><td></td><td><b>Add Component.</b> 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 "Component Gallery and Component Categories" on page 223.</td></tr>
<tr><td></td><td><b>Split</b>. 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).</td></tr>
<tr><td></td><td><b>Split</b>. 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).</td></tr>
<tr><td></td><td><b>Switch to Vertical.</b> Click to change the layout from vertical or tabbed to horizontal. Components placed in this area will be added one above the other.</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr><td></td><td>
<table>
<tr><td></td><td><b>Switch to Horizontal.</b> Click to change the layout from horizontal or tabbed to vertical. Components placed in this area will be added side by side.</td></tr>
<tr><td></td><td><b>Switch to Tabs.</b> Click to change the layout from vertical or horizontal, to a tab layout. Components placed in this area will be added as tabs.</td></tr>
<tr><td><b>Layout Icons:</b></td><td></td></tr>
<tr><td>⇨</td><td><b><Horizontal layout>.</b> This icon in the upper-left corner of a layout indicates that the layout is horizontal. Components placed in this area will be added side by side.</td></tr>
<tr><td>⇩</td><td><b><Vertical layout>.</b> This icon in the upper-left corner of a layout indicates that the layout is vertical. Components placed in this area will be added one above the other.</td></tr>
<tr><td></td><td><b><Tabbed layout>.</b> This icon in the upper-left corner of a layout indicates that the layout is horizontal. Components placed in this area will be added as tabs.</td></tr>
</table>
</td></tr>
</table>

Page Gallery and 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.

You can generate the URL of a Dashboard page to embed the page into another application. You can then click somewhere in that page to navigate away from the application towards the Dashboard page in IT Business Analytics.

To access:

In Dashboard, click **Page Gallery**.

Tasks | UI Description

Tasks

This section includes:

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 y 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

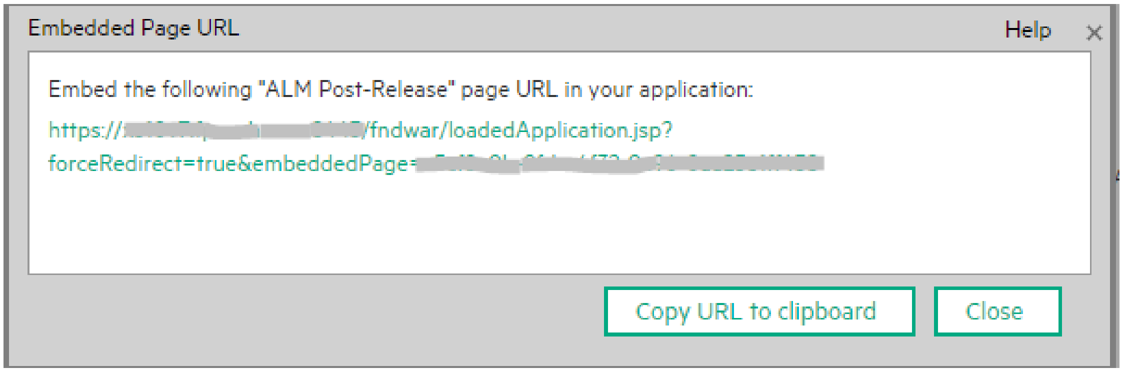
To change the category assignments of a page, right-click it and select the **Categorize** (page or component) option. In the Categorize Page dialog box that opens, modify the selection of categories, and click **OK**.

Embed an ITBA Dashboard page in another application

You can generate the URL of a Dashboard page to embed the page into another application. You can then click somewhere in that page to open the Dashboard page in Business Analytics.

1. In the Dashboard, click **Page Gallery**. Select a page and click **Generate URL** to generate the URL of the page. You can then use the URL to embed the page into another application.

   The following dialog box opens.



Embed the following "ALM Post-Release" page URL in your application:

https://[redacted]/fndwar/loadedApplication.jsp?
forceRedirect=true&embeddedPage=[redacted]

2. You can then:
   - Click **Copy URL to clipboard**. You can then use the copied URL to embed the selected ITBA Dashboard page into another application.
   - Click the link in the dialog box to display the page and make sure it is the correct page.
3. If you want to display the embedded page in one iframe in the other application, edit the file: **$HPA_Home/admin/HPBA-10.10.00-SNAPSHOT-RC-001-master-ubuntu-x64/webserver/httpd/conf/httpd.conf**, comment out the following line:
   # Header always append X-Frame-Options SAMEORIGIN, and save.

Movie: To display the movie, open the ITBA application, click **Help** in the top right corner of the application main page and select the **Movies** option. Select the relevant movie. For details, see Access Movies in the Online Help.

Navigate from a ITBA Dashboard page embedded into another application back to ITBA

You have embedded a ITBA Dashboard page in a non-ITBA application.

You can navigate from the ITBA Dashboard page embedded in the non-ITBA application back to ITBA, by clicking anywhere in that page.

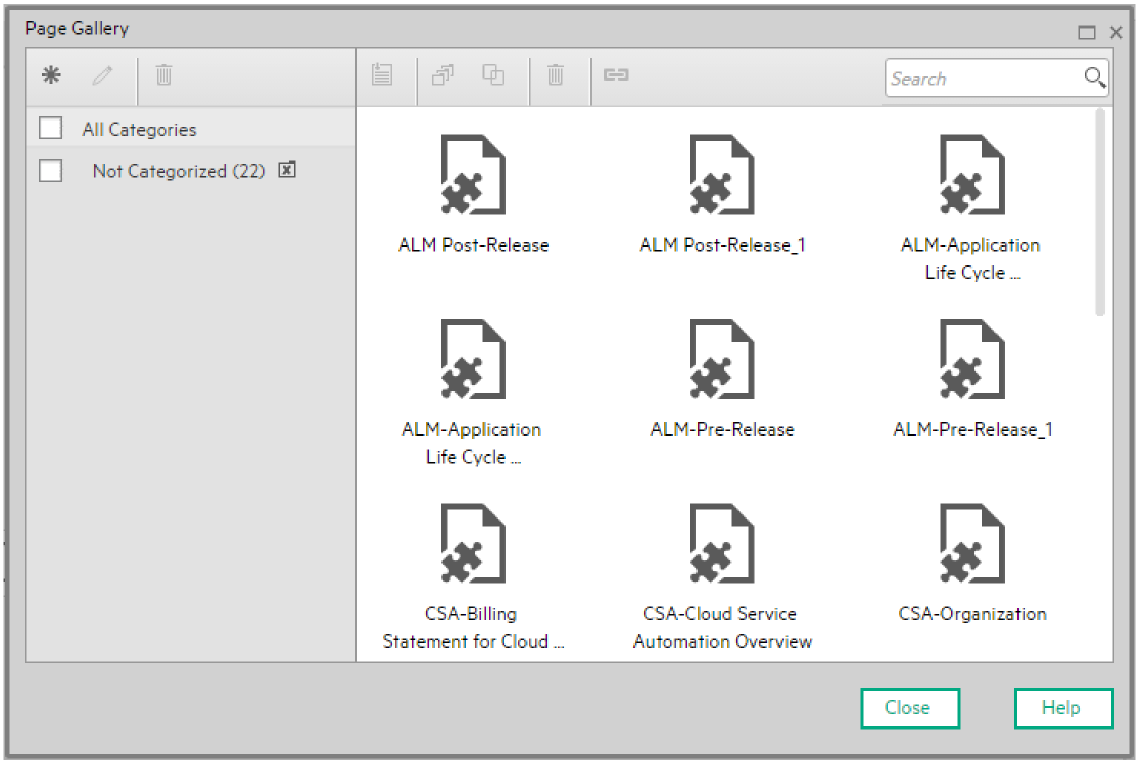
The Dashboard page opens in Business Analytics, in context, in the ITBA application.

You get a log on confirmation. To prevent that you need to configure Single Sign On. For details, see LW-SSO LW-SSO in the in the *Administrator Guide*..

Movie: To display the movie, open the ITBA application, click **Help** in the top right corner of the application main page and select the **Movies** option. Select the relevant movie. For details, see Access Movies in the Online Help.

UI Description

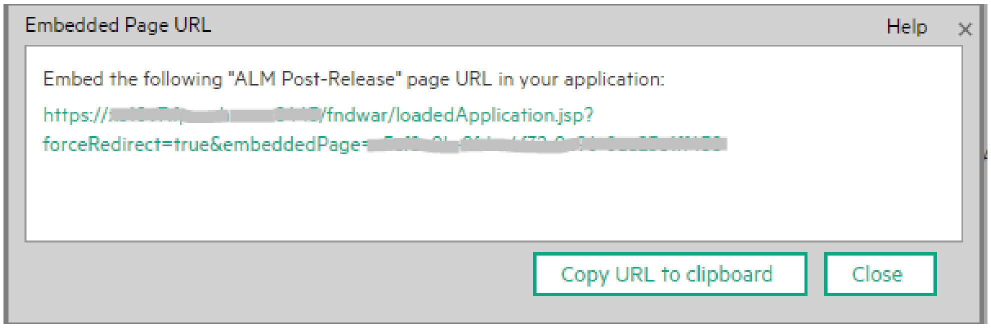
Page Gallery Dialog Box



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

UI Element	Description
Categories (left side)	
✱	**New Category.** Click to create a new category; you can then assign pages to this category. For details see "Component Gallery and Component Categories" on page 223.

UI Element	Description
✎	**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	This contains a list of categories to which pages are assigned. A category can have the following indications after its name: • 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. 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. Categories are not mutually exclusive; you can assign a page to more than one category.
Pages (right side)	
▤	**Open Page**. Select a page and click to open it in the Dashboard workspace. You can also double-click a page within the Page Gallery .
⧉	**Categorize Page**. Select a page and click to assign it to a category.
⧉	**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. 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.
🗑	**Delete Page.** Select a page and click to delete it from the gallery.
🔗	**Generate URL.** Select a page and click to generate the URL of the page. The URL can then be used to embed the page into another application. For details, see "Embed an ITBA Dashboard page in another application" on page 218. The following dialog box opens. You can then: • Click **Copy URL to clipboard**. You can then use the copied URL to embed the selected ITBA Dashboard page into another application. • Click the link in the dialog box to display the page and make sure it is the correct

UI Element	Description
	page.  Embed the following "ALM Post-Release" page URL in your application: https://[redacted]/fndwar/loadedApplication.jsp?forceRedirect=true&embeddedPage=[redacted] In the other application, click anywhere in the embedded Dashboard page to open the same Dashboard page, in context, in ITBA (with a logon confirmation if you had left the session).
Pages	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. ITBA provides out-of-the-box pages that you can display immediately in the Dashboard. For details about the out-of-the-box pages, see "Out-of-the-box Dashboard Pages Reference" on page 200.
Search box	Enter a text string to search for a specific page.

Component Gallery and 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 **Component Gallery** button.

In a Dashboard page, click the **Add component** button.

Tasks | UI Description

Tasks

This section includes:

Create a New Category

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

1. Click the **Component 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 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

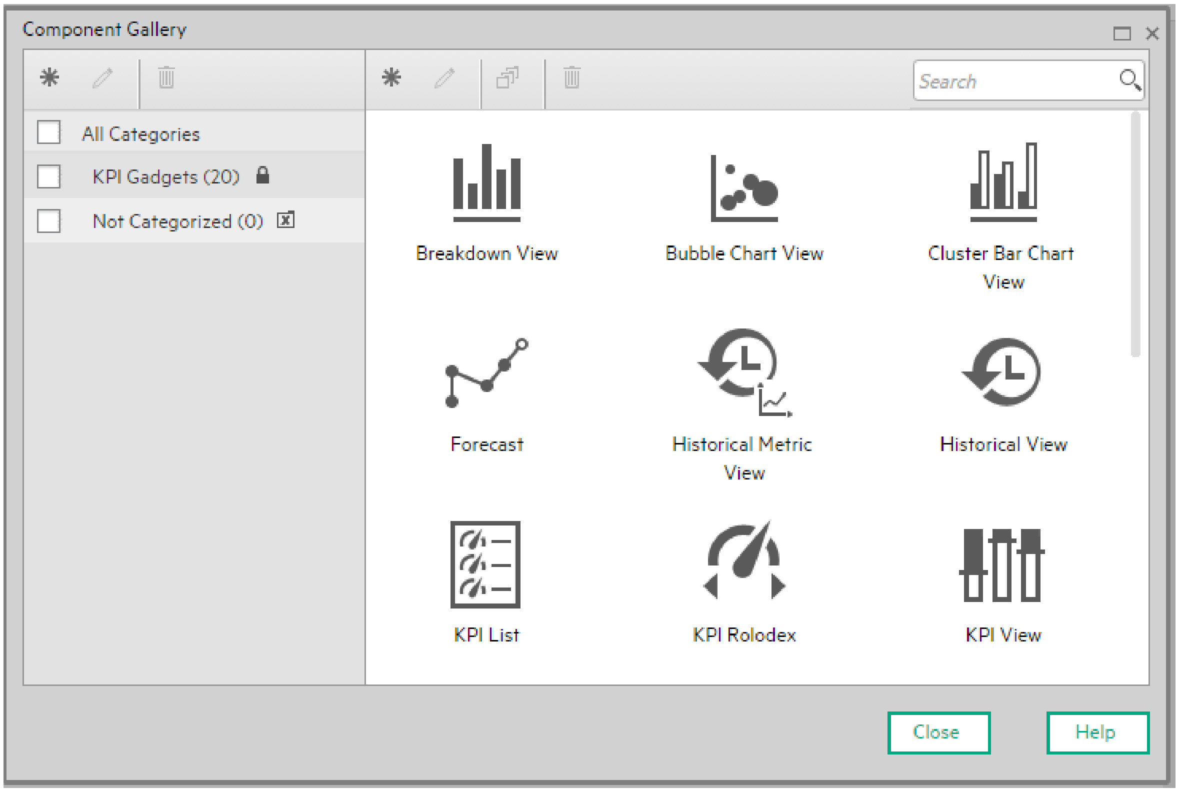
To assign a component to a category, select it and select the **Categorize** button in the toolbar (right side). In the Categorize Component dialog box that opens, select one or more categories to which you want to assign the page or component, and click **OK**.

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**.

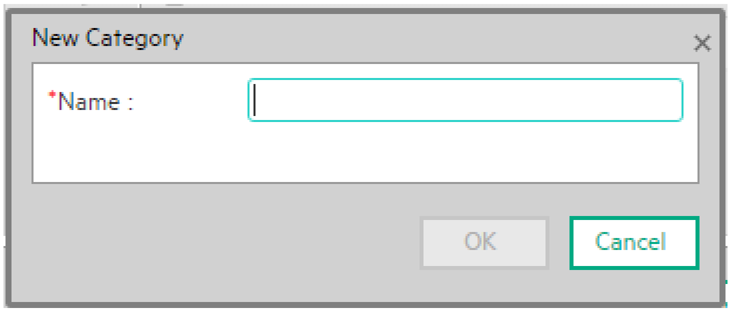
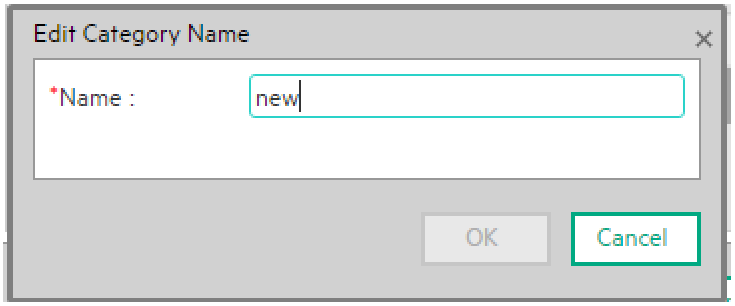
UI Description

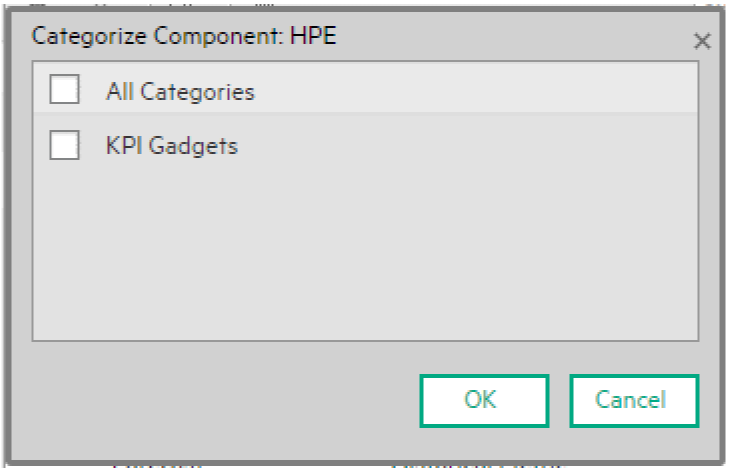
Component Gallery Dialog Box

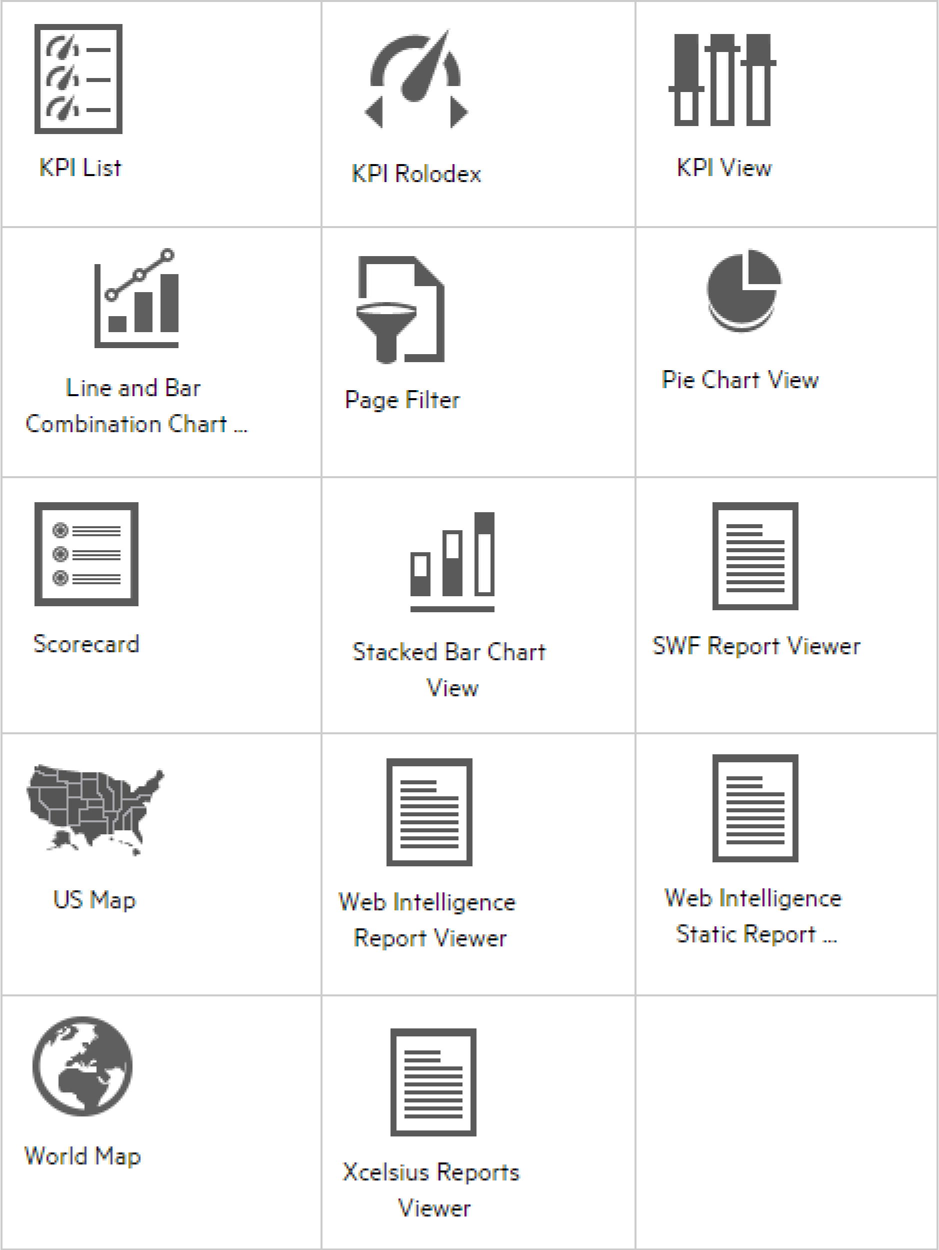


User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
<Left pane>	
✱	**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.

UI Element	Description
	
✎	**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.  *Name : new
🗑	**Delete Category.** Select the relevant category, and click the button to delete it.
<List of categories>	The pane lists the categories. - 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>	
✱	**Add External Component.** Click to add an external component to the gallery of components. The New Component dialog box opens. For details, see "Customized Static or Dynamic URL Component" on page 422.
✎	**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 "Customized Static or Dynamic URL Component" on page 422.
🗑	**Delete Component.** Select the relevant component, and click the button to delete it.

UI Element	Description
⧉	**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.  Categorize Component: HPE ☐ All Categories ☐ KPI Gadgets
Search	Enter a string to display all the components whose name includes the string.
<Components>	A list of the available default and customized components for the selected category. Click the icons below to access the documentation for the relevant component. Breakdown View Bubble Chart View Cluster Bar Chart View Forecast Historical Metric View Historical View

UI Element	Description
	

The Breakdown View Component

The Breakdown View component enables the user to view the values of the KPI Breakdown for the KPI you select in the KPI View, Historical View, or Rolodex component in the same Dashboard page.

To access:

You can view the report in the relevant page in the Dashboard.

Learn More | Tasks | UI Description

Learn More

> **Tip:** A Breakdown View component displays only one KPI Breakdown. If you want to display more than one KPI Breakdown in the Dashboard page, you can create multiple Breakdown View components and rename each component.

Permissions

Permissions. In the Dashboard components and in their configuration dialog boxes, you can only see the Scorecards, Perspectives, Objectives, KPIs, or KPI Breakdowns for which you have permission. If you do not have permission, you do not see that element. If you do not have permission to see all the elements in a component, the error message **Data is not displayed because it does not exist or you do not have the correct viewing permissions. Contact your administrator** is displayed.

Wiring

Wiring. Wiring is between components. It does not depend on the component internal format. For details, see "Wiring Between Components" on page 429.

If you drill down (to Breakdowns) in a specific component that is wired to another component on the same page, and you click the triggering component, the component with the Breakdowns is restored to its top level and filtered according to the triggering component.

The Breakdown View component is automatically wired to the KPI View, Historical View, and KPI Rolodex component that appear on the same Dashboard page. This means, that when you select a KPI in the KPI View component, its KPI Breakdowns are listed in the Breakdown List and you can select to display the relevant one. You cannot configure the Breakdown View component.

The Historical View component is automatically wired to the Breakdown View component and to the Forecast component. For details, see "The Breakdown View Component" on the previous page and "The Forecast Component" on page 261.

Tasks

Main task: "Dashboard Display" on page 195

This section includes:

Display a KPI Breakdown Values

To display a KPI Breakdown values in a component on a Dashboard page, proceed as follows:

1. Prerequisite: Make sure that the KPI has the relevant KPI Breakdowns. For details, see "KPI Breakdowns" on page 163.
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. Add the Breakdown View component to the page. For details, see "Create a Dashboard Page and Add Components to the Page" on page 206
4. Optionally, add the KPI View, Historical View, or KPI Rolodex component to the page. These components are automatically wired to the Breakdown View component.
5. In the Breakdown View component, select the chart display type ,**Top10** or **Bottom 10**, and the KPI Breakdown you want to display. For details, see "Breakdown View Component" on the next page.

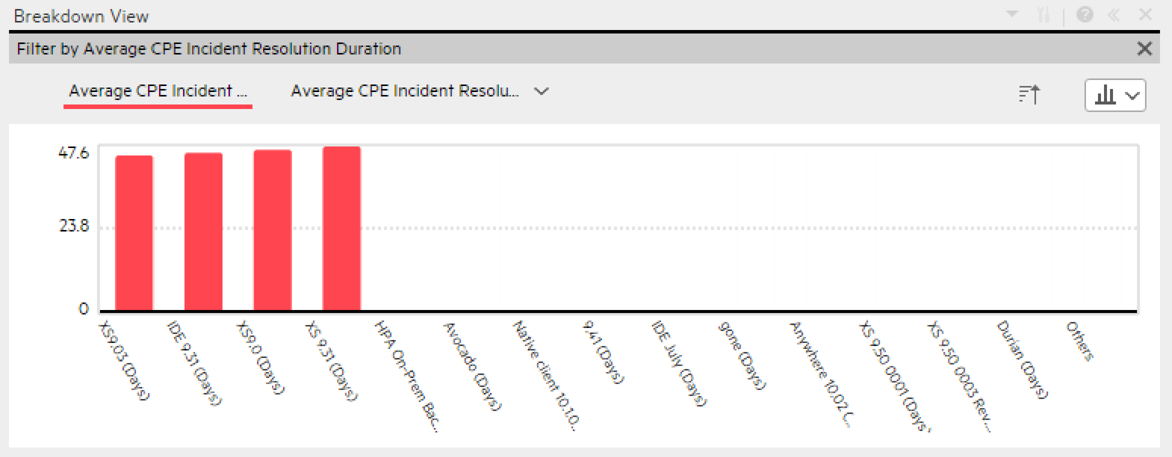
   The component displays the required information.
6. Save the page.

UI Description

Breakdown View Component

Important:

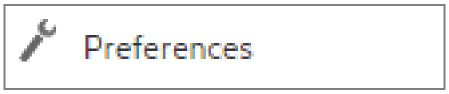
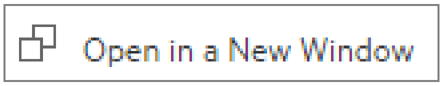
- The Breakdown View component is automatically wired to the KPI View, Historical View, and KPI Rolodex component that appears on the same Dashboard page. This means, that when you select a KPI in the KPI View component, its KPI Breakdowns are listed in the Breakdown List and you can select to display the relevant one. You cannot configure the Breakdown View component.
- > **Note:** To display data in the Metric Breakdown report in an Xcelsius component or in a Metric Breakdown component, you must add the Historical Metric View component to the page . When you click the graph of a specific Metric in the Historical Metric View component, the list of its Metric Breakdowns is displayed in the Metric Breakdown report list. You can then display the relevant Metric Breakdown information.



Component Toolbar

> **Note:** The component toolbar description is common to all components. Some of the elements might be disabled in some of the components.

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

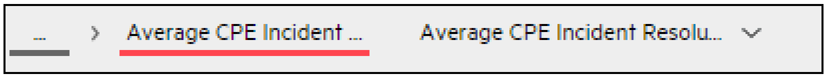
UI Element	Description
▾	**Component Menu.** Opens a menu where you can select: -  **Preferences.** Depending on the component you are current configuring, opens the **<component_name> Preferences** dialog box where you can change the name of the component in the page by changing the name in the **Name** 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 "Wiring Between Components" on page 429. - **Refresh.** Refreshes the display. The button is disabled in the Page Filter component. -  **Open in a New Window**. Opens the component in a new window.
	Configure Component. Opens the Configure Component dialog box for the relevant component. For details, see the relevant section below. **Note:** - The button is disabled in the Breakdown View component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired KPI View, Historical View, or Rolodex components, the Breakdown View component displays the values of the KPI Breakdown for the selected KPI. - The button is disabled in the Forecast component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired Historical View, the Forecast component displays the forecast data for the selected KPI. **Note:** You can also click **here** in **Click Here to configure it** in the center of the component

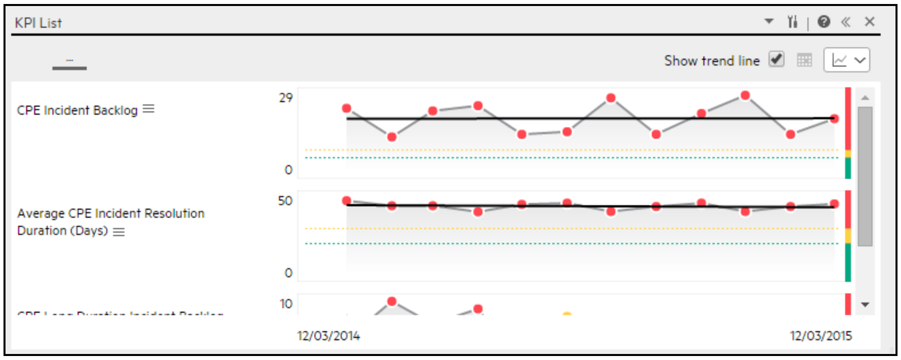
UI Element	Description
?	Opens the online documentation page relevant to the component you are currently configuring.
«	**Collapse component.** Collapses the component. To expand the collapsed component, click the ︾ button on the collapsed component.
▯	Drag the Resize handle to enlarge or reduce horizontally the area occupied by the component.
✕	**Remove Component.** Removes the component from the page.

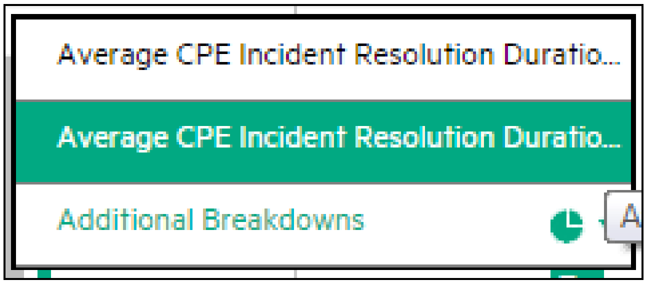
Component Contents

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

> **Note:** Some of the graphs below display thresholds. When the selected item is a Metric (that does not have thresholds), the graph displays the data without the threshold element.

UI Element	Description
<Breadcrumbs>	**Note:** Breadcrumbs are displayed only in specific components. When you have selected a Breakdown (see below for more details), the breadcrumb displays the level of the displayed element:  ... › Average CPE Incident ... Average CPE Incident Resolu... ⌄ Click the relevant item in the breadcrumb list to go back to a previous level.
▦	Enables the on-demand periodicity temporary recalculation and display. For details, see On-demand Periodicity in Component Display.
Show trend line ☐	Only available in single line format. Select the button to display the trend line for the relevant time frame.

UI Element	Description
	 KPI List Show trend line CPE Incident Backlog 29 0 Average CPE Incident Resolution Duration (Days) 50 0 10 12/03/2014 12/03/2015
<Display format>	You can modify the format of the display of some of the components on the fly, by selecting the relevant format. Some of the formats are not applicable to some of the components. The formats you can select are: - - To display the contents of the component using the enriched vertical column format. For details, see Column Format. - - To display the contents of the component using the horizontal Rolodex or gauge format. For details, see Rolodex - Gauge format. - - To display the content using the multiple line format. For details, see Multiple or single line format. - - To display the content using the pie format. For details, see Pie format. - - To display the content using the bar format. For details, see Bar format - - To display the content using the horizontal enriched column format. For details, see Column format. - - To display the content using the vertical Rolodex or gauge format. For details, see Rolodex - Gauge format. - - To display the content using the single line graph format. For details, see Multiple or single line format. - - To display the content using the cluster bar format. For details, see Cluster Bar format. - - To display the content using the stacked bar format. For details, see Stacked Bar format. - - To display the content using the bar and line format. For details, see

UI Element	Description
	Bar and Line format. • ⁘ - To display the content using the bubble chart format. For details, see Bubble Chart format. • ☰ - To display the content using the list format. For details, see List format. For details, see On-the-fly Display Format Change in Dashboard Page Components.
<Breakdowns>	The cursor changes from an arrow to a hand indicates that the displayed item has a Breakdown. Click the displayed item to list the available Breakdowns:  Average CPE Incident Resolution Duratio... Average CPE Incident Resolution Duratio... Additional Breakdowns Click the relevant Breakdown to display its information using the same format as its parent. You can then select another format by selecting it from the **<Display format>** list. For details, see "Change, On-Demand, the Breakdown Display" on page 484.

The Bubble Chart View Component

The Bubble Chart View component displays the list of selected KPIs or Metrics, and their value, trend, and status for the measurement period in bubble chart format, by default.

To access:

You can view the report in the relevant page in the Dashboard.

To configure the component, where possible, click the **Configure Component** button in the component to display the component filter, or click **here** in **Click Here to configure** in the center of the component.

Learn More | Tasks | UI Description

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).
- **Permissions.** In the Dashboard components and in their configuration dialog boxes, you can only see the Scorecards, Perspectives, Objectives, KPIs, or KPI Breakdowns for which you have permission. If you do not have permission, you do not see that element. If you do not have permission to see all the elements in a component, the error message **Data is not displayed because it does not exist or you do not have the correct viewing permissions. Contact your administrator** is displayed.

Tasks

Main task: "Dashboard Display" on page 195

Add the Component to a Dashboard Page

To add a component to a page that is already formatted:

1. In the 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, click or double-click the component to place it in the layout area, or select the component and drag it to an area on the page.

   Note that double-click only works if you open the Component Gallery from the layout itself and not from the toolbar.

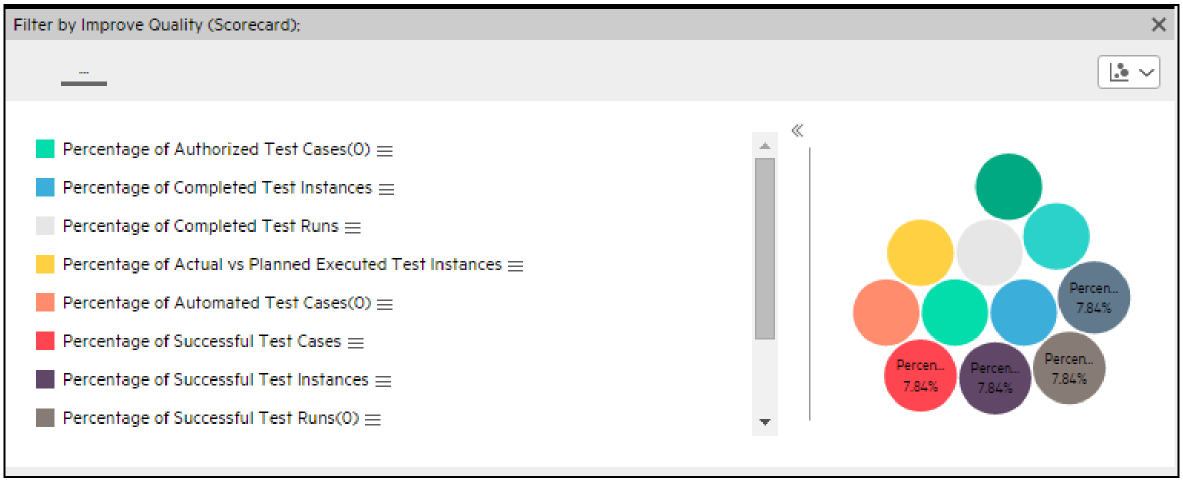
   - If the target area is hidden by the Component Gallery dialog box, click the Component Gallery dialog box title bar and drag it to another location on your screen.
   - If you are dragging a new component to a target area that already has a component defined, drag the new component to the title bar of the target area, and not to the part of the component that is colored white.
4. Close the Component Gallery page. For user interface details, see "Component Gallery and Component Categories" on page 223.
5. In the component, click the **Configure Component** button or click **here** in **Click Here to configure** in the center of the component.
6. In the component Filter dialog box that opens, select the information you want to display and click **OK**.

   The component displays the required information.

For more information, see "Page Layout and Components" on page 205.

UI Description

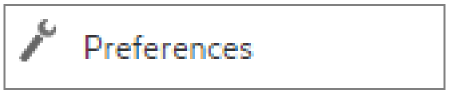
Bubble Chart View Component


Filter by Improve Quality (Scorecard):
Percentage of Authorized Test Cases(0)
Percentage of Completed Test Instances
Percentage of Completed Test Runs
Percentage of Actual vs Planned Executed Test Instances
Percentage of Automated Test Cases(0)
Percentage of Successful Test Cases
Percentage of Successful Test Instances
Percentage of Successful Test Runs(0)
Percen... 7.84%
Percen... 7.84%
Percen... 7.84%
Percen... 7.84%

Component Toolbar

> **Note:** The component toolbar description is common to all components. Some of the elements might be disabled in some of the components.

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

UI Element	Description
	where you can wire the current component to other components. For details, see "Wiring Between Components" on page 429. - ⟳ Refresh **Refresh.** Refreshes the display. The button is disabled in the Page Filter component. - ⧉ Open in a New Window **Open in a New Window**. Opens the component in a new window.
🔧	**Configure Component.** Opens the Configure Component dialog box for the relevant component. For details, see the relevant section below. **Note:** - The button is disabled in the Breakdown View component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired KPI View, Historical View, or Rolodex components, the Breakdown View component displays the values of the KPI Breakdown for the selected KPI. - The button is disabled in the Forecast component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired Historical View, the Forecast component displays the forecast data for the selected KPI. **Note:** You can also click **here** in **Click Here to configure it** in the center of the component
❓	Opens the online documentation page relevant to the component you are currently configuring.
«	**Collapse component.** Collapses the component. To expand the collapsed component, click the ︾ button on the collapsed component.
▯	Drag the Resize handle to enlarge or reduce horizontally the area occupied by the 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):

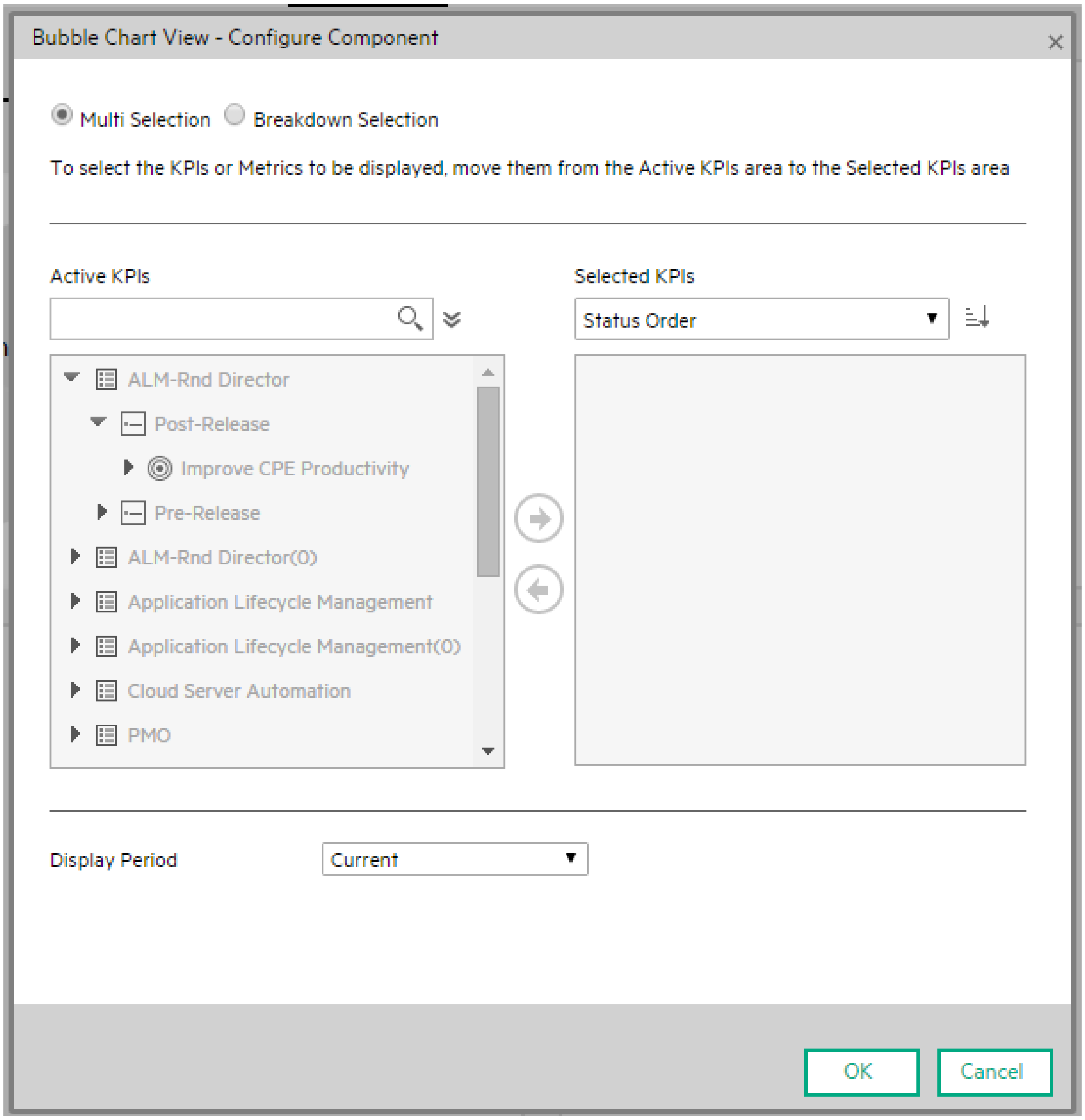
UI Element	Description
<Display format>	You can modify the format of the display of some of the components on the fly, by selecting the relevant format. Some of the formats are not applicable to some of the components. The formats you can select are: • - To display the contents of the component using the enriched vertical column format. For details, see Column Format. • - To display the contents of the component using the horizontal Rolodex or gauge format. For details, see Rolodex - Gauge format. • - To display the content using the multiple line format. For details, see Multiple or single line format. • - To display the content using the pie format. For details, see Pie format. • - To display the content using the bar format. For details, see Bar format • - To display the content using the horizontal enriched column format. For details, see Column format. • - To display the content using the vertical Rolodex or gauge format. For details, see Rolodex - Gauge format. • - To display the content using the single line graph format. For details, see Multiple or single line format. • - To display the content using the cluster bar format. For details, see Cluster Bar format. • - To display the content using the stacked bar format. For details, see Stacked Bar format. • - To display the content using the bar and line format. For details, see Bar and Line format. • - To display the content using the bubble chart format. For details, see Bubble Chart format. • - To display the content using the list format. For details, see List format. For details, see On-the-fly Display Format Change in Dashboard Page Components.

Bubble Chart View - Configure Component Dialog Box

You can select the Multi Selection or Breakdown Selection options:

- **Multi Selection**

  You use this option when you want to compare several metrics or KPIs.



Bubble Chart View - Configure Component

● Multi Selection ○ Breakdown Selection

To select the KPIs or Metrics to be displayed, move them from the Active KPIs area to the Selected KPIs area

Selected KPIs: Status Order

Display Period: Current

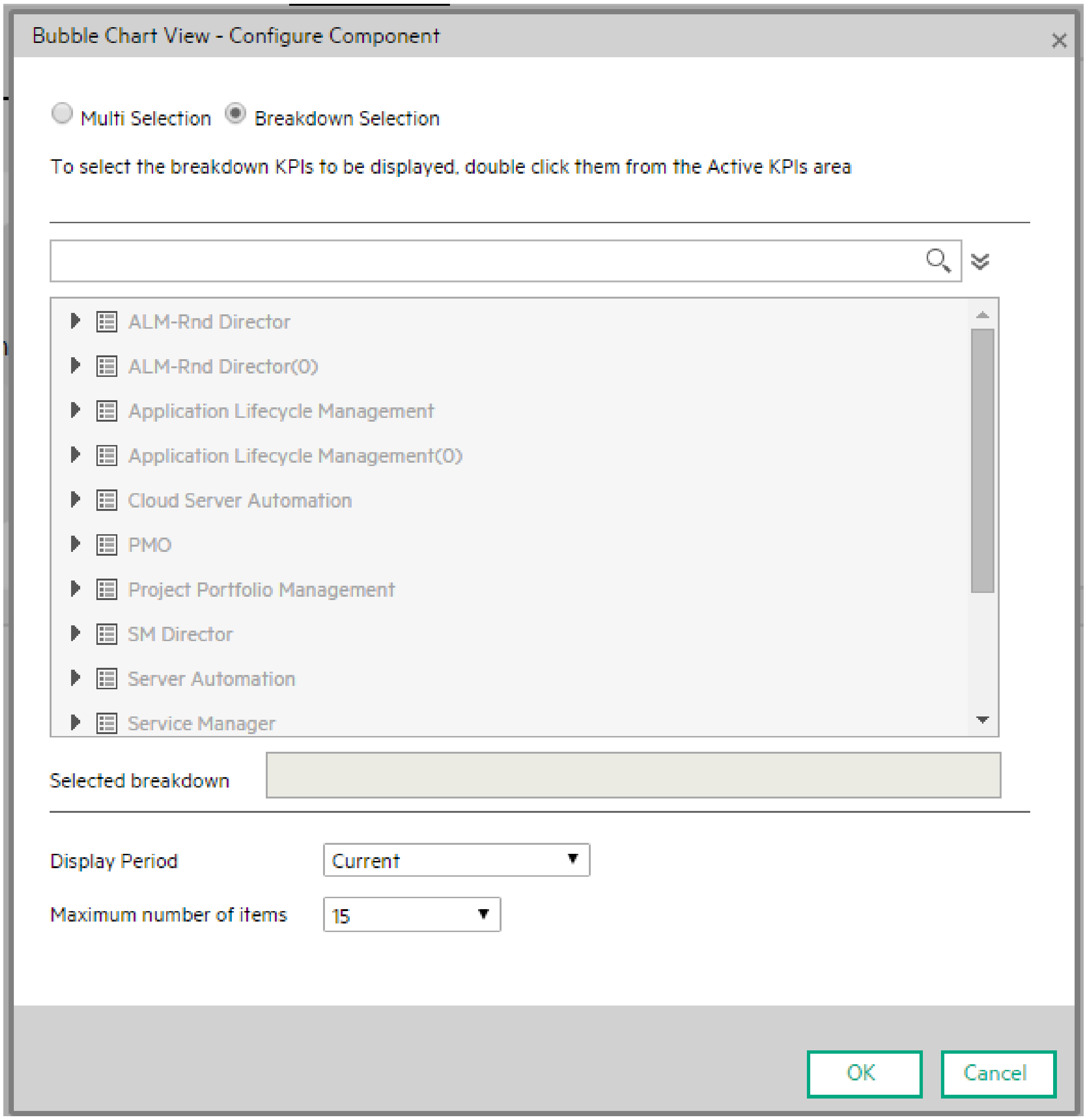
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
<Search>	Enter the relevant string to display, in the tree, only the Metrics or KPIs (or Metric or KPI Breakdowns) whose name includes the string. In addition, the child KPIs or Metrics of the filtered items are also listed even when the child names do not include the string.
︾	**Advanced Search.** Opens additional fields to help you refine the component's filter: ○ **Status:** Select one of the **All**, **Good**, **Warning**, **Critical**, or **No Data** values to display only the elements with the selected status, in the Active KPIs or in the tree area. When you select **No Data**, the search returns only the elements with no data. ○ **Type.** Select: • **All.** To display all the elements in the Active KPIs or in the tree with the selected Status. • **KPIs.** To display, in the Active KPIs or in the tree, only the KPIs. • **Objective.** To display in the Active KPIs or in the tree, only the Objectives and their KPIs. • **Metrics.** To display, in the tree, only the Metrics. You can then select the relevant item if any.
Active KPIs	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 (if you have selected **Breakdown selection**, only the KPI Breakdowns are highlighted). To select or deselect 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. **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.
Selected KPIs	The box lists all the selected metrics or KPIs that you want to display in the component. To select or deselect 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

UI Element	Description
	other. **<Status sort>** ◦ **Status sort** to sort the selected elements in status order. You can then click the icon to the right of the box to select the reverse order. Depending on the selection, the icon can be one of the following: ↑|↓. ◦ **Alphabetical sort** to sort the selected elements in alphabetical order. You can then click the icon to the right of the box to select the reverse order. Depending on the selection, the icon can be one of the following: ↑|↓.
Display Period	Select the time period to display in the component: ◦ **Current**. The values of the selected Metrics or KPIs (**Multi Selection**) or KPIs or Metric Breakdown dimensions (**Breakdown Selection**) 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 **Multi Selection** or KPIs or Metric Breakdown dimensions (**Breakdown Selection**) whose calculation period has already completed according to the selected metrics or KPIs configured periodicity. ◦ **Yearly/Monthly/Quarterly/Weekly/Daily.** The list of time periods represents the longest periodicity configured for the selected Metrics or KPIs (**Multi Selection**) or KPIs or Metric Breakdown dimensions (**Breakdown Selection**). When you select **Yearly/Monthly/Quarterly/Weekly/Daily**, 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 **Multi Selection** or KPIs or Metric Breakdown dimensions (**Breakdown Selection**) that have completed for the selected periods.

- **Breakdown Selection**

  Select this option when you want to compare the values of the selected KPI Breakdown dimension.


Bubble Chart View - Configure Component
ALM-Rnd Director
ALM-Rnd Director(0)
Application Lifecycle Management
Application Lifecycle Management(0)
Cloud Server Automation
PMO
Project Portfolio Management
SM Director
Server Automation
Service Manager
Selected breakdown
OK
Cancel

○ Multi Selection ● Breakdown Selection

To select the breakdown KPIs to be displayed, double click them from the Active KPIs area

Display Period: Current

Maximum number of items: 15

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

UI Element	Description
<Search>	Enter the relevant string to display, in the tree, only the Metrics or KPIs (or Metric or KPI Breakdowns) whose name includes the string.

UI Element	Description
	In addition, the child KPIs or Metrics of the filtered items are also listed even when the child names do not include the string.
︾	**Advanced Search.** Opens additional fields to help you refine the component's filter: ◦ **Status:** Select one of the **All**, **Good**, **Warning**, **Critical**, or **No Data** values to display only the elements with the selected status, in the Active KPIs area. When you select **No Data**, the search returns only the elements with no data. ◦ **Type.** Select: • **All.** To display, in the tree, all the elements. • **KPIs.** To display, in the tree, only the KPIs. • **Objective.** To display in the tree, only the Objectives and their KPIs. • **Metrics.** To display, in the tree, only the Metrics. You can then select the relevant KPI or Metric Breakdown if any.
<Tree>	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. 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.
Selected metrics	The box lists the selected KPI or Metric Breakdown.
Display Period	Select the time period to display in the component: ◦ **Current**. The values of the selected Metrics or KPIs (**Multi Selection**) or KPIs or Metric Breakdown dimensions (**Breakdown Selection**) 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 **Multi Selection** or KPIs or Metric Breakdown dimensions (**Breakdown Selection**) whose calculation period has already completed according to the selected metrics or KPIs configured periodicity. ◦ **Yearly/Monthly/Quarterly/Weekly/Daily.** The list of time periods represents the longest periodicity configured for the selected Metrics or KPIs (**Multi Selection**) or KPIs or Metric Breakdown dimensions (**Breakdown Selection**). When you select **Yearly/Monthly/Quarterly/Weekly/Daily**, 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 **Multi Selection** or KPIs or Metric Breakdown dimensions

UI Element	Description
	(**Breakdown Selection**) that have completed for the selected periods.
Maximum Number of Slices	This field is displayed only when you select Breakdown Selection. Specify the number of KPI Breakdowns to display in the component.

The Cluster Bar Chart View Component

The Cluster Bar Chart View component displays the list of selected KPIs or Metrics, and their value, trend, and status for the measurement period in cluster bar format, by default.

To access:

You can view the report in the relevant page in the Dashboard.

To configure the component, where possible, click the **Configure Component** button in the component to display the component filter, or click **here** in **Click Here to configure** in the center of the component.

Learn More | Tasks | UI Description

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).
- **Permissions.** In the Dashboard components and in their configuration dialog boxes, you can only see the Scorecards, Perspectives, Objectives, KPIs, or KPI Breakdowns for which you have permission. If you do not have permission, you do not see that element. If you do not have permission to see all the elements in a component, the error message **Data is not displayed because it does not exist or you do not have the correct viewing permissions. Contact your administrator** is displayed.

Tasks

Main task: "Dashboard Display" on page 195

Add the Component to a Dashboard Page

To add a component to a page that is already formatted:

1. In the 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, click or double-click the component to place it in the layout area, or select the component and drag it to an area on the page.

   Note that double-click only works if you open the Component Gallery from the layout itself and not from the toolbar.

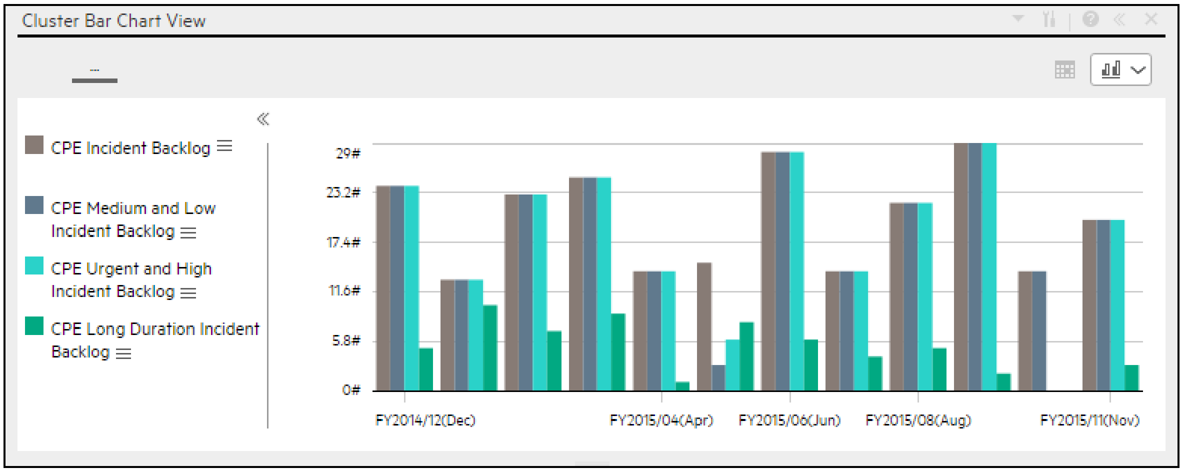
   - If the target area is hidden by the Component Gallery dialog box, click the Component Gallery dialog box title bar and drag it to another location on your screen.
   - If you are dragging a new component to a target area that already has a component defined, drag the new component to the title bar of the target area, and not to the part of the component that is colored white.
4. Close the Component Gallery page. For user interface details, see "Component Gallery and Component Categories" on page 223.
5. In the component, click the **Configure Component** button or click **here** in **Click Here to configure** in the center of the component.
6. In the component Filter dialog box that opens, select the information you want to display and click **OK**.

   The component displays the required information.

For more information, see "Page Layout and Components" on page 205.

UI Description

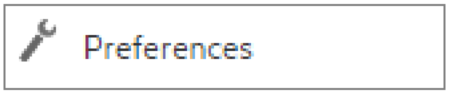
Cluster Bar Chart View Component



Component Toolbar

> **Note:** The component toolbar description is common to all components. Some of the elements might be disabled in some of the components.

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

UI Element	Description
	where you can wire the current component to other components. For details, see "Wiring Between Components" on page 429. - ⟳ Refresh **Refresh.** Refreshes the display. The button is disabled in the Page Filter component. - ⧉ Open in a New Window **Open in a New Window**. Opens the component in a new window.
	Configure Component. Opens the Configure Component dialog box for the relevant component. For details, see the relevant section below. **Note:** - The button is disabled in the Breakdown View component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired KPI View, Historical View, or Rolodex components, the Breakdown View component displays the values of the KPI Breakdown for the selected KPI. - The button is disabled in the Forecast component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired Historical View, the Forecast component displays the forecast data for the selected KPI. **Note:** You can also click **here** in **Click Here to configure it** in the center of the component
?	Opens the online documentation page relevant to the component you are currently configuring.
«	**Collapse component.** Collapses the component. To expand the collapsed component, click the ⌄ button on the collapsed component.
|	Drag the Resize handle to enlarge or reduce horizontally the area occupied by the component.
×	**Remove Component.** Removes the component from the page.

<Component Contents>

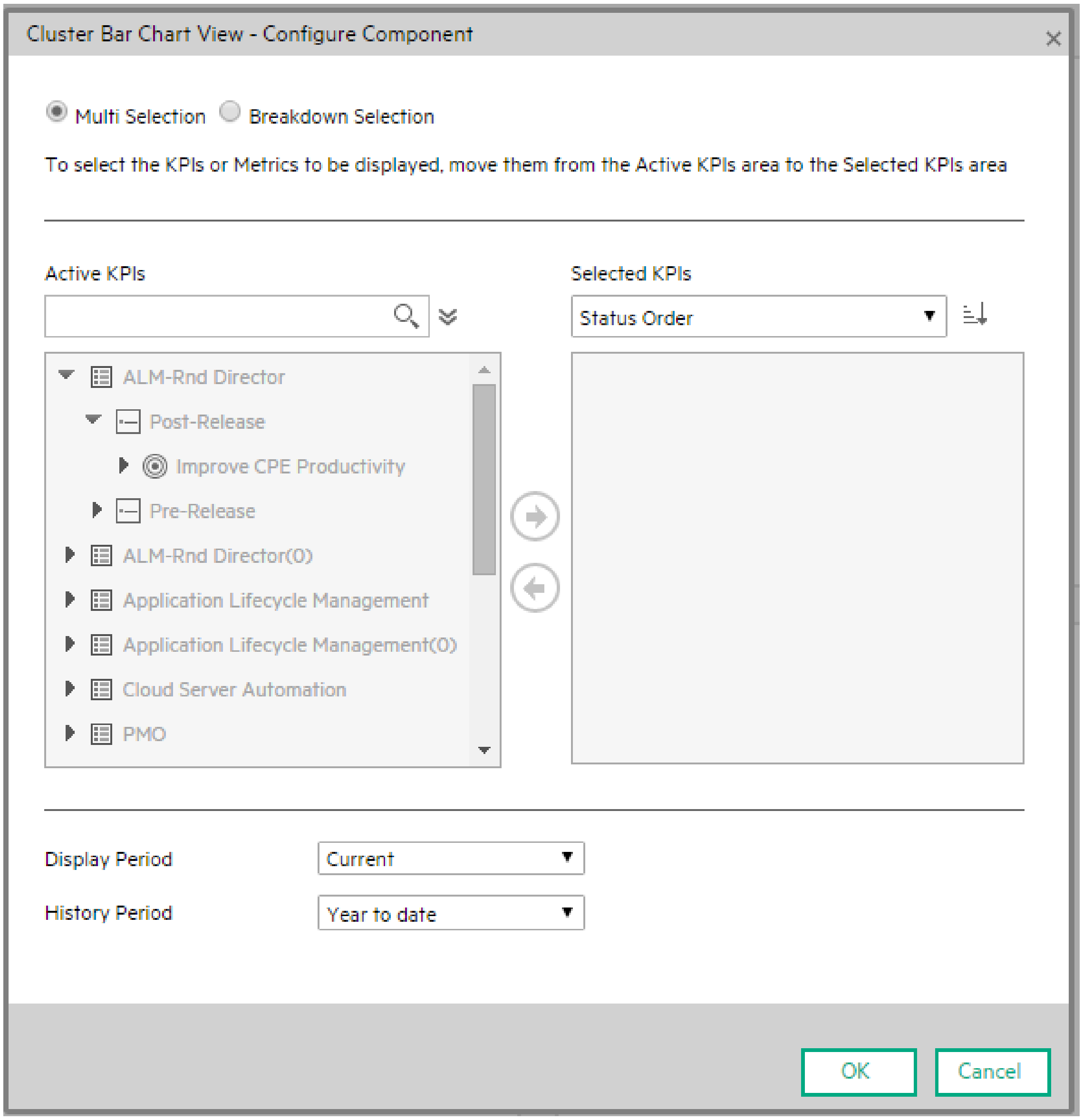
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
▦	Enables the on-demand periodicity temporary recalculation and display. For details, see On-demand Periodicity in Component Display.
<Display format> ◠ ⌄	You can modify the format of the display of some of the components on the fly, by selecting the relevant format. Some of the formats are not applicable to some of the components. The formats you can select are: • ▯ - To display the contents of the component using the enriched vertical column format. For details, see Column Format. • ◠ - To display the contents of the component using the horizontal Rolodex or gauge format. For details, see Rolodex - Gauge format. • 📈 - To display the content using the multiple line format. For details, see Multiple or single line format. • ◔ - To display the content using the pie format. For details, see Pie format. • 📊 - To display the content using the bar format. For details, see Bar format • ▭ - To display the content using the horizontal enriched column format. For details, see Column format. • ⇄ - To display the content using the vertical Rolodex or gauge format. For details, see Rolodex - Gauge format. • 📈 - To display the content using the single line graph format. For details, see Multiple or single line format. • 📊 - To display the content using the cluster bar format. For details, see Cluster Bar format. • 📊 - To display the content using the stacked bar format. For details, see Stacked Bar format. • 📊 - To display the content using the bar and line format. For details, see Bar and Line format. • ⁘ - To display the content using the bubble chart format. For details, see Bubble Chart format. • ☰ - To display the content using the list format. For details, see List format. For details, see On-the-fly Display Format Change in Dashboard Page Components.

Cluster Bar Chart View - Configure Component Dialog Box

You can select the Multi Selection or Breakdown Selection options:

- **Multi Selection.** You use this option when you want to compare several metrics or KPIs.



Cluster Bar Chart View - Configure Component

● Multi Selection ○ Breakdown Selection

To select the KPIs or Metrics to be displayed, move them from the Active KPIs area to the Selected KPIs area

Active KPIs

- ALM-Rnd Director
  - Post-Release
    - Improve CPE Productivity
  - Pre-Release
- ALM-Rnd Director(0)
- Application Lifecycle Management
- Application Lifecycle Management(0)
- Cloud Server Automation
- PMO

Selected KPIs: Status Order

Display Period: Current

History Period: Year to date

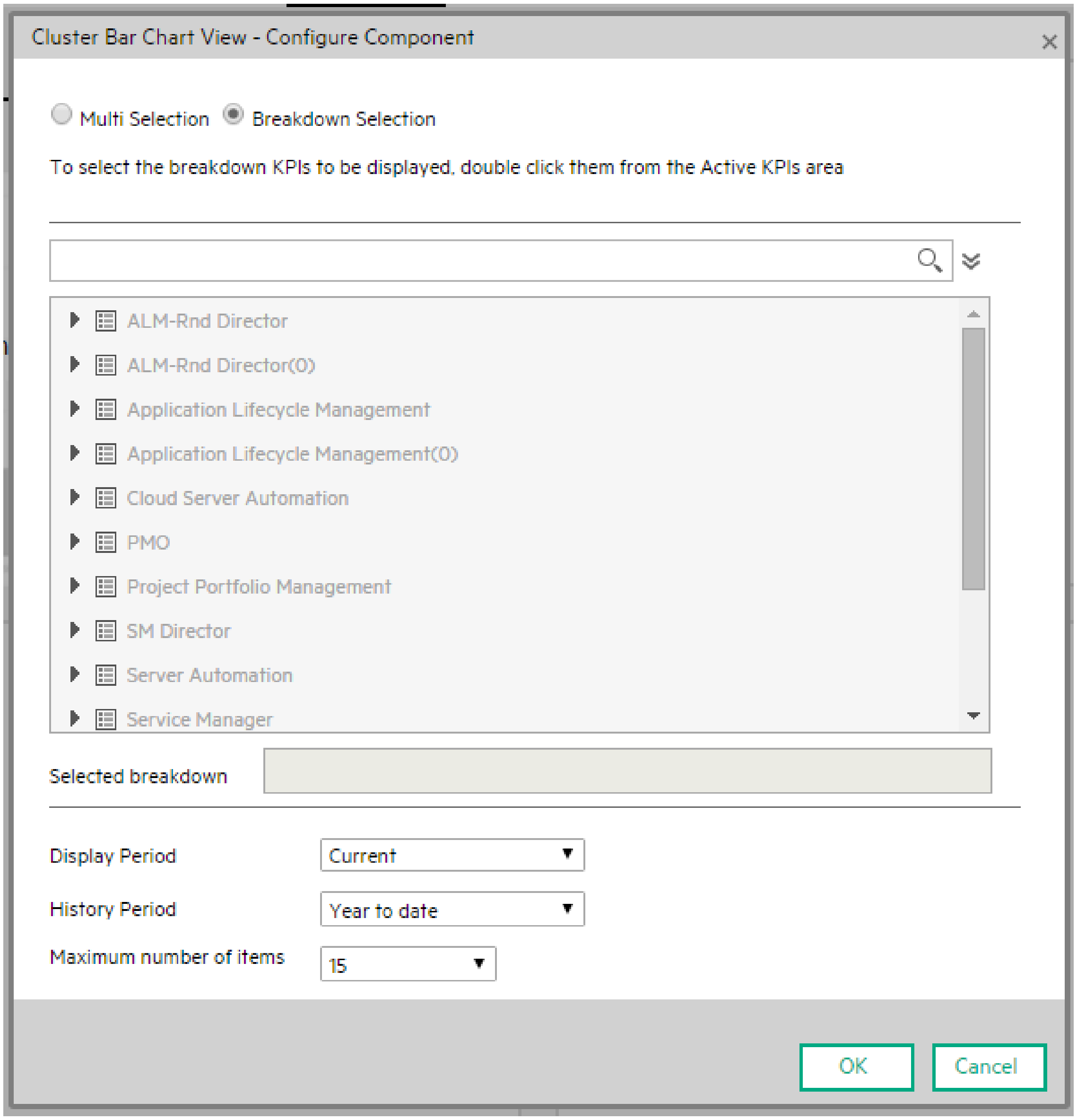
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
<Search>	Enter the relevant string to display, in the tree, only the Metrics or KPIs (or Metric or KPI Breakdowns) whose name includes the string. In addition, the child KPIs or Metrics of the filtered items are also listed even when the child names do not include the string.
︾	**Advanced Search.** Opens additional fields to help you refine the component's filter: ○ **Status:** Select one of the **All**, **Good**, **Warning**, **Critical**, or **No Data** values to display only the elements with the selected status, in the Active KPIs or in the tree area. When you select **No Data**, the search returns only the elements with no data. ○ **Type.** Select: • **All.** To display all the elements in the Active KPIs or in the tree with the selected Status. • **KPIs.** To display, in the Active KPIs or in the tree, only the KPIs. • **Objective.** To display in the Active KPIs or in the tree, only the Objectives and their KPIs. • **Metrics.** To display, in the tree, only the Metrics. You can then select the relevant item if any.
Active KPIs	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 (if you have selected **Breakdown selection**, only the KPI Breakdowns are highlighted). To select or deselect 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. **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.
Selected KPIs	The box lists all the selected metrics or KPIs that you want to display in the component. To select or deselect 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

UI Element	Description
	other. **<Status sort>** ◦ **Status sort** to sort the selected elements in status order. You can then click the icon to the right of the box to select the reverse order. Depending on the selection, the icon can be one of the following: ↑|↓. ◦ **Alphabetical sort** to sort the selected elements in alphabetical order. You can then click the icon to the right of the box to select the reverse order. Depending on the selection, the icon can be one of the following: ↑|↓.
Display Period	Select the time period to display in the component: ◦ **Current**. The values of the selected Metrics or KPIs (**Multi Selection**) or KPIs or Metric Breakdown dimensions (**Breakdown Selection**) 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 **Multi Selection** or KPIs or Metric Breakdown dimensions (**Breakdown Selection**) whose calculation period has already completed according to the selected metrics or KPIs configured periodicity. ◦ **Yearly/Monthly/Quarterly/Weekly/Daily.** The list of time periods represents the longest periodicity configured for the selected Metrics or KPIs (**Multi Selection**) or KPIs or Metric Breakdown dimensions (**Breakdown Selection**). When you select **Yearly/Monthly/Quarterly/Weekly/Daily**, 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 **Multi Selection** or KPIs or Metric Breakdown dimensions (**Breakdown Selection**) that have completed for the selected periods.
History Period	Select one of the following options: ◦ **Quarter to date.** The report's display period starts 3 months prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. ◦ **Half a year to date.** The report's display period starts 6 months prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. ◦ **Year to date.** The report's display period starts 1 year prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. ◦ **2 years to date.** The report's display period starts 2 years prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. ◦ **3 years to date.** The report's display period starts 3 years prior to the current date

UI Element	Description
	or prior to the selected year, month, quarter, week, or day in the **Display Period**. **Note:** ◦ 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. **Example** If you select the 4th Quarter of 2013 in the **Display Period** field, and **3 years to date** in the **History Period** field, the rightmost point in the X-axis is the end of the 4th Quarter of 2013 (December 31st, 2013), and the leftmost point is the 4th Quarter of 2011. ◦ Each point in the chart between the two end points represents the end of a Quarter between December 31st, 2010, and December 31st, 2013. ◦ 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.

- **Breakdown Selection.** Select this option when you want to compare the values of the selected KPI Breakdown dimension.



Cluster Bar Chart View - Configure Component
○ Multi Selection ● Breakdown Selection

To select the breakdown KPIs to be displayed, double click them from the Active KPIs area

ALM-Rnd Director
ALM-Rnd Director(0)
Application Lifecycle Management
Application Lifecycle Management(0)
Cloud Server Automation
PMO
Project Portfolio Management
SM Director
Server Automation
Service Manager
Selected breakdown

Display Period: Current

History Period: Year to date

Maximum number of items: 15

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

UI Element	Description
<Search>	Enter the relevant string to display, in the tree, only the Metrics or KPIs (or Metric or KPI Breakdowns) whose name includes the string.

UI Element	Description
	In addition, the child KPIs or Metrics of the filtered items are also listed even when the child names do not include the string.
︾	**Advanced Search.** Opens additional fields to help you refine the component's filter: ◦ **Status:** Select one of the **All**, **Good**, **Warning**, **Critical**, or **No Data** values to display only the elements with the selected status, in the Active KPIs area. When you select **No Data**, the search returns only the elements with no data. ◦ **Type.** Select: • **All.** To display, in the tree, all the elements. • **KPIs.** To display, in the tree, only the KPIs. • **Objective.** To display in the tree, only the Objectives and their KPIs. • **Metrics.** To display, in the tree, only the Metrics. You can then select the relevant KPI or Metric Breakdown if any.
<Tree>	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. To select the item you want to display in the report, double-click it. It is then listed in the **Selected breakdown** box. To unselect the item, remove it from the **Selected breakdown** box.
Selected breakdown	The box lists the selected KPI or Metric Breakdown.
Display Period	Select the time period to display in the component: ◦ **Current**. The values of the selected Metrics or KPIs (**Multi Selection**) or KPIs or Metric Breakdown dimensions (**Breakdown Selection**) 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 **Multi Selection** or KPIs or Metric Breakdown dimensions (**Breakdown Selection**) whose calculation period has already completed according to the selected metrics or KPIs configured periodicity. ◦ **Yearly/Monthly/Quarterly/Weekly/Daily.** The list of time periods represents the longest periodicity configured for the selected Metrics or KPIs (**Multi Selection**) or KPIs or Metric Breakdown dimensions (**Breakdown Selection**). When you select **Yearly/Monthly/Quarterly/Weekly/Daily**, 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

UI Element	Description
	values of the Metrics or KPIs **Multi Selection** or KPIs or Metric Breakdown dimensions (**Breakdown Selection**) that have completed for the selected periods.
History Period	Select one of the following options: ◦ **Quarter to date.** The report's display period starts 3 months prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. ◦ **Half a year to date.** The report's display period starts 6 months prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. ◦ **Year to date.** The report's display period starts 1 year prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. ◦ **2 years to date.** The report's display period starts 2 years prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. ◦ **3 years to date.** The report's display period starts 3 years prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. **Note:** ◦ 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. **Example** If you select the 4th Quarter of 2013 in the **Display Period** field, and **3 years to date** in the **History Period** field, the rightmost point in the X-axis is the end of the 4th Quarter of 2013 (December 31st, 2013), and the leftmost point is the 4th Quarter of 2011. ◦ Each point in the chart between the two end points represents the end of a Quarter between December 31st, 2010, and December 31st, 2013. ◦ 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.

UI Element	Description
Maximum Number of Items	This field is displayed only when you select **Breakdown Selection**. Specify the number of KPI Breakdowns to display in the component.

The Forecast Component

The Forecast component provides a glimpse into the future by forecasting the entity future behavior, based on historical data, of the selected KPI or Metric, so you will be able more easily understand the underlying trend and to do all you can now to improve or maintain the desired behavior.

You can view the forecast of the upcoming future of the selected KPIs, or Metrics (for which you have permission), in a period of up to 1 year from the current period.

The Forecast component is enabled only when you have the **Forecast** permission. For details about permissions, see User Management in the *Administrator Guide*.

To access:

You can view the report in the relevant page in the Dashboard.

Learn More | Tasks | UI Description

Learn More

Calculation method for forecast

The correctness of the forecast calculation is based on the historical data of the entity and is calculated using the DoubleExponentialSmoothingModel algorithm. The more data there is the more precise the forecast is.

- $f_t = \alpha.Y_t+(1-\alpha)(f_{t-1}+b_{t-1})$
- $b_t = \gamma.(f_t-f_{t-1})+(1-\gamma).b_{t-1}$

where:

- Y_t is the observed value at time t.
- f_t is the forecast at time t.
- b_t is the estimated slope at time t.
- α - (alpha) - is the first smoothing constant, used to smooth the observations. Its value is: 0.6.

- γ - (gamma) - is the second smoothing constant, used to smooth the trend. Its value is: 0.6.

To forecast:

$f_{t+m} = f_t + mb_{t-m}$

where m=1 (The time interval).

The initial point is: $f_1=y_1$; $b_1=y_2-y_1$

Minimum historical data

The best forecasts are based on a large amount of historical data.

To provide the best forecast using the above algorithm, the calculation relies on as much historical data as is available. The following table indicates what are the minimum historical periods needed to calculate a certain future period.

Future Period	Minimum historical data to calculate single future period	Maximum period possible for this periodicity	Maximum historical data to calculate maximum future period
1 day	30 days	14 days	420 days
1 week	12 weeks	4 weeks	48 weeks
1 month	12 months	3 months	36 months
1 quarter	6 quarters	3 quarters	18 quarters
1 year	3 years	3 years	9 years

Limitations

If you select a forecast period that cannot be calculated due to the lack of data, the error message **You do not have enough valid historical data to calculate the forecast or you do not have the correct viewing permissions. Contact your administrator** is issued, and the forecast calculation is not performed. When the historical data is less than the value of the **Minimum historical data to calculate single future period**, the Forecast is not calculated.

So for a yearly KPI, only when the historical data is less than 3 years, there will be insufficient data to calculate a 3 years, 2 years, and 1 years forecast.

Wiring

Wiring. Wiring is between components. It does not depend on the component internal format. For details, see "Wiring Between Components" on page 429.

If you drill down (to Breakdowns) in a specific component that is wired to another component on the same page, and you click the triggering component, the component with the Breakdowns is restored to its top level and filtered according to the triggering component.

The Breakdown View component is automatically wired to the KPI View, Historical View, and KPI Rolodex component that appear on the same Dashboard page. This means, that when you select a KPI in the KPI View component, its KPI Breakdowns are listed in the Breakdown List and you can select to display the relevant one. You cannot configure the Breakdown View component.

The Historical View component is automatically wired to the Breakdown View component and to the Forecast component. For details, see "The Breakdown View Component" on page 230 and "The Forecast Component" on page 261.

Tasks

Main task: "Dashboard Display" on page 195

Add the Component to a Dashboard Page

To add a component to a page that is already formatted:

1. In the 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, click or double-click the component to place it in the layout area, or select the component and drag it to an area on the page.

   Note that double-click only works if you open the Component Gallery from the layout itself and not from the toolbar.

   - 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 page. For user interface details, see "Component Gallery and Component Categories" on page 223.
5. Make sure you add one of the components that is wired to the Forecast component to the Dashboard page. For details, see "Wiring Between Components" on page 429.
6. In the component Filter dialog box that opens, select the information you want to display and click **OK**.

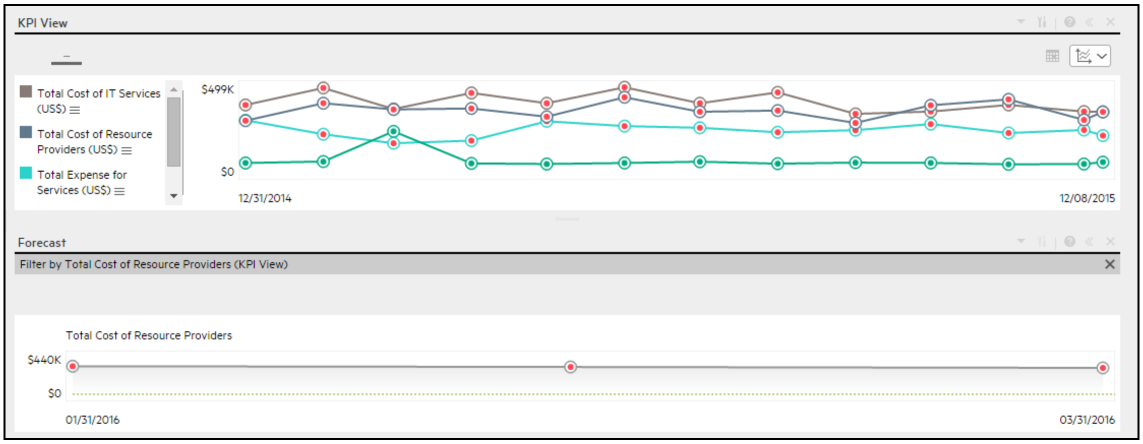
   The component displays the required information.

For more information, see "Page Layout and Components" on page 205.

UI Description

Forecast Component

In the example below, the Forecast component displays the forecast for the KPI selected in a Historical View component that is wired to the Forecast component.


KPI View
Total Cost of IT Services (US$)
Total Cost of Resource Providers (US$)
Total Expense for Services (US$)
$499K
$0
12/31/2014
12/08/2015
Forecast
Filter by Total Cost of Resource Providers (KPI View)
Total Cost of Resource Providers
$440K
$0
01/31/2016
03/31/2016

<Component Toolbar>

> **Note:** The component toolbar description is common to all components. Some of the elements might be disabled in some of the components.

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 **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 **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 "Wiring Between Components" on page 429. - Refresh **Refresh.** Refreshes the display. The button is disabled in the Page Filter component. - Open in a New Window **Open in a New Window**. Opens the component in a new window.
🛠	**Configure Component.** Opens the Configure Component dialog box for the relevant component. For details, see the relevant section below.

UI Element	Description
	Note: - The button is disabled in the Breakdown View component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired KPI View, Historical View, or Rolodex components, the Breakdown View component displays the values of the KPI Breakdown for the selected KPI. - The button is disabled in the Forecast component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired Historical View, the Forecast component displays the forecast data for the selected KPI. **Note:** You can also click **here** in **Click Here to configure it** in the center of the component
?	Opens the online documentation page relevant to the component you are currently configuring.
«	**Collapse component.** Collapses the component. To expand the collapsed component, click the ︾ button on the collapsed component.
‖	Drag the Resize handle to enlarge or reduce horizontally the area occupied by the component.
✕	**Remove Component.** Removes the component from the page.

<Graph area>

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

UI Element	Description
<Trend line>	The trend line shows the trend for the relevant time frame. It is calculated on the fly and as the linear function. The time frame depends on the periodicity specified when configuring the KPI or Metric:

<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr><td></td><td>
<table>
<tr><th>KPI or Metric Periodicity</th><th>Forecast time period</th></tr>
<tr><td>1 day</td><td>14 days</td></tr>
<tr><td>1 week</td><td>4 weeks</td></tr>
<tr><td>1 month</td><td>3 months</td></tr>
<tr><td>1 quarter</td><td>3 quarters</td></tr>
<tr><td>1 year</td><td>3 years</td></tr>
</table>
</td></tr>
<tr><td>**<Threshold>**</td><td>The thresholds of the item are displayed on the right of the component.
 </td></tr>
<tr><td>**<Y-axis>**</td><td>The Y-axis displays the values of the item in the relevant unit.</td></tr>
<tr><td>**<X-axis>**</td><td>The X-axis displays the time frame for the trend calculation, split into equal segments, depending on the Display Period.</td></tr>
</table>

The Historical Metric View Component

The Historical Metric View component displays the over time value and trend of the Metrics or the over time value, trend, status, and thresholds of the KPIs you selected in the Historical Metric View Component Filter.

To access:

You can view the report in the relevant page in the Dashboard.

To configure the component, where possible, click the **Configure Component** button in the component to display the component filter, or click **here** in **Click Here to configure** in the center of the component.

Learn More **Tasks** **UI Description**

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).
- **Permissions.** In the Dashboard components and in their configuration dialog boxes, you can only see the Scorecards, Perspectives, Objectives, KPIs, or KPI Breakdowns for which you have permission. If you do not have permission, you do not see that element. If you do not have permission to see all the elements in a component, the error message **Data is not displayed because it does not exist or you do not have the correct viewing permissions. Contact your administrator** is displayed.

Tasks

Main task: "Dashboard Display" on page 195

Add the Component to a Dashboard Page

To add a component to a page that is already formatted:

1. In the 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, click or double-click the component to place it in the layout area, or select the component and drag it to an area on the page.

   Note that double-click only works if you open the Component Gallery from the layout itself and not from the toolbar.

   - 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 page. For user interface details, see "Component Gallery and Component Categories" on page 223.
5. In the component, click the **Configure Component** button or click **here** in **Click Here to configure** in the center of the component.
6. In the component Filter dialog box that opens, select the information you want to display and click **OK**.

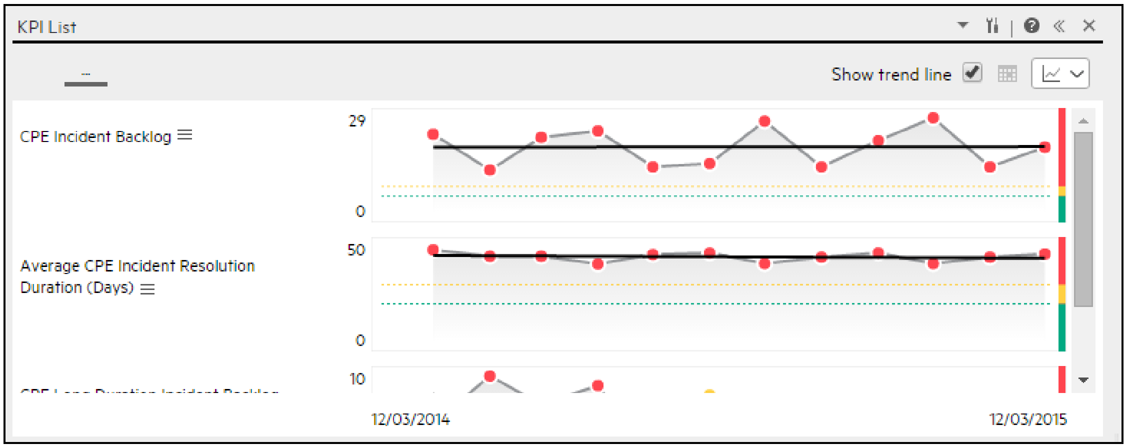
   The component displays the required information.

For more information, see "Page Layout and Components" on page 205.

Display the trend line

In the Historical Metric View component:

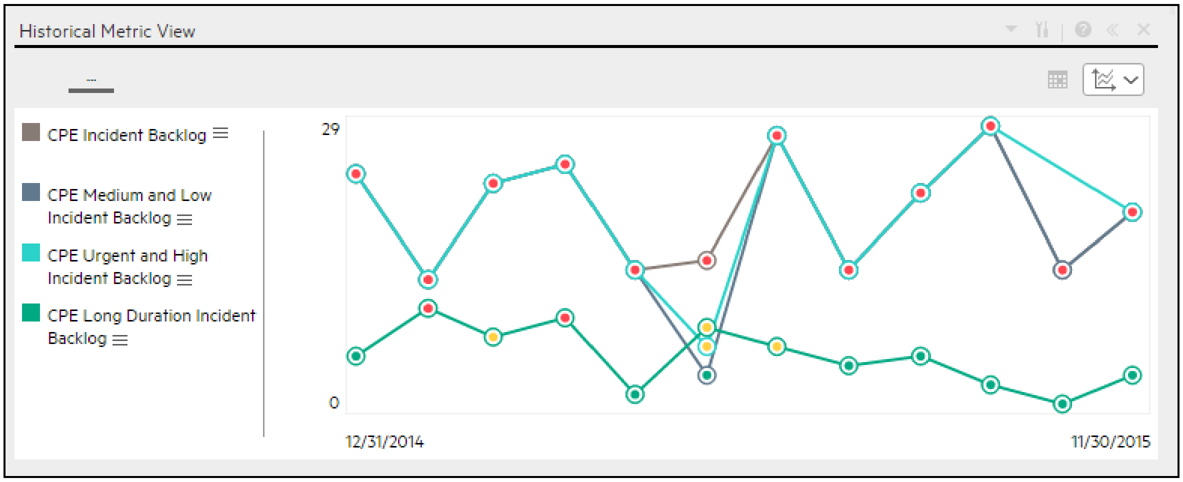
1. Make sure that the format of the component display is single line format .
2. Click Show trend line ☐.
3. Select one of the Metrics.
4. The trend line shows the trend for the relevant time frame.



UI Description

Historical Metric View Component (Display) Dialog Box

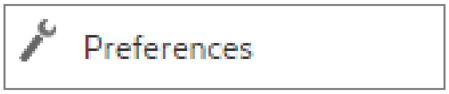
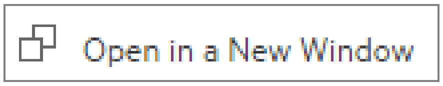
The component displays the over time value, trend, status of the KPIs or metrics you selected in the Historical Metric View Component Filter.


Historical Metric View
CPE Incident Backlog
CPE Medium and Low Incident Backlog
CPE Urgent and High Incident Backlog
CPE Long Duration Incident Backlog
29
0
12/31/2014
11/30/2015

Component Toolbar

> **Note:** The component toolbar description is common to all components. Some of the elements might be disabled in some of the components.

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

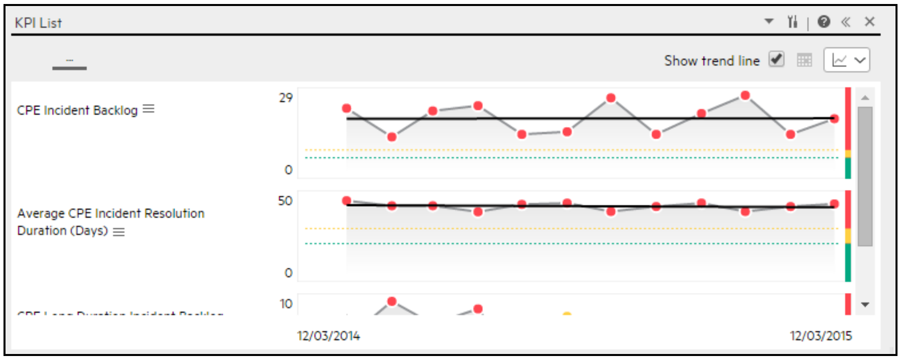
UI Element	Description
▾	**Component Menu.** Opens a menu where you can select: -  **Preferences.** Depending on the component you are current configuring, opens the **<component_name> Preferences** dialog box where you can change the name of the component in the page by changing the name in the **Name** 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 "Wiring Between Components" on page 429. - **Refresh.** Refreshes the display. The button is disabled in the Page Filter component. -  **Open in a New Window**. Opens the component in a new window.

UI Element	Description
🛠	**Configure Component.** Opens the Configure Component dialog box for the relevant component. For details, see the relevant section below. **Note:** • The button is disabled in the Breakdown View component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired KPI View, Historical View, or Rolodex components, the Breakdown View component displays the values of the KPI Breakdown for the selected KPI. • The button is disabled in the Forecast component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired Historical View, the Forecast component displays the forecast data for the selected KPI. **Note:** You can also click **here** in **Click Here to configure it** in the center of the component
?	Opens the online documentation page relevant to the component you are currently configuring.
«	**Collapse component.** Collapses the component. To expand the collapsed component, click the ︾ button on the collapsed component.
▯	Drag the Resize handle to enlarge or reduce horizontally the area occupied by the component.
✕	**Remove Component.** Removes the component from the page.

<Component Contents>

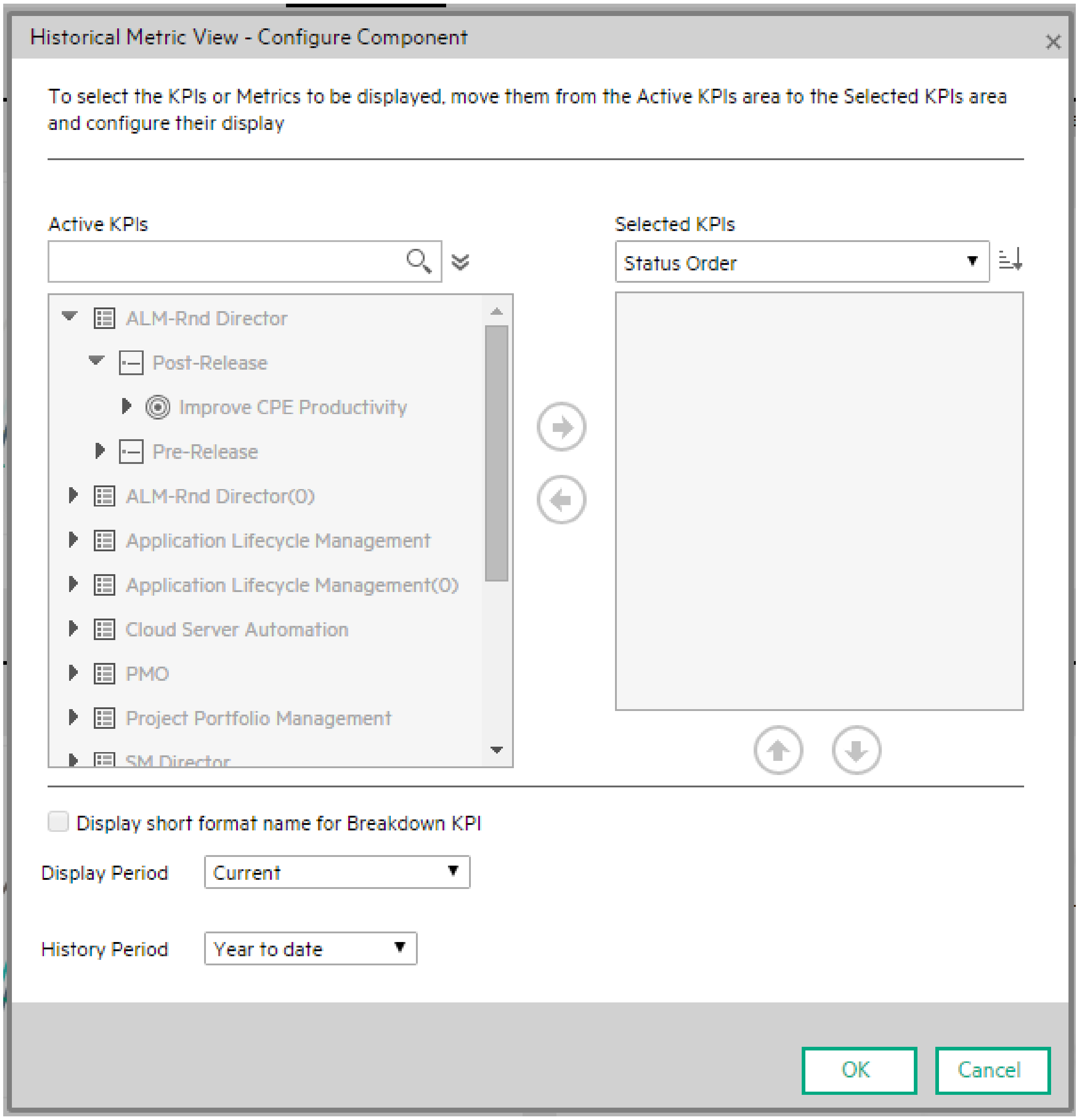
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

> **Note:** Some of the graphs below display thresholds. When the selected item is a Metric (that does not have thresholds), the graph displays the data without the threshold element.

UI Element	Description
▦	Enables the on-demand periodicity temporary recalculation and display. For details, see On-demand Periodicity in Component Display.
Show trend line ☐	Only available in single line format. Select the button to display the trend line for the relevant time frame.  KPI List Show trend line ☑ CPE Incident Backlog 29 0 Average CPE Incident Resolution Duration (Days) 50 0 10 12/03/2014 12/03/2015
<Display format>	You can modify the format of the display of some of the components on the fly, by selecting the relevant format. Some of the formats are not applicable to some of the components. The formats you can select are: - - To display the contents of the component using the enriched vertical column format. For details, see Column Format. - - To display the contents of the component using the horizontal Rolodex or gauge format. For details, see Rolodex - Gauge format. - - To display the content using the multiple line format. For details, see Multiple or single line format. - - To display the content using the pie format. For details, see Pie format. - - To display the content using the bar format. For details, see Bar format - - To display the content using the horizontal enriched column format. For details, see Column format. - - To display the content using the vertical Rolodex or gauge format. For details, see Rolodex - Gauge format. - - To display the content using the single line graph format. For details, see Multiple or single line format. - - To display the content using the cluster bar format. For details, see Cluster Bar format.

UI Element	Description
	• 📊 - To display the content using the stacked bar format. For details, see Stacked Bar format. • 📈 - To display the content using the bar and line format. For details, see Bar and Line format. • ⁘ - To display the content using the bubble chart format. For details, see Bubble Chart format. • ☰ - To display the content using the list format. For details, see List format. For details, see On-the-fly Display Format Change in Dashboard Page Components.

Historical Metric View - Configure Component Filter Dialog Box



Historical Metric View - Configure Component

To select the KPIs or Metrics to be displayed, move them from the Active KPIs area to the Selected KPIs area and configure their display

Selected KPIs: Status Order

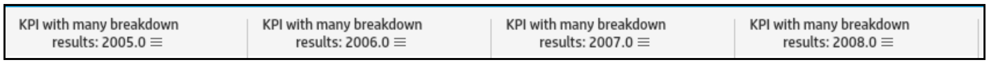
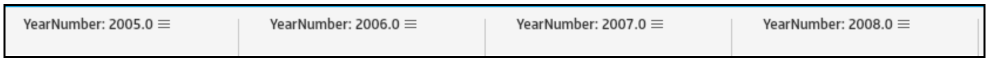
☐ Display short format name for Breakdown KPI

Display Period: Current

History Period: Year to date

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

UI Element	Description
🔍	Enter the relevant string to display, in the tree, only the Metrics and the KPIs with a name that includes the string. In addition, the child Metrics of the filtered Metrics are also listed even when the child Metric names do not include the string.
︾	**Advanced Search.** Opens additional fields to help you refine the component's filter: • **Status:** Select one of the **All**, **Good**, **Warning**, **Critical**, or **No Data** values to display only the elements with the selected status, in the Active KPIs area. When you select **No Data**, the search returns only the elements with no data. • **Type:** Select: ◦ **All.** To display all the elements in the tree with the selected Status. ◦ **KPI.** To display only the KPIs with the selected status. ◦ **Metric.** To display a list of all the Metrics (the Status is changed to **All**). If you had selected a value in Status, and then you select **Metric**, then the Status field is changed to **All** and becomes inaccessible. ◦ **Objective.**To display only the Objectives with the selected status, and their KPIs.
Active KPIs	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. To select or deselect 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.
Selected KPIs	The right-side box lists all the selected KPIs or metrics that you want to display in the component. To select or deselect 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.
<Status sort>	Select : • **Alphabetical sort** to sort the selected elements in alphabetical order. You can then click the icon to the right of the box to select the reverse order. Depending on the selection, the icon can be one of the following: ⇅. • **Status sort** to sort the selected elements according to their status (for example: KPIs with the **Critical** status, followed by KPIs with a **Warning** status, and then KPIs with a **Good** status). • **Manual sort** to sort the selected elements manually using the ⬆ ⬇ buttons. The buttons are available only when you select **Manual sort**.

UI Element	Description
Display short format name for KPI Breakdown	**Note:** - You can select this option only when KPI/Metric 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 parent KPI followed by the names of the entity and dimension you selected when you created it. In the Dashboard components, this can cause problems because the complete name of the KPI Breakdown is not displayed.  KPI with many breakdown results: 2005.0 ≡ | KPI with many breakdown results: 2006.0 ≡ | KPI with many breakdown results: 2007.0 ≡ | KPI with many breakdown results: 2008.0 ≡ To display, in the component, only the name of the entity and dimension instead of the complete name of the KPI Breakdown: 1. Move the relevant KPI/Metric 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**. The component display shows the short names of the KPI/Metric Breakdowns. A tooltip displays the full name of the KPI Breakdowns.  YearNumber: 2005.0 ≡ | YearNumber: 2006.0 ≡ | YearNumber: 2007.0 ≡ | YearNumber: 2008.0 ≡ For details on KPI Breakdowns, see "KPI Breakdowns" on page 163.
Display Period	Select the time period to be displayed in the component: - **Current**. The values of the last calculations if the results were received during the current period. For KPIs/Metrics with incomplete calculations, 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/Daily.** 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/Daily**, 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.
History Period	Select one of the following options: - **Quarter to date.** The report's display period starts 3 months prior to the current

UI Element	Description
	date or prior to the selected year, month, quarter, week, or day in the **Display Period**. - **Half a year to date.** The report's display period starts 6 months prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. - **Year to date.** The report's display period starts 1 year prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. - **2 years to date.** The report's display period starts 2 years prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. - **3 years to date.** The report's display period starts 3 years prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. **Note:** - 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. **Example** If you select the 4th Quarter of 2013 in the **Display Period** field, and **3 years to date** in the **History Period** field, the rightmost point in the X-axis is the end of the 4th Quarter of 2013 (December 31st, 2013), and the leftmost point is the 4th Quarter of 2011. - Each point in the chart between the two end points represents the end of a Quarter between December 31st, 2010, and December 31st, 2013. - 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.

The Historical View Component

The Historical View component displays the over time value, trend, status, and threshold of the KPIs or the over time value and trend of the Metric you selected in the Historical View - Configure Component dialog box.

To access:

You can view the report in the relevant page in the Dashboard.

To configure the component, where possible, click the **Configure Component** button in the component to display the component filter, or click **here** in **Click Here to configure** in the center of the component.

Learn More | Tasks | UI Description

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).
- **Permissions.** In the Dashboard components and in their configuration dialog boxes, you can only see the Scorecards, Perspectives, Objectives, KPIs, or KPI Breakdowns for which you have permission. If you do not have permission, you do not see that element. If you do not have permission to see all the elements in a component, the error message **Data is not displayed because it does not exist or you do not have the correct viewing permissions. Contact your administrator** is displayed.

Wiring to other components

The Historical View component is automatically wired to the Breakdown View component. For details, see "The Breakdown View Component" on page 230.

Wiring. Wiring is between components. It does not depend on the component internal format. For details, see "Wiring Between Components" on page 429.

If you drill down (to Breakdowns) in a specific component that is wired to another component on the same page, and you click the triggering component, the component with the Breakdowns is restored to its top level and filtered according to the triggering component.

The Breakdown View component is automatically wired to the KPI View, Historical View, and KPI Rolodex component that appear on the same Dashboard page. This means, that when you select a KPI in the KPI View component, its KPI Breakdowns are listed in the Breakdown List and you can select to display the relevant one. You cannot configure the Breakdown View component.

The Historical View component is automatically wired to the Breakdown View component and to the Forecast component. For details, see "The Breakdown View Component" on page 230 and "The Forecast Component" on page 261.

Tasks

Main task: "Dashboard Display" on page 195

Add the Component to a Dashboard Page

To add a component to a page that is already formatted:

1. In the 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, click or double-click the component to place it in the layout area, or select the component and drag it to an area on the page.

   Note that double-click only works if you open the Component Gallery from the layout itself and not from the toolbar.

   - 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 page. For user interface details, see "Component Gallery and

Component Categories" on page 223.

5. In the component, click the **Configure Component** button or click **here** in **Click Here to configure** in the center of the component.
6. In the component Filter dialog box that opens, select the information you want to display and click **OK**.

   The component displays the required information.

For more information, see "Page Layout and Components" on page 205.

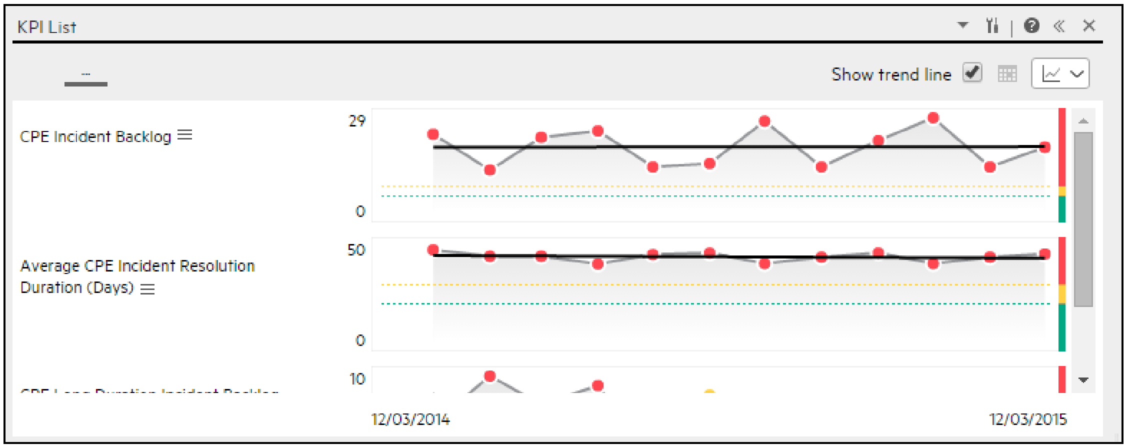
Display the trend line

In the Historical View component or in any of the following components configured to single line format:

- KPI Rolodex Component
- The Breakdown View Component
- The Bubble Chart View Component
- The Cluster Bar Chart View Component
- The Line and Bar Chart View Component
- The Historical Metric View Component
- The Historical View Component
- The KPI List Component
- The KPI View Component
- The Pie Chart Component
- The Stacked Bar Chart View Component

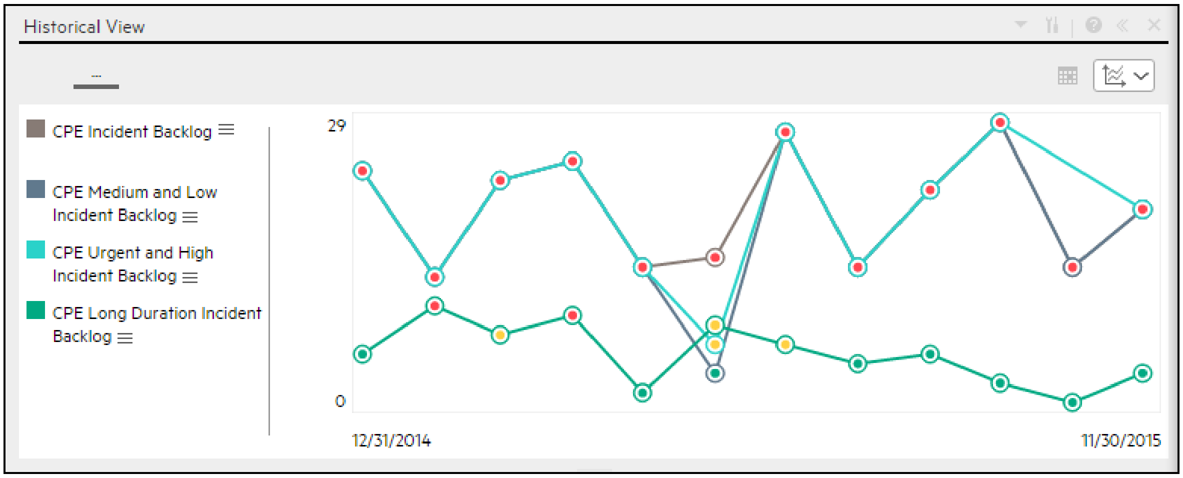
1. Make sure that the format of the component display is single line format .
2. Click Show trend line ☐.
3. Select one of the KPIs.

4. The trend line shows the trend for the relevant time frame.



UI Description

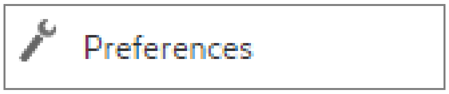
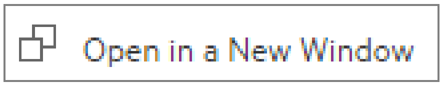
Historical View Component


Historical View
CPE Incident Backlog
CPE Medium and Low Incident Backlog
CPE Urgent and High Incident Backlog
CPE Long Duration Incident Backlog
29
0
12/31/2014
11/30/2015

Component Toolbar

> **Note:** The component toolbar description is common to all components. Some of the elements might be disabled in some of the components.

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

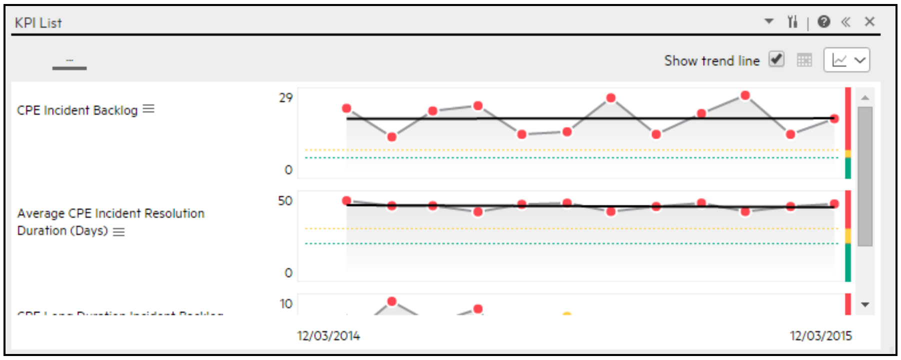
UI Element	Description
▾	**Component Menu.** Opens a menu where you can select: -  **Preferences.** Depending on the component you are current configuring, opens the **<component_name> Preferences** dialog box where you can change the name of the component in the page by changing the name in the **Name** 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 "Wiring Between Components" on page 429. - **Refresh.** Refreshes the display. The button is disabled in the Page Filter component. -  **Open in a New Window**. Opens the component in a new window.
	Configure Component. Opens the Configure Component dialog box for the relevant component. For details, see the relevant section below. **Note:** - The button is disabled in the Breakdown View component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired KPI View, Historical View, or Rolodex components, the Breakdown View component displays the values of the KPI Breakdown for the selected KPI. - The button is disabled in the Forecast component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired Historical View, the Forecast component displays the forecast data for the selected KPI. **Note:** You can also click **here** in **Click Here to configure it** in the center of the component

UI Element	Description
?	Opens the online documentation page relevant to the component you are currently configuring.
«	**Collapse component.** Collapses the component. To expand the collapsed component, click the ︾ button on the collapsed component.
▯	Drag the Resize handle to enlarge or reduce horizontally the area occupied by the component.
✕	**Remove Component.** Removes the component from the page.

<Component Contents>

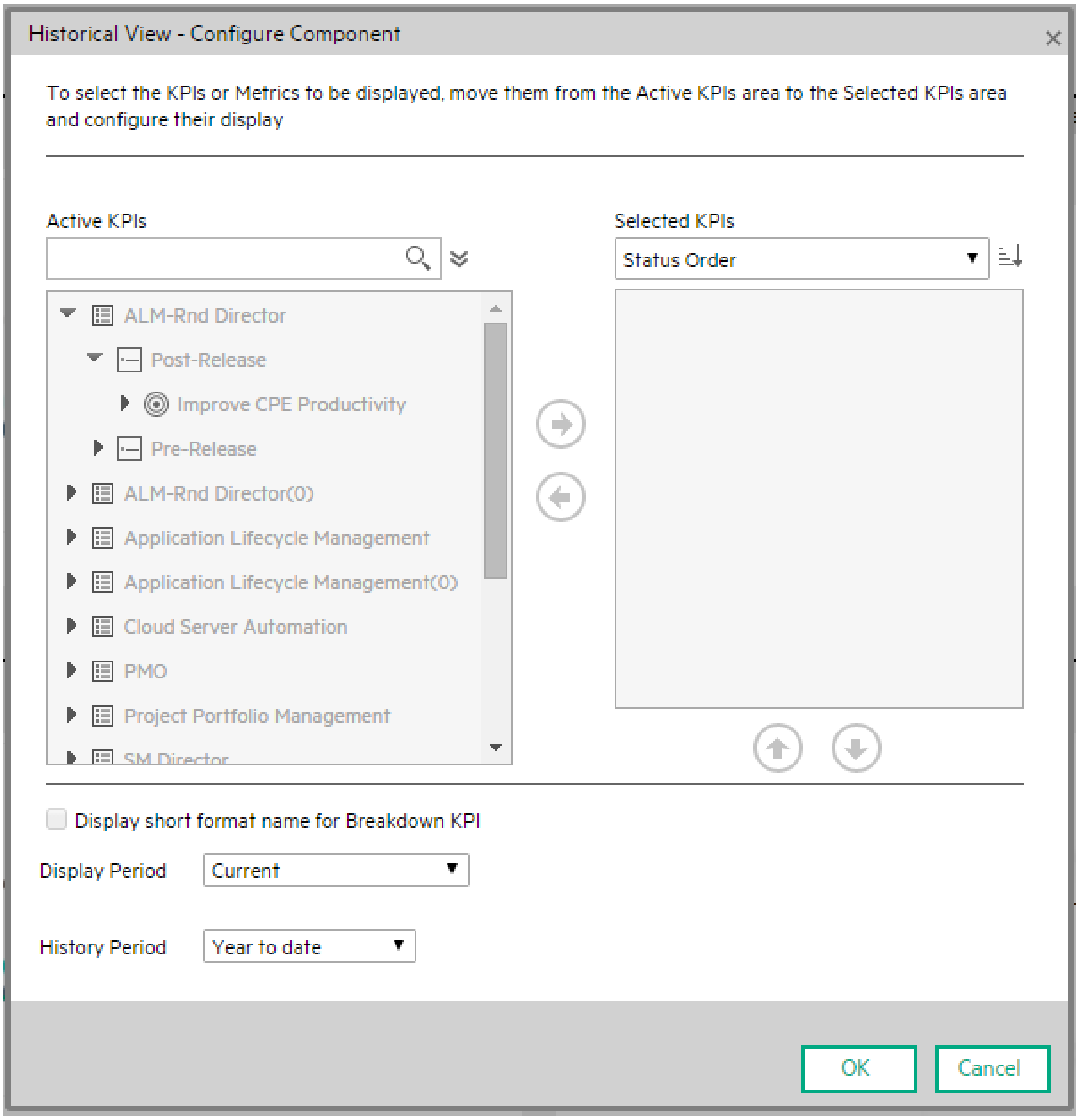
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

> **Note:** Some of the graphs below display thresholds. When the selected item is a Metric (that does not have thresholds), the graph displays the data without the threshold element.

UI Element	Description
▦	Enables the on-demand periodicity temporary recalculation and display. For details, see On-demand Periodicity in Component Display.
Show trend line ☐	Only available in single line format. Select the button to display the trend line for the relevant time frame.  KPI List Show trend line CPE Incident Backlog 29 0 Average CPE Incident Resolution Duration (Days) 50 0 10 12/03/2014 12/03/2015
<Display format> ⫯ ⌄	You can modify the format of the display of some of the components on the fly, by selecting the relevant format. Some of the formats are not applicable to some of the components.

UI Element	Description
	The formats you can select are: • - To display the contents of the component using the enriched vertical column format. For details, see Column Format. • - To display the contents of the component using the horizontal Rolodex or gauge format. For details, see Rolodex - Gauge format. • - To display the content using the multiple line format. For details, see Multiple or single line format. • - To display the content using the pie format. For details, see Pie format. • - To display the content using the bar format. For details, see Bar format • - To display the content using the horizontal enriched column format. For details, see Column format. • - To display the content using the vertical Rolodex or gauge format. For details, see Rolodex - Gauge format. • - To display the content using the single line graph format. For details, see Multiple or single line format. • - To display the content using the cluster bar format. For details, see Cluster Bar format. • - To display the content using the stacked bar format. For details, see Stacked Bar format. • - To display the content using the bar and line format. For details, see Bar and Line format. • - To display the content using the bubble chart format. For details, see Bubble Chart format. • - To display the content using the list format. For details, see List format. For details, see On-the-fly Display Format Change in Dashboard Page Components.

Historical View - Configure Component Dialog Box



Historical View - Configure Component

To select the KPIs or Metrics to be displayed, move them from the Active KPIs area to the Selected KPIs area and configure their display

Selected KPIs: Status Order

☐ Display short format name for Breakdown KPI

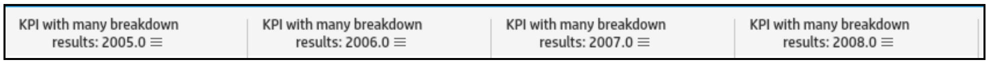
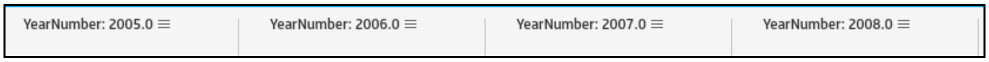
Display Period: Current

History Period: Year to date

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

UI Element	Description
🔍	Enter the relevant string to display, in the tree, only the KPIs whose name includes the

UI Element	Description
	string. In addition, the child KPIs of the filtered KPIs are also listed even when the child KPIs names do not include the string.
︾	**Advanced Search.** Opens additional fields to help you refine the component's filter: - **Status:** Select one of the **All**, **Good**, **Warning**, **Critical**, or **No Data** values to display only the elements with the selected status, in the Active KPIs area. When you select **No Data**, the search returns only the elements with no data. - **Type:** Select: ○ **All.** To display all the elements in the tree with the selected status. ○ **KPI.** To display only the KPIs with the selected status. ○ **Objective.**To display only the Objectives with the selected status, and their KPIs.
Active KPIs	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 and KPI Breakdowns are highlighted. To select or deselect 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.
Selected KPIs	The right-side box lists all the selected KPIs that you want to display in the component. To select or deselect 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.
<Status sort>	Select : - **Alphabetical sort** to sort the selected elements in alphabetical order. You can then click the icon to the right of the box to select the reverse order. Depending on the selection, the icon can be one of the following: ⇡⇣. - **Status sort** to sort the selected elements according to their status (for example: KPIs with the **Critical** status, followed by KPIs with a **Warning** status, and then KPIs with a **Good** status). - **Manual sort** to sort the selected elements manually using the ⬆ ⬇ buttons. The buttons are available only when you select **Manual sort**.
⇡⇣	Click to display the KPIs in ascending or descending alphabetical order.
Display short	**Note:**

UI Element	Description
format name for KPI Breakdown	- You can select this option only when KPI/Metric 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 parent KPI followed by the names of the entity and dimension you selected when you created it. In the Dashboard components, this can cause problems because the complete name of the KPI Breakdown is not displayed.  KPI with many breakdown results: 2005.0 ≡ KPI with many breakdown results: 2006.0 ≡ KPI with many breakdown results: 2007.0 ≡ KPI with many breakdown results: 2008.0 ≡ To display, in the component, only the name of the entity and dimension instead of the complete name of the KPI Breakdown: 1. Move the relevant KPI/Metric 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**. The component display shows the short names of the KPI/Metric Breakdowns. A tooltip displays the full name of the KPI Breakdowns.  YearNumber: 2005.0 ≡ YearNumber: 2006.0 ≡ YearNumber: 2007.0 ≡ YearNumber: 2008.0 ≡ For details on KPI Breakdowns, see "KPI Breakdowns" on page 163.
Display Period	Select the time period to be displayed in the component: - **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 **History 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 period that is the longest from all the selected KPIs periods is displayed as an additional option near the Display Period field. **Example** If one of the selected KPI 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 KPI values, statuses, and scores were calculated by the engine. **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

UI Element	Description
	list is independent from the selected KPIs. - **Last Closed.** The values of only the KPIs whose calculation period has completed for the time period selected in the **History Period** list.
History Period	Select one of the following options: - **Quarter to date.** The report's display period starts 3 months prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. - **Half a year to date.** The report's display period starts 6 months prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. - **Year to date.** The report's display period starts 1 year prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. - **2 years to date.** The report's display period starts 2 years prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. - **3 years to date.** The report's display period starts 3 years prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. **Note:** - 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. **Example** If you select the 4th Quarter of 2013 in the **Display Period** field, and **3 years to date** in the **History Period** field, the rightmost point in the X-axis is the end of the 4th Quarter of 2013 (December 31st, 2013), and the leftmost point is the last day of the 4th Quarter of 2010 (December 31st, 2010). - Each point in the chart between the two end points represents the end of a Quarter between December 31st, 2010, and December 31st, 2013. - 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.

The KPI List Component

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.

To configure the component, where possible, click the **Configure Component** button in the component to display the component filter, or click **here** in **Click Here to configure** in the center of the component.

Learn More | Tasks | UI Description

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).
- **Permissions.** In the Dashboard components and in their configuration dialog boxes, you can only see the Scorecards, Perspectives, Objectives, KPIs, or KPI Breakdowns for which you have permission. If you do not have permission, you do not see that element. If you do not have permission to see all the elements in a component, the error message **Data is not displayed because it does not exist or you do not have the correct viewing permissions. Contact your administrator** is displayed.

Tasks

Main task: "Dashboard Display" on page 195

Add the Component to a Dashboard Page

To add a component to a page that is already formatted:

1. In the 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, click or double-click the component to place it in the layout area, or select the component and drag it to an area on the page.

   Note that double-click only works if you open the Component Gallery from the layout itself and not from the toolbar.

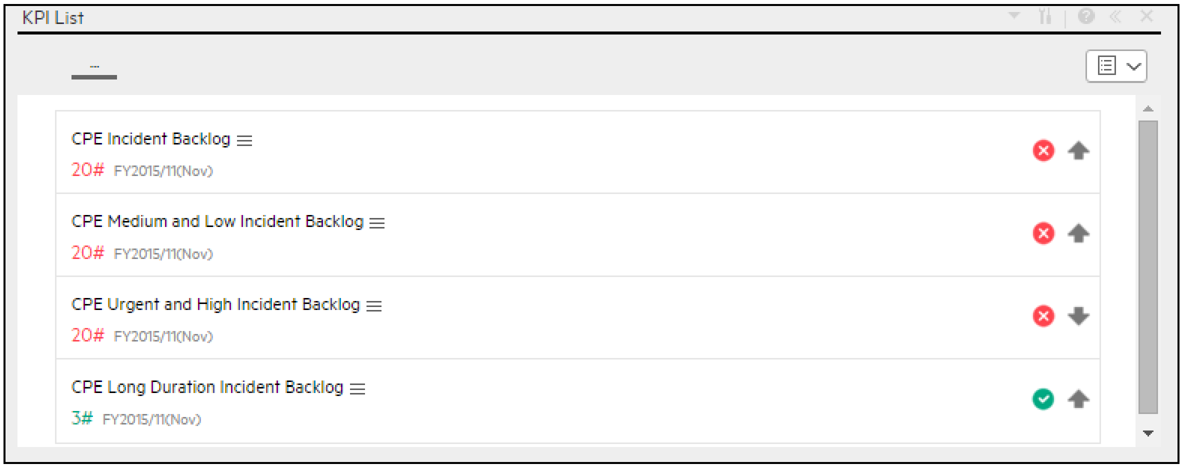
   - If the target area is hidden by the Component Gallery dialog box, click the Component Gallery dialog box title bar and drag it to another location on your screen.
   - If you are dragging a new component to a target area that already has a component defined, drag the new component to the title bar of the target area, and not to the part of the component that is colored white.
4. Close the Component Gallery page. For user interface details, see "Component Gallery and Component Categories" on page 223.
5. In the component, click the **Configure Component** button or click **here** in **Click Here to configure** in the center of the component.
6. In the component Filter dialog box that opens, select the information you want to display and click **OK**.

   The component displays the required information.

For more information, see "Page Layout and Components" on page 205.

UI Description

KPI List Component



KPI List

CPE Incident Backlog
20# FY2015/11(Nov)

CPE Medium and Low Incident Backlog
20# FY2015/11(Nov)

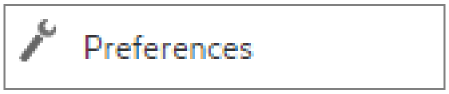
CPE Urgent and High Incident Backlog
20# FY2015/11(Nov)

CPE Long Duration Incident Backlog
3# FY2015/11(Nov)

Component Toolbar

> **Note:** The component toolbar description is common to all components. Some of the elements might be disabled in some of the components.

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

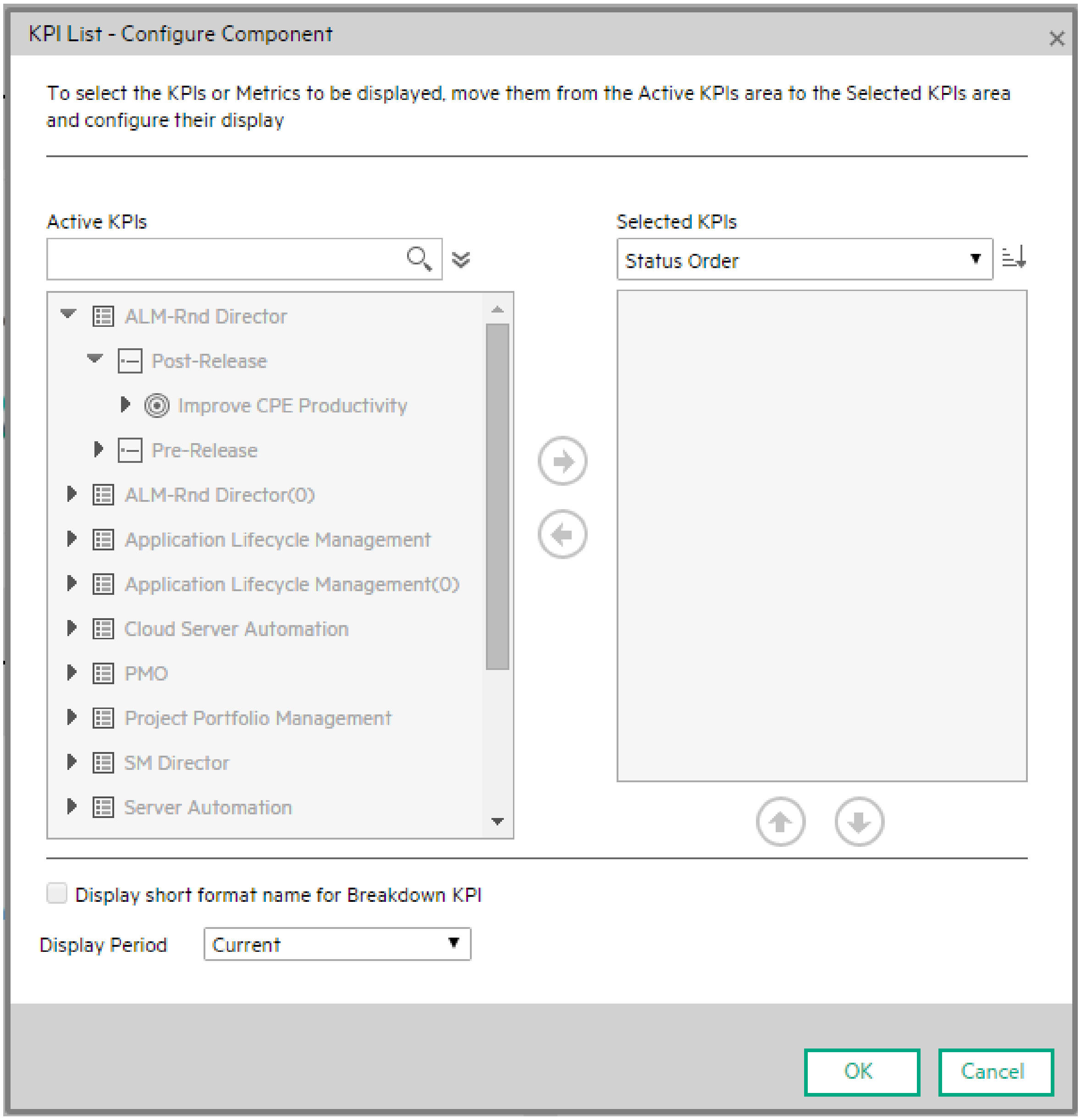
UI Element	Description
	details, see "Wiring Between Components" on page 429. - ⟳ Refresh **Refresh.** Refreshes the display. The button is disabled in the Page Filter component. - ⧉ Open in a New Window **Open in a New Window**. Opens the component in a new window.
🛠	**Configure Component.** Opens the Configure Component dialog box for the relevant component. For details, see the relevant section below. **Note:** - The button is disabled in the Breakdown View component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired KPI View, Historical View, or Rolodex components, the Breakdown View component displays the values of the KPI Breakdown for the selected KPI. - The button is disabled in the Forecast component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired Historical View, the Forecast component displays the forecast data for the selected KPI. **Note:** You can also click **here** in **Click Here to configure it** in the center of the component
?	Opens the online documentation page relevant to the component you are currently configuring.
«	**Collapse component.** Collapses the component. To expand the collapsed component, click the ⌄ button on the collapsed component.
▯	Drag the Resize handle to enlarge or reduce horizontally the area occupied by the 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
<Display format>	You can modify the format of the display of some of the components on the fly, by selecting the relevant format. Some of the formats are not applicable to some of the components. The formats you can select are: • - To display the contents of the component using the enriched vertical column format. For details, see Column Format. • - To display the contents of the component using the horizontal Rolodex or gauge format. For details, see Rolodex - Gauge format. • - To display the content using the multiple line format. For details, see Multiple or single line format. • - To display the content using the pie format. For details, see Pie format. • - To display the content using the bar format. For details, see Bar format • - To display the content using the horizontal enriched column format. For details, see Column format. • - To display the content using the vertical Rolodex or gauge format. For details, see Rolodex - Gauge format. • - To display the content using the single line graph format. For details, see Multiple or single line format. • - To display the content using the cluster bar format. For details, see Cluster Bar format. • - To display the content using the stacked bar format. For details, see Stacked Bar format. • - To display the content using the bar and line format. For details, see Bar and Line format. • - To display the content using the bubble chart format. For details, see Bubble Chart format. • - To display the content using the list format. For details, see List format. For details, see On-the-fly Display Format Change in Dashboard Page Components.

KPI List - Configure Component Dialog Box



KPI List - Configure Component

To select the KPIs or Metrics to be displayed, move them from the Active KPIs area to the Selected KPIs area and configure their display

Status Order

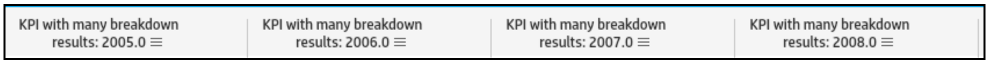
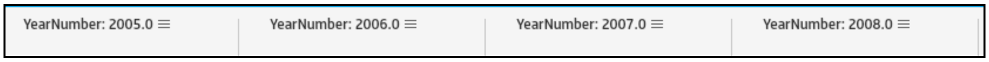
☐ Display short format name for Breakdown KPI

Display Period: Current

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

UI Element	Description
<Search>	Enter the relevant string to display, in the tree, only the KPIs whose name includes the

UI Element	Description
	string. In addition, the child KPIs of the filtered KPIs are also listed even when the child KPIs names do not include the string.
︾	**Advanced Search.** Opens additional fields to help you refine the component's filter: • **Status:** Select one of the **All**, **Good**, **Warning**, **Critical**, or **No Data** values to display only the elements with the selected status, in the Active KPIs area. When you select **No Data**, the search returns only the elements with no data. • **Type:** Select: ○ **All.** To display all the elements in the tree with the selected Status. ○ **KPI.** To display only the KPIs with the selected status. ○ **Metric.** To display a list of all the Metrics (the Status is changed to **All**). If you had selected a value in Status, and then you select **Metric**, then the Status field is changed to **All** and becomes inaccessible. ○ **Objective.**To display only the Objectives with the selected status, and their KPIs.
Active KPIs	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. To select or deselect 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.
Selected KPIs	The right-side box lists all the selected KPIs that you want to display in the component. To select or deselect 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.
<Status sort>	Select : • **Alphabetical sort** to sort the selected elements in alphabetical order. You can then click the icon to the right of the box to select the reverse order. Depending on the selection, the icon can be one of the following: ↑↓. • **Status sort** to sort the selected elements according to their status (for example: KPIs with the **Critical** status, followed by KPIs with a **Warning** status, and then KPIs with a **Good** status). • **Manual sort** to sort the selected elements manually using the ⬆ ⬇ buttons. The buttons are available only when you select **Manual sort**.

UI Element	Description
⇅	Click to display the KPIs in ascending or descending alphabetical order.
Display short format name for KPI Breakdown	**Note:** • 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 parent KPI followed by the names of the entity and dimension you selected when you created it. In the Dashboard components, this can cause problems because the complete name of the KPI Breakdown is not displayed.  KPI with many breakdown results: 2005.0 ≡ KPI with many breakdown results: 2006.0 ≡ KPI with many breakdown results: 2007.0 ≡ KPI with many breakdown results: 2008.0 ≡ To display, in the component, only the name of the entity and dimension instead of the complete name of the KPI Breakdown: 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**. The component display shows the short names of the KPI Breakdowns. A tooltip displays the full name of the KPI Breakdowns.  YearNumber: 2005.0 ≡ YearNumber: 2006.0 ≡ YearNumber: 2007.0 ≡ YearNumber: 2008.0 ≡ For details on KPI Breakdowns, see "KPI Breakdowns" on page 163.
Display Period	Select the time period to be displayed in the component: • **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. • **<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

UI Element	Description
	completed.

The KPI Rolodex Component

The KPI Rolodex component displays the value, trend, and status of the selected KPIs or the value and trend of the selected Metrics for the measurement period in gauge format.

The KPI Rolodex component is automatically wired to the Breakdown View component. For details, see "The Breakdown View Component" on page 230.

To access:

You can view the report in the relevant page in the Dashboard.

To configure the component, where possible, click the **Configure Component** button in the component to display the component filter, or click **here** in **Click Here to configure** in the center of the component.

Learn More | Tasks | UI Description

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).
- **Permissions.** In the Dashboard components and in their configuration dialog boxes, you can only see the Scorecards, Perspectives, Objectives, KPIs, or KPI Breakdowns for which you have permission. If you do not have permission, you do not see that element. If you do not have permission to see all the elements in a component, the error message **Data is not displayed because it does not exist or you do not have the correct viewing permissions. Contact your administrator** is displayed.

Wiring to other components

The KPI Rolodex component is automatically wired to the Breakdown View component. For details, see "The Breakdown View Component" on page 230.

Wiring. Wiring is between components. It does not depend on the component internal format. For details, see "Wiring Between Components" on page 429.

If you drill down (to Breakdowns) in a specific component that is wired to another component on the same page, and you click the triggering component, the component with the Breakdowns is restored to its top level and filtered according to the triggering component.

The Breakdown View component is automatically wired to the KPI View, Historical View, and KPI Rolodex component that appear on the same Dashboard page. This means, that when you select a KPI in the KPI View component, its KPI Breakdowns are listed in the Breakdown List and you can select to display the relevant one. You cannot configure the Breakdown View component.

The Historical View component is automatically wired to the Breakdown View component and to the Forecast component. For details, see "The Breakdown View Component" on page 230 and "The Forecast Component" on page 261.

Tasks

Main task: "Dashboard Display" on page 195

Add the Component to a Dashboard Page

To add a component to a page that is already formatted:

1. In the 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, click or double-click the component to place it in the layout area, or select the component and drag it to an area on the page.

   Note that double-click only works if you open the Component Gallery from the layout itself and not from the toolbar.

   - 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.

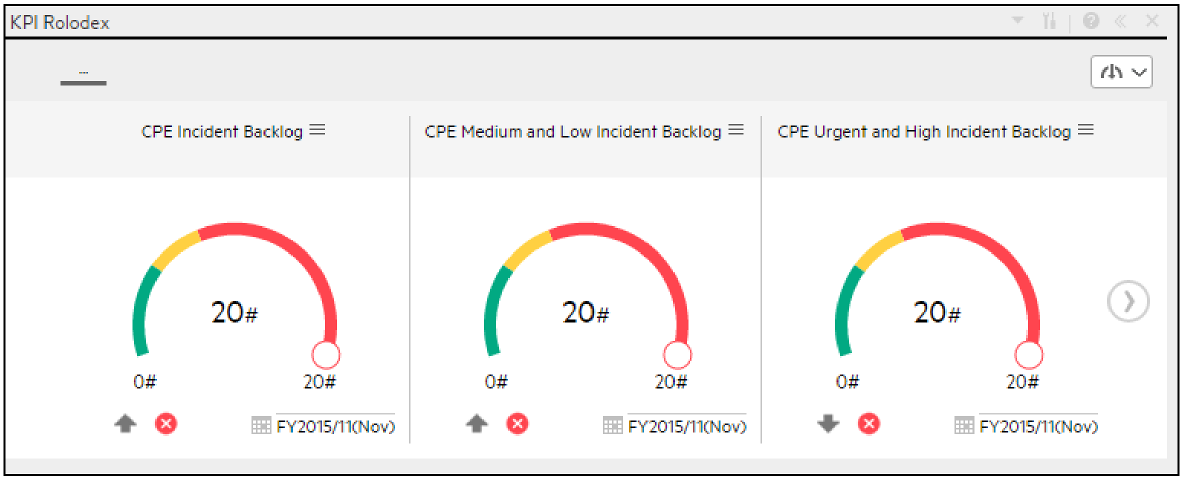
4. Close the Component Gallery page. For user interface details, see "Component Gallery and Component Categories" on page 223.
5. In the component, click the **Configure Component** button or click **here** in **Click Here to configure** in the center of the component.
6. In the component Filter dialog box that opens, select the information you want to display and click **OK**.

   The component displays the required information.

For more information, see "Page Layout and Components" on page 205.

UI Description

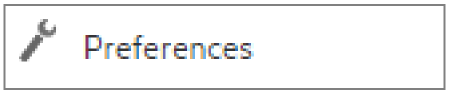
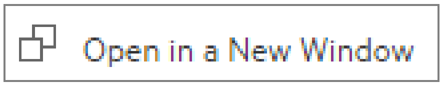
KPI Rolodex Component



Component Toolbar

> **Note:** The component toolbar description is common to all components. Some of the elements might be disabled in some of the components.

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

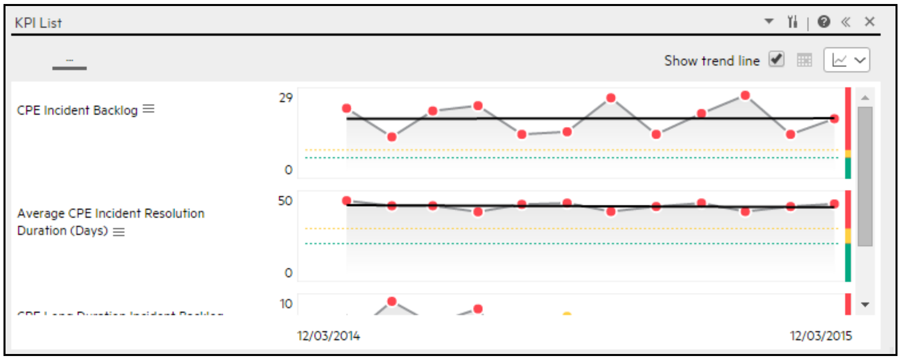
UI Element	Description
▾	**Component Menu.** Opens a menu where you can select: -  **Preferences.** Depending on the component you are current configuring, opens the **<component_name> Preferences** dialog box where you can change the name of the component in the page by changing the name in the **Name** 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 "Wiring Between Components" on page 429. - **Refresh.** Refreshes the display. The button is disabled in the Page Filter component. -  **Open in a New Window**. Opens the component in a new window.
	Configure Component. Opens the Configure Component dialog box for the relevant component. For details, see the relevant section below. **Note:** - The button is disabled in the Breakdown View component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired KPI View, Historical View, or Rolodex components, the Breakdown View component displays the values of the KPI Breakdown for the selected KPI. - The button is disabled in the Forecast component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired Historical View, the Forecast component displays the forecast data for the selected KPI. **Note:** You can also click **here** in **Click Here to configure it** in the center of the component

UI Element	Description
❓	Opens the online documentation page relevant to the component you are currently configuring.
«	**Collapse component.** Collapses the component. To expand the collapsed component, click the ⌄ button on the collapsed component.
▯	Drag the Resize handle to enlarge or reduce horizontally the area occupied by the component.
✕	**Remove Component.** Removes the component from the page.

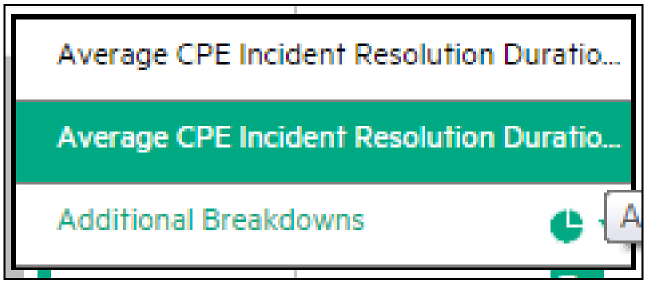
<Component Contents>

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

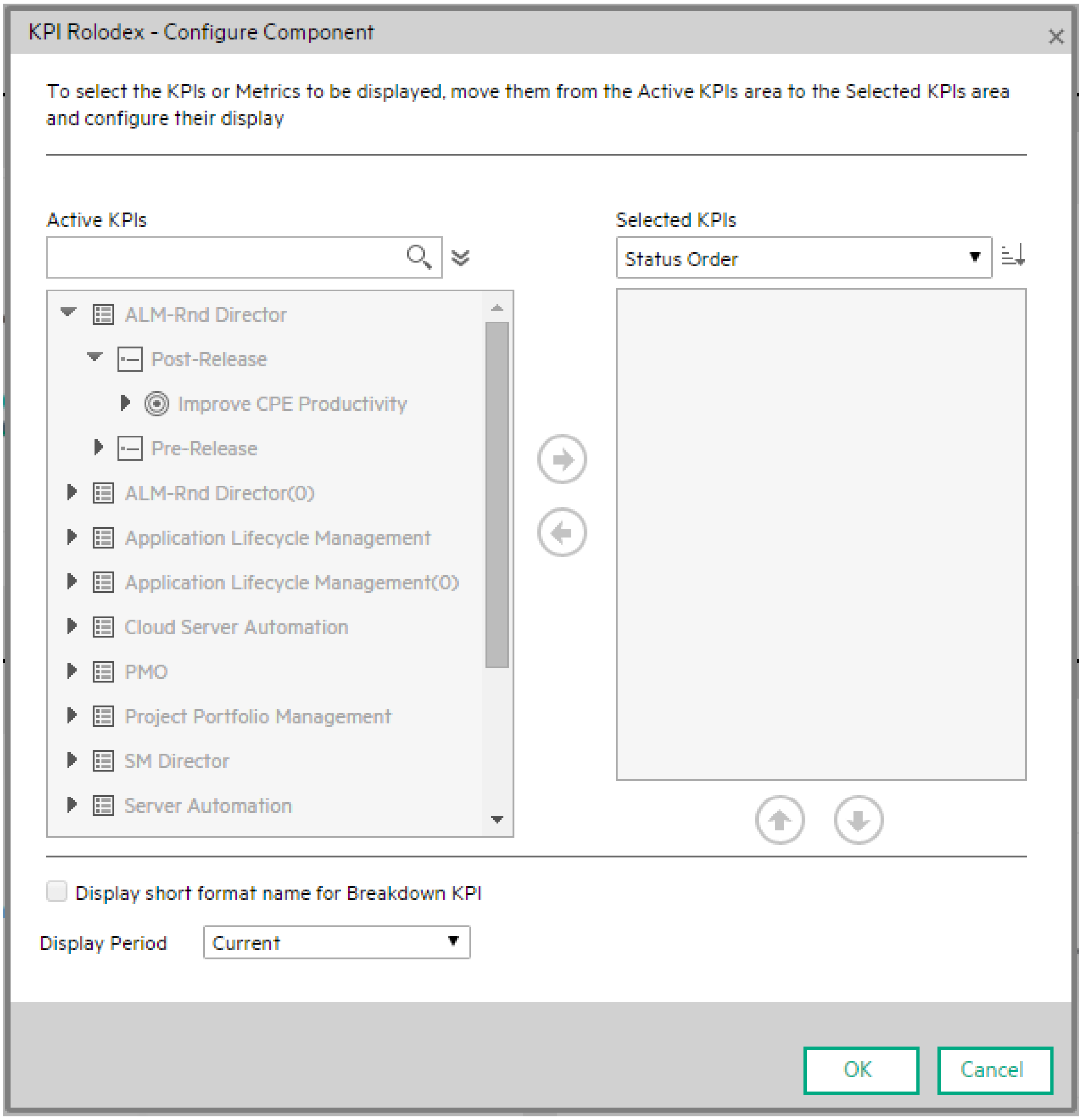
> **Note:** Some of the graphs below display thresholds. When the selected item is a Metric (that does not have thresholds), the graph displays the data without the threshold element.

UI Element	Description
▦	Enables the on-demand periodicity temporary recalculation and display. For details, see On-demand Periodicity in Component Display.
Show trend line ☐	Only available in single line format. Select the button to display the trend line for the relevant time frame.  KPI List Show trend line CPE Incident Backlog 29 0 Average CPE Incident Resolution Duration (Days) 50 0 10 12/03/2014 12/03/2015
<Display format>	You can modify the format of the display of some of the components on the fly, by selecting the relevant format. Some of the formats are not applicable to some of the components.

UI Element	Description
	The components for which you can modify the display format on-the-fly are: • KPI Rolodex Component • The Breakdown View Component • The Bubble Chart View Component • The Cluster Bar Chart View Component • The Line and Bar Chart View Component • The Historical Metric View Component • The Historical View Component • The KPI List Component • The KPI View Component • The Pie Chart Component • The Stacked Bar Chart View Component The formats you can select are: • - To display the contents of the component using the enriched vertical column format. For details, see Column Format. • - To display the contents of the component using the horizontal Rolodex or gauge format. For details, see Rolodex - Gauge format. • - To display the content using the multiple line format. For details, see Multiple or single line format. • - To display the content using the pie format. For details, see Pie format. • - To display the content using the bar format. For details, see Bar format • - To display the content using the horizontal enriched column format. For details, see Column format. • - To display the content using the vertical Rolodex or gauge format. For details, see Rolodex - Gauge format. • - To display the content using the single line graph format. For details, see Multiple or single line format. • - To display the content using the cluster bar format. For details, see Cluster Bar format. • - To display the content using the stacked bar format. For details, see Stacked Bar format.

UI Element	Description
	• 📊 - To display the content using the bar and line format. For details, see Bar and Line format. • ⁘ - To display the content using the bubble chart format. For details, see Bubble Chart format. • ☰ - To display the content using the list format. For details, see List format. For details, see On-the-fly Display Format Change in Dashboard Page Components.
<Breakdowns>	The cursor changes from an arrow to a hand indicates that the displayed item has a Breakdown. Click the displayed item to list the available Breakdowns:  Average CPE Incident Resolution Duratio... Average CPE Incident Resolution Duratio... Additional Breakdowns Click the relevant Breakdown to display its information using the same format as its parent. You can then select another format by selecting it from the **<Display format>** list. For details, see "Change, On-Demand, the Breakdown Display" on page 484.

KPI Rolodex - Configure Component Dialog Box



KPI Rolodex - Configure Component

To select the KPIs or Metrics to be displayed, move them from the Active KPIs area to the Selected KPIs area and configure their display

Selected KPIs: Status Order

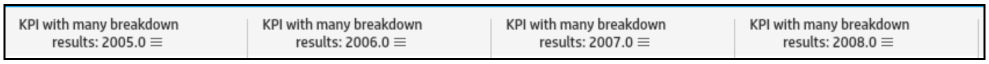
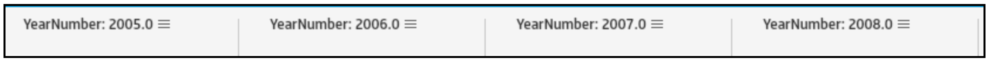
☐ Display short format name for Breakdown KPI

Display Period: Current

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

UI Element	Description
🔍	Enter the relevant string to display, in the tree, only the KPIs whose name includes the

UI Element	Description
	string. In addition, the child KPIs of the filtered KPIs are also listed even when the child KPIs names do not include the string.
︾	**Advanced Search.** Opens additional fields to help you refine the component's filter: • **Status:** Select one of the **All**, **Good**, **Warning**, **Critical**, or **No Data** values to display only the elements with the selected status, in the Active KPIs area. When you select **No Data**, the search returns only the elements with no data. • **Type:** Select either **KPIs** or **Objectives** to display: ◦ Only the KPIs with the selected status. ◦ The Objectives and those of their KPIs that have the selected status.
Active KPIs	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. To select or deselect 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.
Selected KPIs	The right-side box lists all the selected KPIs that you want to display in the KPI Overtime report. To select or deselect 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.
<Status sort>	Select : • **Alphabetical sort** to sort the selected elements in alphabetical order. You can then click the icon to the right of the box to select the reverse order. Depending on the selection, the icon can be one of the following: ⇅. • **Status sort** to sort the selected elements according to their status (for example: KPIs with the **Critical** status, followed by KPIs with a **Warning** status, and then KPIs with a **Good** status). • **Manual sort** to sort the selected elements manually using the ⬆ ⬇ buttons. The buttons are available only when you select **Manual sort**.
⇅	Click to display the KPIs in ascending or descending alphabetical order.
Display short format	**Note:** • You can select this option only when KPI Breakdowns have been defined and

UI Element	Description
name for KPI Breakdown	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 parent KPI followed by the names of the entity and dimension you selected when you created it. In the Dashboard components, this can cause problems because the complete name of the KPI Breakdown is not displayed.  KPI with many breakdown results: 2005.0 ≡ KPI with many breakdown results: 2006.0 ≡ KPI with many breakdown results: 2007.0 ≡ KPI with many breakdown results: 2008.0 ≡ To display, in the component, only the name of the entity and dimension instead of the complete name of the KPI Breakdown: 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**. The component display shows the short names of the KPI Breakdowns. A tooltip displays the full name of the KPI Breakdowns.  YearNumber: 2005.0 ≡ YearNumber: 2006.0 ≡ YearNumber: 2007.0 ≡ YearNumber: 2008.0 ≡ For details on KPI Breakdowns, see "KPI Breakdowns" on page 163.
Display Period	Select the time period to be displayed in the component: - **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. - **<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.

The KPI View Component

The KPI View component displays the list of selected KPIs or Metrics and their value, trend, and status for the measurement period in horizontal or vertical bar or gauge format.

The KPI View component is automatically wired to the Breakdown View component. For details, see "The Breakdown View Component" on page 230.

To access:

You can view the report in the relevant page in the Dashboard.

To configure the component, where possible, click the **Configure Component** button in the component to display the component filter, or click **here** in **Click Here to configure** in the center of the component.

Learn More | Tasks | UI Description

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).
- **Permissions.** In the Dashboard components and in their configuration dialog boxes, you can only see the Scorecards, Perspectives, Objectives, KPIs, or KPI Breakdowns for which you have permission. If you do not have permission, you do not see that element. If you do not have permission to see all the elements in a component, the error message **Data is not displayed because it does not exist or you do not have the correct viewing permissions. Contact your administrator** is displayed.

Wiring to other components

The KPI View component is automatically wired to the Breakdown View component. For details, see "The Breakdown View Component" on page 230

Wiring. Wiring is between components. It does not depend on the component internal format. For details, see "Wiring Between Components" on page 429.

If you drill down (to Breakdowns) in a specific component that is wired to another component on the same page, and you click the triggering component, the component with the Breakdowns is restored to its top level and filtered according to the triggering component.

The Breakdown View component is automatically wired to the KPI View, Historical View, and KPI Rolodex component that appear on the same Dashboard page. This means, that when you select a KPI in the KPI View component, its KPI Breakdowns are listed in the Breakdown List and you can select to display the relevant one. You cannot configure the Breakdown View component.

The Historical View component is automatically wired to the Breakdown View component and to the Forecast component. For details, see "The Breakdown View Component" on page 230 and "The Forecast Component" on page 261.

Tasks

Main task: "Dashboard Display" on page 195

Add the Component to a Dashboard Page

To add a component to a page that is already formatted:

1. In the 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, click or double-click the component to place it in the layout area, or select the component and drag it to an area on the page.

   Note that double-click only works if you open the Component Gallery from the layout itself and not from the toolbar.

   - 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 page. For user interface details, see "Component Gallery and Component Categories" on page 223.

5. In the component, click the **Configure Component** button or click **here** in **Click Here to configure** in the center of the component.

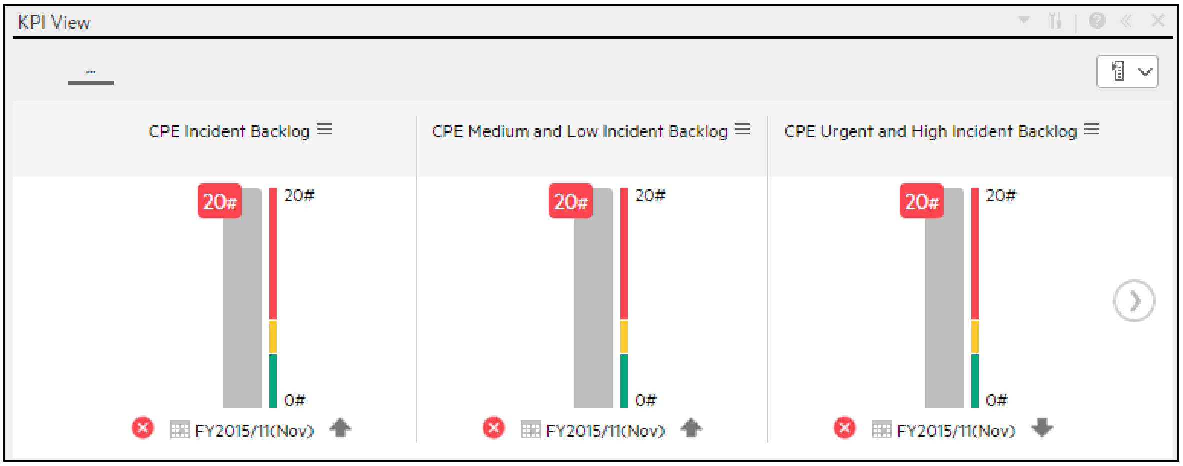
6. In the component Filter dialog box that opens, select the information you want to display and click **OK**.

   The component displays the required information.

For more information, see "Page Layout and Components" on page 205.

UI Description

KPI View Component

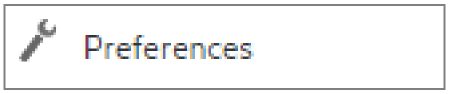
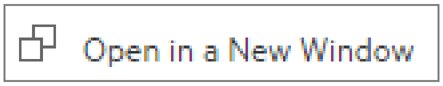


> **Note:** This component is wired, by default, with the Page Filter component. For details, see "The Page Filter Component" on page 333.

Component Toolbar

> **Note:** The component toolbar description is common to all components. Some of the elements might be disabled in some of the components.

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

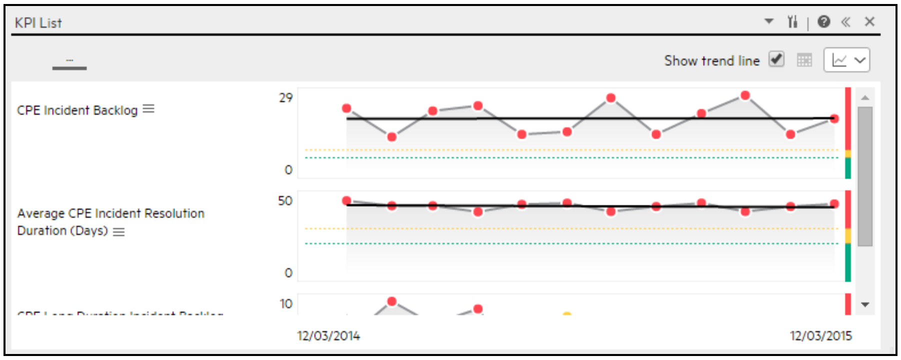
UI Element	Description
▾	**Component Menu.** Opens a menu where you can select: •  **Preferences.** Depending on the component you are current configuring, opens the **<component_name> Preferences** dialog box where you can change the name of the component in the page by changing the name in the **Name** 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 "Wiring Between Components" on page 429. • **Refresh.** Refreshes the display. The button is disabled in the Page Filter component. •  **Open in a New Window**. Opens the component in a new window.
	Configure Component. Opens the Configure Component dialog box for the relevant component. For details, see the relevant section below. **Note:** • The button is disabled in the Breakdown View component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired KPI View, Historical View, or Rolodex components, the Breakdown View component displays the values of the KPI Breakdown for the selected KPI. • The button is disabled in the Forecast component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired Historical View, the Forecast component displays the forecast data for the selected KPI.

UI Element	Description
	> **Note:** You can also click **here** in **Click Here to configure it** in the center of the component
❓	Opens the online documentation page relevant to the component you are currently configuring.
«	**Collapse component.** Collapses the component. To expand the collapsed component, click the ︾ button on the collapsed component.
▯	Drag the Resize handle to enlarge or reduce horizontally the area occupied by the component.
✕	**Remove Component.** Removes the component from the page.

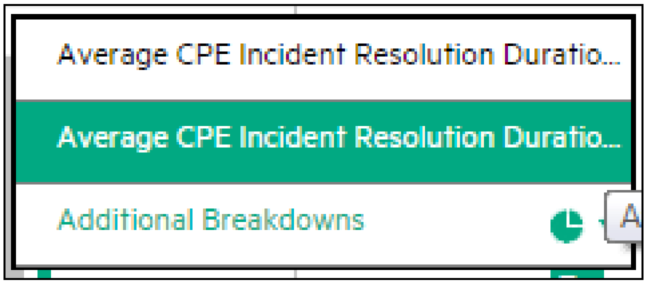
<Component Contents>

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

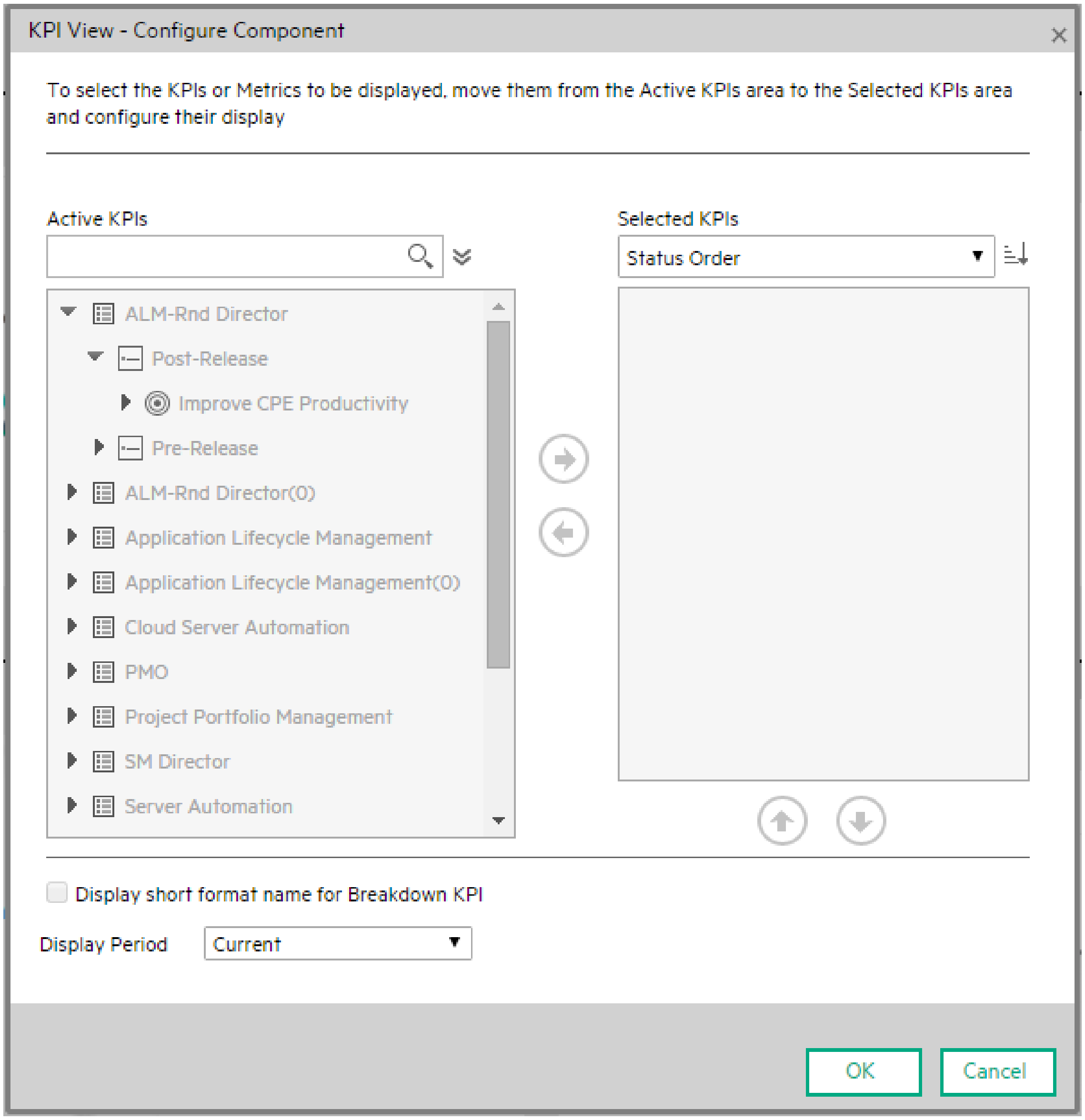
> **Note:** Some of the graphs below display thresholds. When the selected item is a Metric (that does not have thresholds), the graph displays the data without the threshold element.

UI Element	Description
▦	Enables the on-demand periodicity temporary recalculation and display. For details, see On-demand Periodicity in Component Display.
Show trend line ☐	Only available in single line format. Select the button to display the trend line for the relevant time frame.  KPI List Show trend line ☑ CPE Incident Backlog 29 0 Average CPE Incident Resolution Duration (Days) 50 0 10 12/03/2014 12/03/2015

UI Element	Description
<Display format>	You can modify the format of the display of some of the components on the fly, by selecting the relevant format. Some of the formats are not applicable to some of the components. The formats you can select are: - - To display the contents of the component using the enriched vertical column format. For details, see Column Format. - - To display the contents of the component using the horizontal Rolodex or gauge format. For details, see Rolodex - Gauge format. - - To display the content using the multiple line format. For details, see Multiple or single line format. - - To display the content using the pie format. For details, see Pie format. - - To display the content using the bar format. For details, see Bar format - - To display the content using the horizontal enriched column format. For details, see Column format. - - To display the content using the vertical Rolodex or gauge format. For details, see Rolodex - Gauge format. - - To display the content using the single line graph format. For details, see Multiple or single line format. - - To display the content using the cluster bar format. For details, see Cluster Bar format. - - To display the content using the stacked bar format. For details, see Stacked Bar format. - - To display the content using the bar and line format. For details, see Bar and Line format. - - To display the content using the bubble chart format. For details, see Bubble Chart format. - - To display the content using the list format. For details, see List format. For details, see On-the-fly Display Format Change in Dashboard Page Components.
<Breakdowns>	The cursor changes from an arrow to a hand indicates that the displayed item

UI Element	Description
	has a Breakdown. Click the displayed item to list the available Breakdowns:  Average CPE Incident Resolution Duratio... Average CPE Incident Resolution Duratio... Additional Breakdowns Click the relevant Breakdown to display its information using the same format as its parent. You can then select another format by selecting it from the **<Display format>** list. For details, see "Change, On-Demand, the Breakdown Display" on page 484.

KPI View - Configure Component Dialog Box

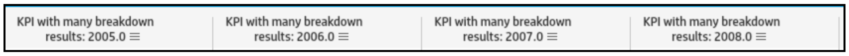
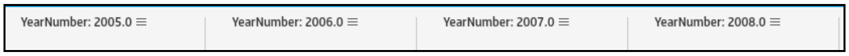


KPI View - Configure Component
To select the KPIs or Metrics to be displayed, move them from the Active KPIs area to the Selected KPIs area and configure their display
Active KPIs
ALM-Rnd Director
Post-Release
Improve CPE Productivity
Pre-Release
ALM-Rnd Director(0)
Application Lifecycle Management
Application Lifecycle Management(0)
Cloud Server Automation
PMO
Project Portfolio Management
SM Director
Server Automation
Selected KPIs
Status Order
☐ Display short format name for Breakdown KPI
Display Period
Current
OK
Cancel

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

UI Element	Description
<Search>	Enter the relevant string to display, in the tree in the Active KPIs box, only the KPIs whose name includes the string.

UI Element	Description
	In addition, the child KPIs of the filtered KPIs are also listed even when the child KPIs names do not include the string.
︾	**Advanced Search.** Opens additional fields to help you refine the component's filter: • **Status:** Select one of the **All**, **Good**, **Warning**, **Critical**, or **No Data** values to display only the elements with the selected status, in the Active KPIs area. When you select **No Data**, the search returns only the elements with no data. • **Type:** Select: ○ **All.** To display all the elements in the tree with the selected Status. ○ **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	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. To select or deselect 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.
Selected KPIs	The right-side box lists all the selected KPIs that you want to display in the KPI Overtime report. To select or deselect 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.
<Status sort>	Select : • **Alphabetical sort** to sort the selected elements in alphabetical order. You can then click the icon to the right of the box to select the reverse order. Depending on the selection, the icon can be one of the following: ⇅|⇵. • **Status sort** to sort the selected elements according to their status (for example: KPIs with the **Critical** status, followed by KPIs with a **Warning** status, and then KPIs with a **Good** status). • **Manual sort** to sort the selected elements manually using the ⬆ ⬇ buttons. The buttons are available only when you select

UI Element	Description
	Manual sort.
↑|↓	Click to display the KPIs in ascending or descending alphabetical order.
Display short format name for KPI Breakdown	**Note:** - 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 parent KPI followed by the names of the entity and dimension you selected when you created it. In the Dashboard components, this can cause problems because the complete name of the KPI Breakdown is not displayed.  KPI with many breakdown results: 2005.0 ≡ KPI with many breakdown results: 2006.0 ≡ KPI with many breakdown results: 2007.0 ≡ KPI with many breakdown results: 2008.0 ≡ To display, in the component, only the name of the entity and dimension instead of the complete name of the KPI Breakdown: 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**. The component display shows the short names of the KPI Breakdowns. A tooltip displays the full name of the KPI Breakdowns.  YearNumber: 2005.0 ≡ YearNumber: 2006.0 ≡ YearNumber: 2007.0 ≡ YearNumber: 2008.0 ≡ For details on KPI Breakdowns, see "KPI Breakdowns" on page 163.
Display Period	Select the time period to be displayed in the component: - **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. - **<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

UI Element	Description
	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.

The Line and Bar Combination Chart View Component

The Line and Bar Combination Chart View component displays the list of selected KPIs or Metrics, and their value, trend, and status for the measurement period in line and bar format, by default.

To access:

You can view the report in the relevant page in the Dashboard.

To configure the component, where possible, click the **Configure Component** button in the component to display the component filter, or click **here** in **Click Here to configure** in the center of the component.

Learn More | Tasks | UI Description

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).

- **Permissions.** In the Dashboard components and in their configuration dialog boxes, you can only see the Scorecards, Perspectives, Objectives, KPIs, or KPI Breakdowns for which you have permission. If you do not have permission, you do not see that element. If you do not have permission to see all the elements in a component, the error message **Data is not displayed because it does not exist or you do not have the correct viewing permissions. Contact your administrator** is displayed.

Tasks

Main task: "Dashboard Display" on page 195

Add the Component to a Dashboard Page

To add a component to a page that is already formatted:

1. In the 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, click or double-click the component to place it in the layout area, or select the component and drag it to an area on the page.

   Note that double-click only works if you open the Component Gallery from the layout itself and not from the toolbar.

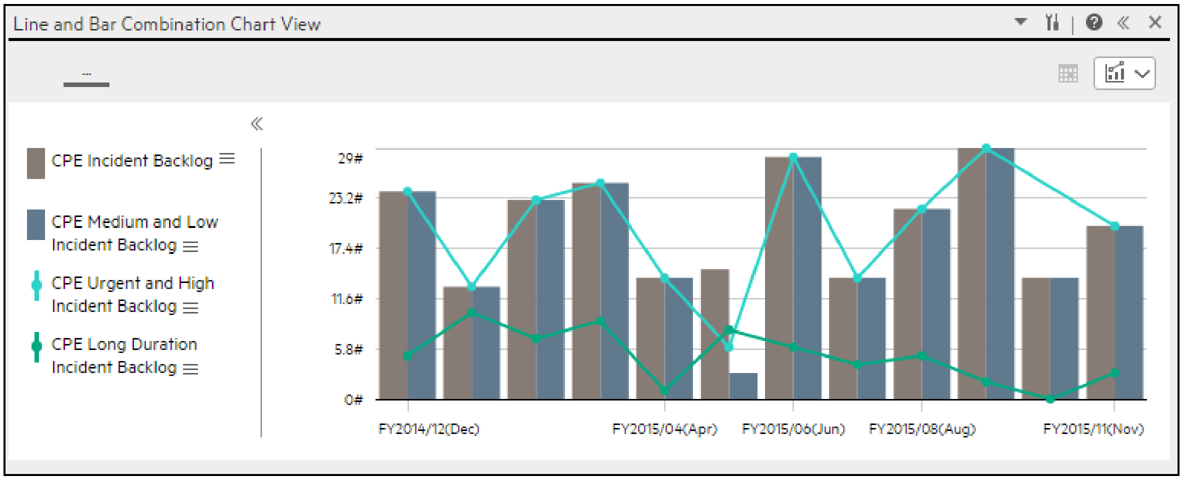
   - If the target area is hidden by the Component Gallery dialog box, click the Component Gallery dialog box title bar and drag it to another location on your screen.
   - If you are dragging a new component to a target area that already has a component defined, drag the new component to the title bar of the target area, and not to the part of the component that is colored white.
4. Close the Component Gallery page. For user interface details, see "Component Gallery and Component Categories" on page 223.
5. In the component, click the **Configure Component** button or click **here** in **Click Here to configure** in the center of the component.
6. In the component Filter dialog box that opens, select the information you want to display and click **OK**.

   The component displays the required information.

For more information, see "Page Layout and Components" on page 205.

UI Description

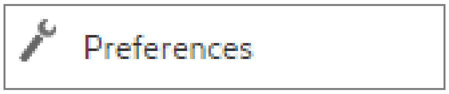
Line and Bar Combination Chart View Component


Line and Bar Combination Chart View
CPE Incident Backlog
CPE Medium and Low Incident Backlog
CPE Urgent and High Incident Backlog
CPE Long Duration Incident Backlog
29#
23.2#
17.4#
11.6#
5.8#
0#
FY2014/12(Dec)
FY2015/04(Apr)
FY2015/06(Jun)
FY2015/08(Aug)
FY2015/11(Nov)

Component Toolbar

> **Note:** The component toolbar description is common to all components. Some of the elements might be disabled in some of the components.

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

UI Element	Description
	where you can wire the current component to other components. For details, see "Wiring Between Components" on page 429. - Refresh **Refresh.** Refreshes the display. The button is disabled in the Page Filter component. - Open in a New Window **Open in a New Window**. Opens the component in a new window.
	Configure Component. Opens the Configure Component dialog box for the relevant component. For details, see the relevant section below. **Note:** - The button is disabled in the Breakdown View component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired KPI View, Historical View, or Rolodex components, the Breakdown View component displays the values of the KPI Breakdown for the selected KPI. - The button is disabled in the Forecast component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired Historical View, the Forecast component displays the forecast data for the selected KPI. **Note:** You can also click **here** in **Click Here to configure it** in the center of the component
?	Opens the online documentation page relevant to the component you are currently configuring.
«	**Collapse component.** Collapses the component. To expand the collapsed component, click the ⌄ button on the collapsed component.
▯	Drag the Resize handle to enlarge or reduce horizontally the area occupied by the 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):

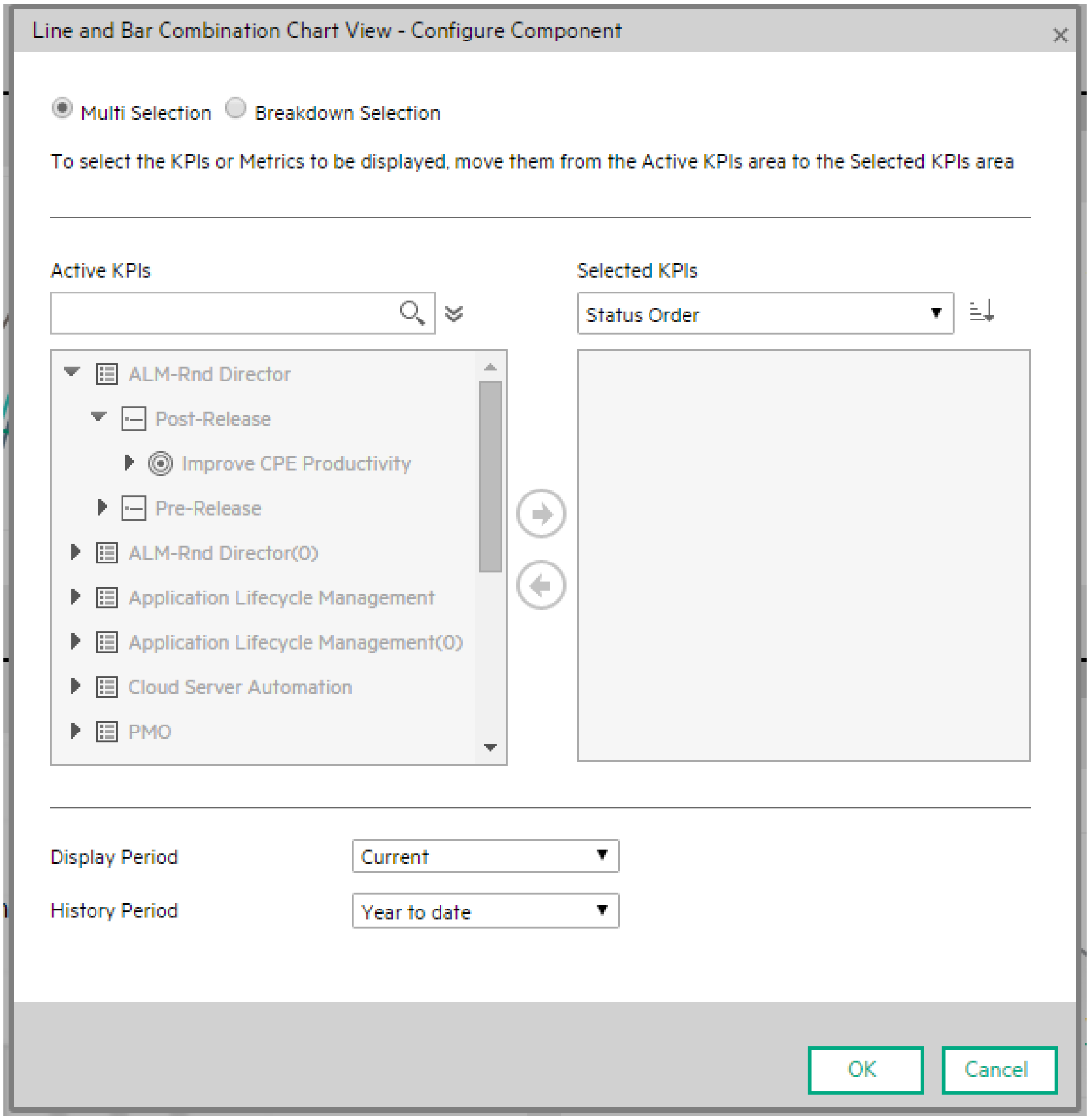
UI Element	Description
	Enables the on-demand periodicity temporary recalculation and display. For details, see On-demand Periodicity in Component Display.
<Display format>	You can modify the format of the display of some of the components on the fly, by selecting the relevant format. Some of the formats are not applicable to some of the components. The formats you can select are: • - To display the contents of the component using the enriched vertical column format. For details, see Column Format. • - To display the contents of the component using the horizontal Rolodex or gauge format. For details, see Rolodex - Gauge format. • - To display the content using the multiple line format. For details, see Multiple or single line format. • - To display the content using the pie format. For details, see Pie format. • - To display the content using the bar format. For details, see Bar format • - To display the content using the horizontal enriched column format. For details, see Column format. • - To display the content using the vertical Rolodex or gauge format. For details, see Rolodex - Gauge format. • - To display the content using the single line graph format. For details, see Multiple or single line format. • - To display the content using the cluster bar format. For details, see Cluster Bar format. • - To display the content using the stacked bar format. For details, see Stacked Bar format. • - To display the content using the bar and line format. For details, see Bar and Line format. • - To display the content using the bubble chart format. For details, see Bubble Chart format. • - To display the content using the list format. For details, see List format. For details, see On-the-fly Display Format Change in Dashboard Page Components.

Line and Bar Combination Chart View - Configure Component Dialog Box

You can select the Multi Selection or Breakdown Selection options:

- **Multi Selection.**

  You use this option when you want to compare several metrics or KPIs.



Line and Bar Combination Chart View - Configure Component

● Multi Selection ○ Breakdown Selection

To select the KPIs or Metrics to be displayed, move them from the Active KPIs area to the Selected KPIs area

Display Period: Current

History Period: Year to date

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

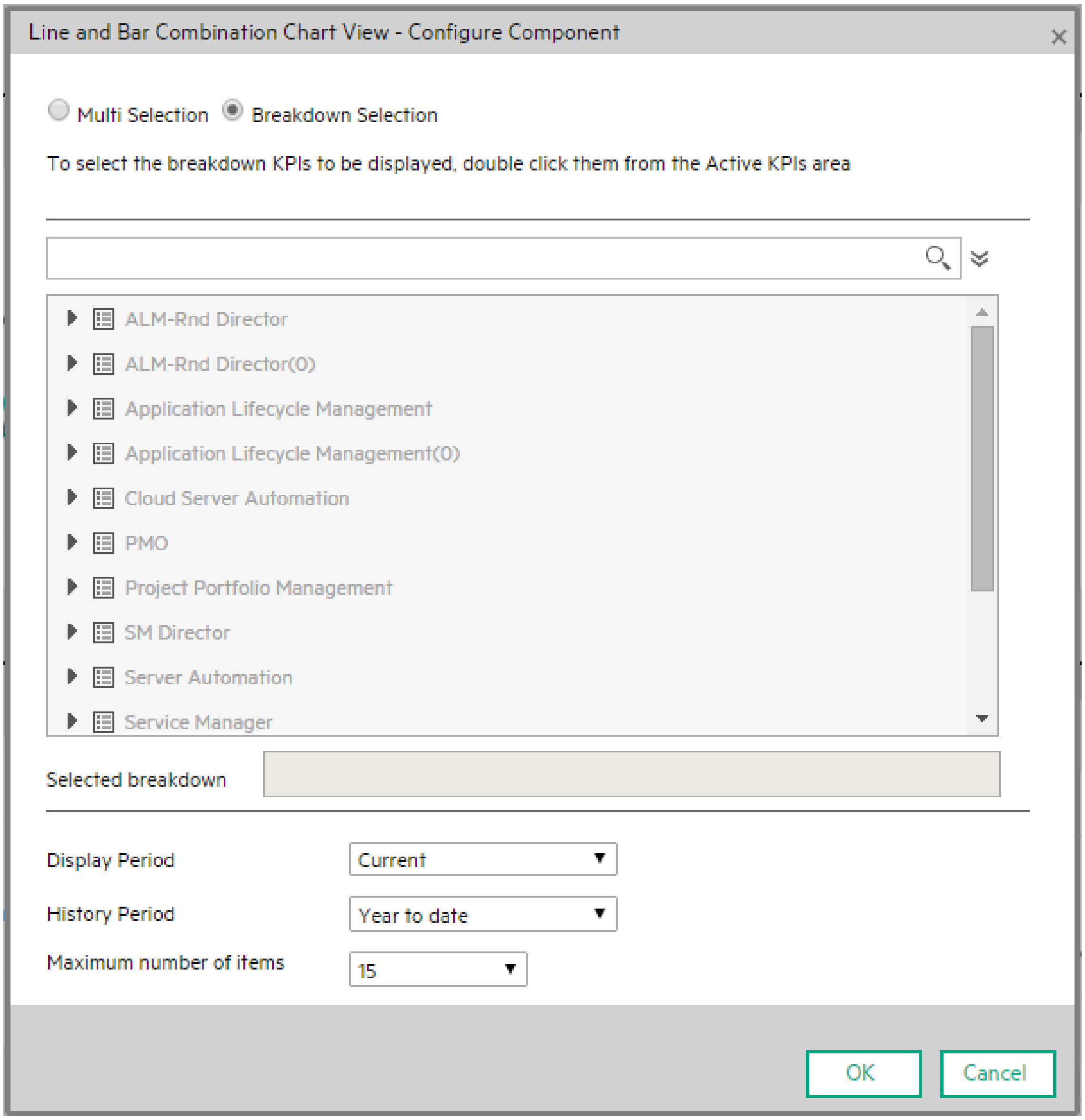
UI Element	Description
<Search>	Enter the relevant string to display, in the tree, only the Metrics or KPIs (or Metric or KPI Breakdowns) whose name includes the string. In addition, the child KPIs or Metrics of the filtered items are also listed even when the child names do not include the string.
︾	**Advanced Search.** Opens additional fields to help you refine the component's filter: ○ **Status:** Select one of the **All**, **Good**, **Warning**, **Critical**, or **No Data** values to display only the elements with the selected status, in the Active KPIs or in the tree area. When you select **No Data**, the search returns only the elements with no data. ○ **Type.** Select: • **All.** To display all the elements in the Active KPIs or in the tree with the selected Status. • **KPIs.** To display, in the Active KPIs or in the tree, only the KPIs. • **Objective.** To display in the Active KPIs or in the tree, only the Objectives and their KPIs. • **Metrics.** To display, in the tree, only the Metrics. You can then select the relevant item if any.
Active KPIs	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 (if you have selected **Breakdown selection**, only the KPI Breakdowns are highlighted). To select or deselect 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. **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.
Selected KPIs	The box lists all the selected metrics or KPIs that you want to display in the component. To select or deselect 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

UI Element	Description
	other. **<Status sort>** ◦ **Status sort** to sort the selected elements in status order. You can then click the icon to the right of the box to select the reverse order. Depending on the selection, the icon can be one of the following: ↑|↓. ◦ **Alphabetical sort** to sort the selected elements in alphabetical order. You can then click the icon to the right of the box to select the reverse order. Depending on the selection, the icon can be one of the following: ↑|↓.
Display Period	Select the time period to display in the component: ◦ **Current**. The values of the selected Metrics or KPIs (**Multi Selection**) or KPIs or Metric Breakdown dimensions (**Breakdown Selection**) 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 **Multi Selection** or KPIs or Metric Breakdown dimensions (**Breakdown Selection**) whose calculation period has already completed according to the selected metrics or KPIs configured periodicity. ◦ **Yearly/Monthly/Quarterly/Weekly/Daily.** The list of time periods represents the longest periodicity configured for the selected Metrics or KPIs (**Multi Selection**) or KPIs or Metric Breakdown dimensions (**Breakdown Selection**). When you select **Yearly/Monthly/Quarterly/Weekly/Daily**, 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 **Multi Selection** or KPIs or Metric Breakdown dimensions (**Breakdown Selection**) that have completed for the selected periods.
History Period	Select one of the following options: ◦ **Quarter to date.** The report's display period starts 3 months prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. ◦ **Half a year to date.** The report's display period starts 6 months prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. ◦ **Year to date.** The report's display period starts 1 year prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. ◦ **2 years to date.** The report's display period starts 2 years prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. ◦ **3 years to date.** The report's display period starts 3 years prior to the current date

UI Element	Description
	or prior to the selected year, month, quarter, week, or day in the **Display Period**. **Note:** ○ 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. **Example** If you select the 4th Quarter of 2013 in the **Display Period** field, and **3 years to date** in the **History Period** field, the rightmost point in the X-axis is the end of the 4th Quarter of 2013 (December 31st, 2013), and the leftmost point is the 4th Quarter of 2011. ○ Each point in the chart between the two end points represents the end of a Quarter between December 31st, 2010, and December 31st, 2013. ○ 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.

- **Breakdown Selection.**

  Select this option when you want to compare the values of the selected KPI Breakdown dimension.



Line and Bar Combination Chart View - Configure Component

○ Multi Selection ● Breakdown Selection

To select the breakdown KPIs to be displayed, double click them from the Active KPIs area

Selected breakdown

Display Period: Current

History Period: Year to date

Maximum number of items: 15

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

UI Element	Description
<Search>	Enter the relevant string to display, in the tree, only the Metrics or KPIs (or Metric or KPI Breakdowns) whose name includes the string.

UI Element	Description
	In addition, the child KPIs or Metrics of the filtered items are also listed even when the child names do not include the string.
︾	**Advanced Search.** Opens additional fields to help you refine the component's filter: ◦ **Status:** Select one of the **All**, **Good**, **Warning**, **Critical**, or **No Data** values to display only the elements with the selected status, in the Active KPIs area. When you select **No Data**, the search returns only the elements with no data. ◦ **Type.** Select: • **All.** To display, in the tree, all the elements. • **KPIs.** To display, in the tree, only the KPIs. • **Objective.** To display in the tree, only the Objectives and their KPIs. • **Metrics.** To display, in the tree, only the Metrics. You can then select the relevant KPI or Metric Breakdown if any.
<Tree>	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. To select the item you want to display in the report, double-click it. It is then listed in the **Selected breakdown** box. To unselect the item, remove it from the **Selected breakdown** box.
Selected breakdown	The box lists the selected KPI or Metric Breakdown.
Display Period	Select the time period to display in the component: ◦ **Current**. The values of the selected Metrics or KPIs (**Multi Selection**) or KPIs or Metric Breakdown dimensions (**Breakdown Selection**) 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 **Multi Selection** or KPIs or Metric Breakdown dimensions (**Breakdown Selection**) whose calculation period has already completed according to the selected metrics or KPIs configured periodicity. ◦ **Yearly/Monthly/Quarterly/Weekly/Daily.** The list of time periods represents the longest periodicity configured for the selected Metrics or KPIs (**Multi Selection**) or KPIs or Metric Breakdown dimensions (**Breakdown Selection**). When you select **Yearly/Monthly/Quarterly/Weekly/Daily**, 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

UI Element	Description
	values of the Metrics or KPIs **Multi Selection** or KPIs or Metric Breakdown dimensions (**Breakdown Selection**) that have completed for the selected periods.
History Period	Select one of the following options: ◦ **Quarter to date.** The report's display period starts 3 months prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. ◦ **Half a year to date.** The report's display period starts 6 months prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. ◦ **Year to date.** The report's display period starts 1 year prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. ◦ **2 years to date.** The report's display period starts 2 years prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. ◦ **3 years to date.** The report's display period starts 3 years prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. **Note:** ◦ 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. **Example** If you select the 4th Quarter of 2013 in the **Display Period** field, and **3 years to date** in the **History Period** field, the rightmost point in the X-axis is the end of the 4th Quarter of 2013 (December 31st, 2013), and the leftmost point is the 4th Quarter of 2011. ◦ Each point in the chart between the two end points represents the end of a Quarter between December 31st, 2010, and December 31st, 2013. ◦ 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.

UI Element	Description
Maximum Number of Items	This field is displayed only when you select **Breakdown Selection**. Specify the number of KPI Breakdowns to display in the component.

The Page Filter Component

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.

To configure the component, where possible, click the **Configure Component** button in the component to display the component filter, or click **here** in **Click Here to configure** in the center of the component.

Learn More | Tasks | UI Description

Learn More

Permissions

Permissions. In the Dashboard components and in their configuration dialog boxes, you can only see the Scorecards, Perspectives, Objectives, KPIs, or KPI Breakdowns for which you have permission. If you do not have permission, you do not see that element. If you do not have permission to see all the elements in a component, the error message **Data is not displayed because it does not exist or you do not have the correct viewing permissions. Contact your administrator** is displayed.

Wiring

The Page Filter component is automatically wired with the following components when these components are on the same Dashboard page:

- Historical Metric View component. For details, see"The Historical Metric View Component" on page 268.

- Historical View component . For details, see"The Historical View Component" on page 279.
- KPI View component. For details, see "The KPI View Component" on page 309.
- KPI List component . For details, see "The KPI List Component" on page 290.
- KPI Rolodex component. For details, see"The KPI Rolodex Component" on page 299.
- Xcelsius Report Viewer Flash component. For details, see "The Xcelsius Reports Viewer (Flash) Component" on page 415.
- Web Intelligence Report Viewer component. For details, see"The Web Intelligence Report Viewer Component" on page 387.
- Pie Chart component. For details, see"The Pie Chart Component" on page 344.
- Bubble Chart component. For details, see "The Bubble Chart View Component" on page 237.
- Cluster Bar Chart View component. For details, see "The Cluster Bar Chart View Component" on page 248.
- Stacked Bar Chart View component. For details, see "The Stacked Bar Chart View Component" on page 364.
- Line and Bar Combination Chart View component. For details, see "The Line and Bar Combination Chart View Component" on page 320.

You can also set up wiring between components. For additional information about wiring, see "Wiring Between Components" on page 429.

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

Main task: "Dashboard Display" on page 195

This section includes the following topics:

Add the Component to a Dashboard Page

To add a component to a page that is already formatted:

1. In the 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, click or double-click the component to place it in the layout area, or select the component and drag it to an area on the page.

   Note that double-click only works if you open the Component Gallery from the layout itself and not from the toolbar.

   - 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 page. For user interface details, see "Component Gallery and Component Categories" on page 223.

5. In the component, click the **Configure Component** button or click **here** in **Click Here to configure** in the center of the component.
6. In the component Filter dialog box that opens, select the information you want to display and click **OK**.

   The component displays the required information.

For more information, see "Page Layout and Components" on page 205.

Use Case - Filter Component in 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 (for details, see 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.
   - 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 of 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**.

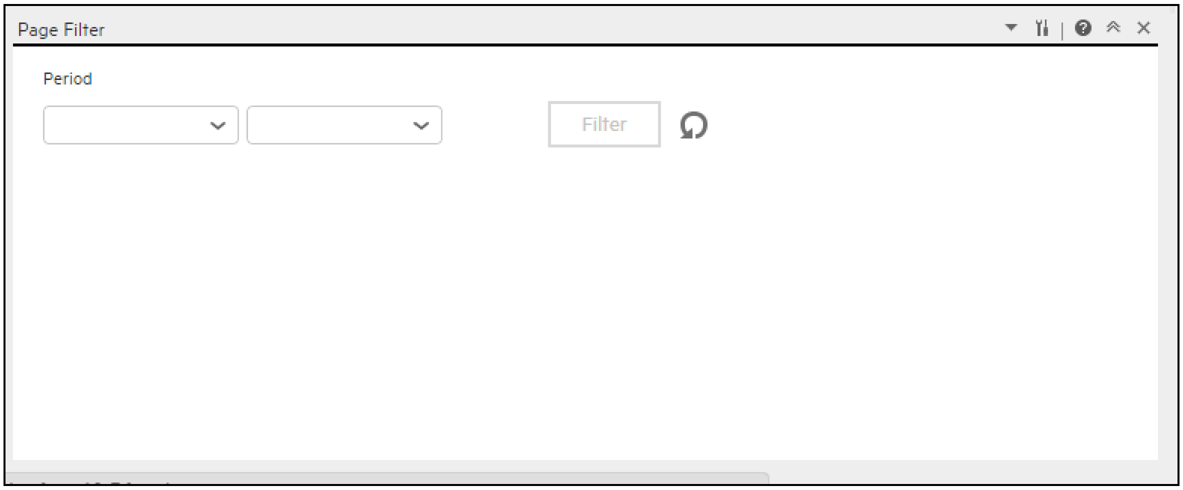
Movie: To display the relevant movie, open the ITBA application, click **Help** in the top right corner of the application main page and select the **Movies** option. Select the relevant movie. For details, see Access Movies.

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.

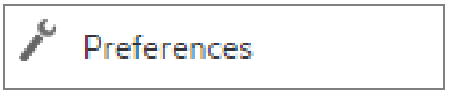
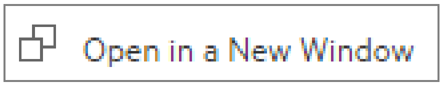
> **Tip:** It is important to have configured KPI Breakdowns or Metric Breakdowns before you add the Page Filter component to a Dashboard page. For details, see "KPI Breakdowns" on page 163 or "Metric Breakdowns" on page 171.



Component Toolbar

> **Note:** The component toolbar description is common to all components. Some of the elements might be disabled in some of the components.

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 "Wiring Between Components" on page 429. - **Refresh.** Refreshes the display. The button is disabled in the Page Filter component. -  **Open in a New Window**. Opens the component in a new window.

UI Element	Description
🛠	**Configure Component.** Opens the Configure Component dialog box for the relevant component. For details, see the relevant section below. **Note:** • The button is disabled in the Breakdown View component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired KPI View, Historical View, or Rolodex components, the Breakdown View component displays the values of the KPI Breakdown for the selected KPI. • The button is disabled in the Forecast component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired Historical View, the Forecast component displays the forecast data for the selected KPI. **Note:** You can also click **here** in **Click Here to configure it** in the center of the component
?	Opens the online documentation page relevant to the component you are currently configuring.
«	**Collapse component.** Collapses the component. To expand the collapsed component, click the ︾ button on the collapsed component.
▯	Drag the Resize handle to enlarge or reduce horizontally the area occupied by the component.
✕	**Remove Component.** Removes the component from the page.

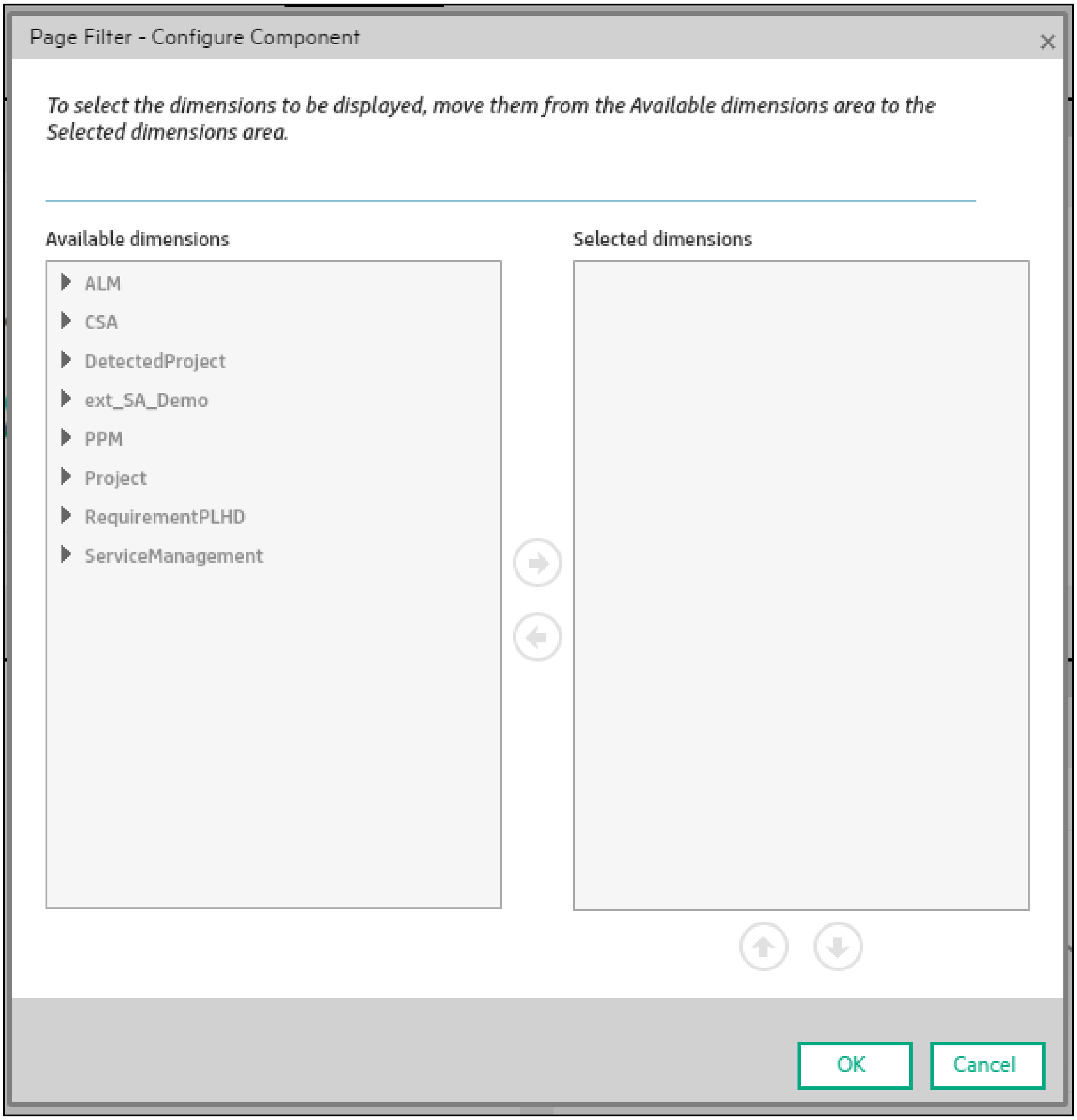
<Component Contents>

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

UI Element	Description
Period	Select the display period type. It can be **Last Closed, Current**, **Weekly**, **Quarterly**, **Monthly**, or **Yearly**. If you select a specific period type, all the KPIs and Metrics with a periodicity that is different from the selected periodicity show **No data**. The values that are displayed correspond to the

UI Element	Description
	periods used when the engine runs calculations. If the engine has not yet run calculations this field is empty. 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. **Example** If you select Quarterly, you can select **FY2011/Q1**, **FY2011/Q2**, **FY2011/Q3**, or **FY2011/Q4**. 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**.
<entity:dimension>	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. When a large number of entity:dimensions are selected, a scrollbar is automatically displayed. 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**.
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.

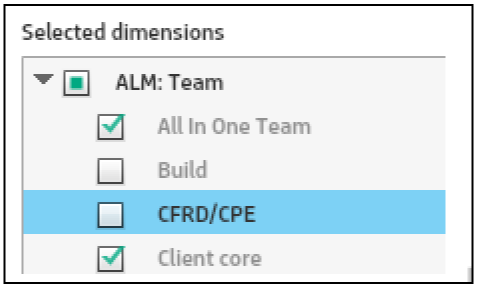
Page Filter - Configure Component Dialog Box



To select the dimensions to be displayed, move them from the Available dimensions area to the Selected dimensions area.

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

UI Element	Description
Available	The list of entities and dimensions corresponding to the KPI Breakdowns or Metric

UI Element	Description
dimensions	Breakdowns that were defined in the Studio.
Selected dimensions	The list of entities and dimensions you selected using the arrows. 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. You can also globally select or deselect a dimension values by clicking the check box at the level of the dimension. You can then select or deselect the dimension values you want or do not want to include in the filter. If only some of the dimension values are selected or deselected, the check box at the level of the dimension is partially filled in:  Selected dimensions ▼ ▣ ALM: Team ☑ All In One Team ☐ Build ☐ CFRD/CPE ☑ Client core
⬆ ⬇	Select an entity and dimension in the Selected dimensions tree to move it up or down in the tree. The order of the selected entities and dimensions is the order displayed in the Page Filter. To view the information, you must have defined the correct KPI/Metric Breakdowns. **Example** If the tree of KPIs and KPI Breakdowns is: • % Attrition ○ % Attrition by Organization • % Attrition by Location 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**. To prevent this problem, it is recommended to also define the other combination of entities and dimensions as follows: • % Attrition

UI Element	Description
	○ % Attrition by Organization • % Attrition by Location ○ % Attrition by Location

The Pie Chart Component

The Pie Chart component displays the selected KPIs or Metrics distribution, either by selecting the different slices or by selecting a breakdown.

To access:

You can view the report in the relevant page in the Dashboard.

To configure the component, where possible, click the **Configure Component** button in the component to display the component filter, or click **here** in **Click Here to configure** in the center of the component.

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UI Description

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- 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).
- **Permissions.** In the Dashboard components and in their configuration dialog boxes, you can only see the Scorecards, Perspectives, Objectives, KPIs, or KPI Breakdowns for which you have permission. If you do not have permission, you do not see that element. If you do not have permission to see all the elements in a component, the error message **Data is not displayed because it does not exist or you do not have the correct viewing permissions. Contact your administrator** is displayed.

Tasks

Main task: "Dashboard Display" on page 195

Add the Component to a Dashboard Page

To add a component to a page that is already formatted:

1. In the 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, click or double-click the component to place it in the layout area, or select the component and drag it to an area on the page.

   Note that double-click only works if you open the Component Gallery from the layout itself and not from the toolbar.

   - 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 page. For user interface details, see "Component Gallery and Component Categories" on page 223.
5. In the component, click the **Configure Component** button or click **here** in **Click Here to configure** in the center of the component.
6. In the component Filter dialog box that opens, select the information you want to display and click **OK**.

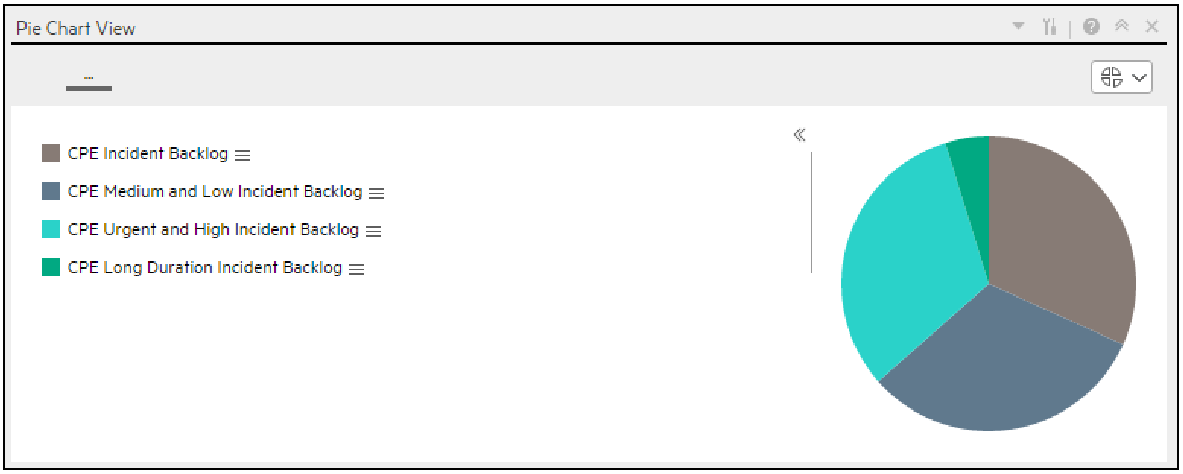
   The component displays the required information.

For more information, see "Page Layout and Components" on page 205.

UI Description

Pie Chart View Component

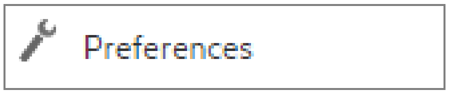
The Pie Chart View component displays a pie chart that enables you to compare the values of the selected Metrics or KPIs for the selected time period or the values of the selected KPI Breakdown or Metric Breakdown dimension for the selected time period.

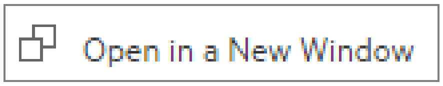

Pie Chart View
CPE Incident Backlog
CPE Medium and Low Incident Backlog
CPE Urgent and High Incident Backlog
CPE Long Duration Incident Backlog

Component Toolbar

> **Note:** The component toolbar description is common to all components. Some of the elements might be disabled in some of the components.

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**.

UI Element	Description
	- **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 "Wiring Between Components" on page 429. - **Refresh.** Refreshes the display. The button is disabled in the Page Filter component. -  **Open in a New Window**. Opens the component in a new window.
	Configure Component. Opens the Configure Component dialog box for the relevant component. For details, see the relevant section below. **Note:** - The button is disabled in the Breakdown View component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired KPI View, Historical View, or Rolodex components, the Breakdown View component displays the values of the KPI Breakdown for the selected KPI. - The button is disabled in the Forecast component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired Historical View, the Forecast component displays the forecast data for the selected KPI. **Note:** You can also click **here** in **Click Here to configure it** in the center of the component
?	Opens the online documentation page relevant to the component you are currently configuring.
«	**Collapse component.** Collapses the component. To expand the collapsed component, click the ︾ button on the collapsed component.
	Drag the Resize handle to enlarge or reduce horizontally the area occupied by the component.

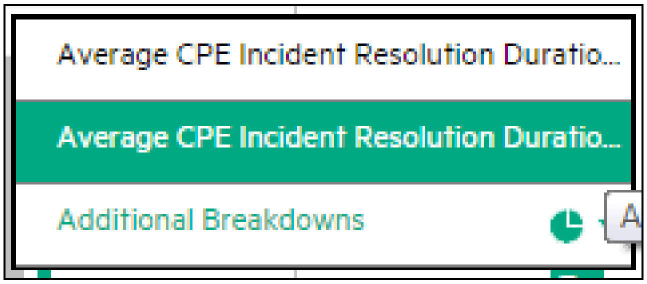
UI Element	Description
✕	**Remove Component.** Removes the component from the page.

Component Contents

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

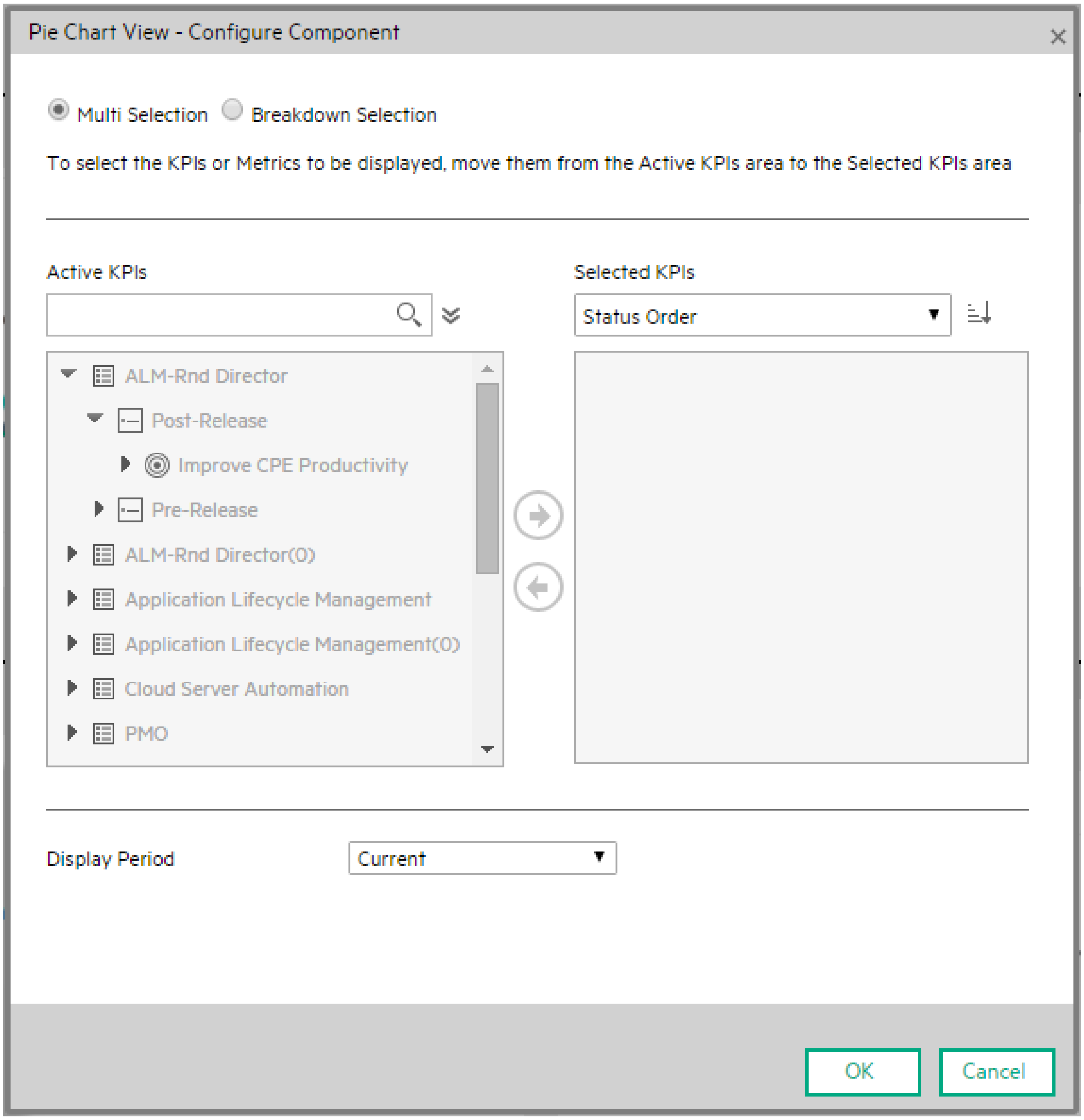
> **Note:** Some of the graphs below display thresholds. When the selected item is a Metric (that does not have thresholds), the graph displays the data without the threshold element.

UI Element	Description
<Display format>	You can modify the format of the display of some of the components on the fly, by selecting the relevant format. Some of the formats are not applicable to some of the components. The formats you can select are: - - To display the contents of the component using the enriched vertical column format. For details, see Column Format. - - To display the contents of the component using the horizontal Rolodex or gauge format. For details, see Rolodex - Gauge format. - - To display the content using the multiple line format. For details, see Multiple or single line format. - - To display the content using the pie format. For details, see Pie format. - - To display the content using the bar format. For details, see Bar format - - To display the content using the horizontal enriched column format. For details, see Column format. - - To display the content using the vertical Rolodex or gauge format. For details, see Rolodex - Gauge format. - - To display the content using the single line graph format. For details, see Multiple or single line format. - - To display the content using the cluster bar format. For details, see Cluster Bar format. - - To display the content using the stacked bar format. For details, see Stacked Bar format. - - To display the content using the bar and line format. For details, see Bar

UI Element	Description
	and Line format. • ⁘ - To display the content using the bubble chart format. For details, see Bubble Chart format. • ☰ - To display the content using the list format. For details, see List format. For details, see On-the-fly Display Format Change in Dashboard Page Components.
<Breakdowns>	The cursor changes from an arrow to a hand indicates that the displayed item has a Breakdown. Click the displayed item to list the available Breakdowns:  Average CPE Incident Resolution Duratio... Average CPE Incident Resolution Duratio... Additional Breakdowns Click the relevant Breakdown to display its information using the same format as its parent. You can then select another format by selecting it from the **<Display format>** list. For details, see "Change, On-Demand, the Breakdown Display" on page 484.

Pie Chart View Configure Component Dialog Box

Use the dialog box to configure the Pie Chart View component displayed in the Dashboard.



Pie Chart View - Configure Component

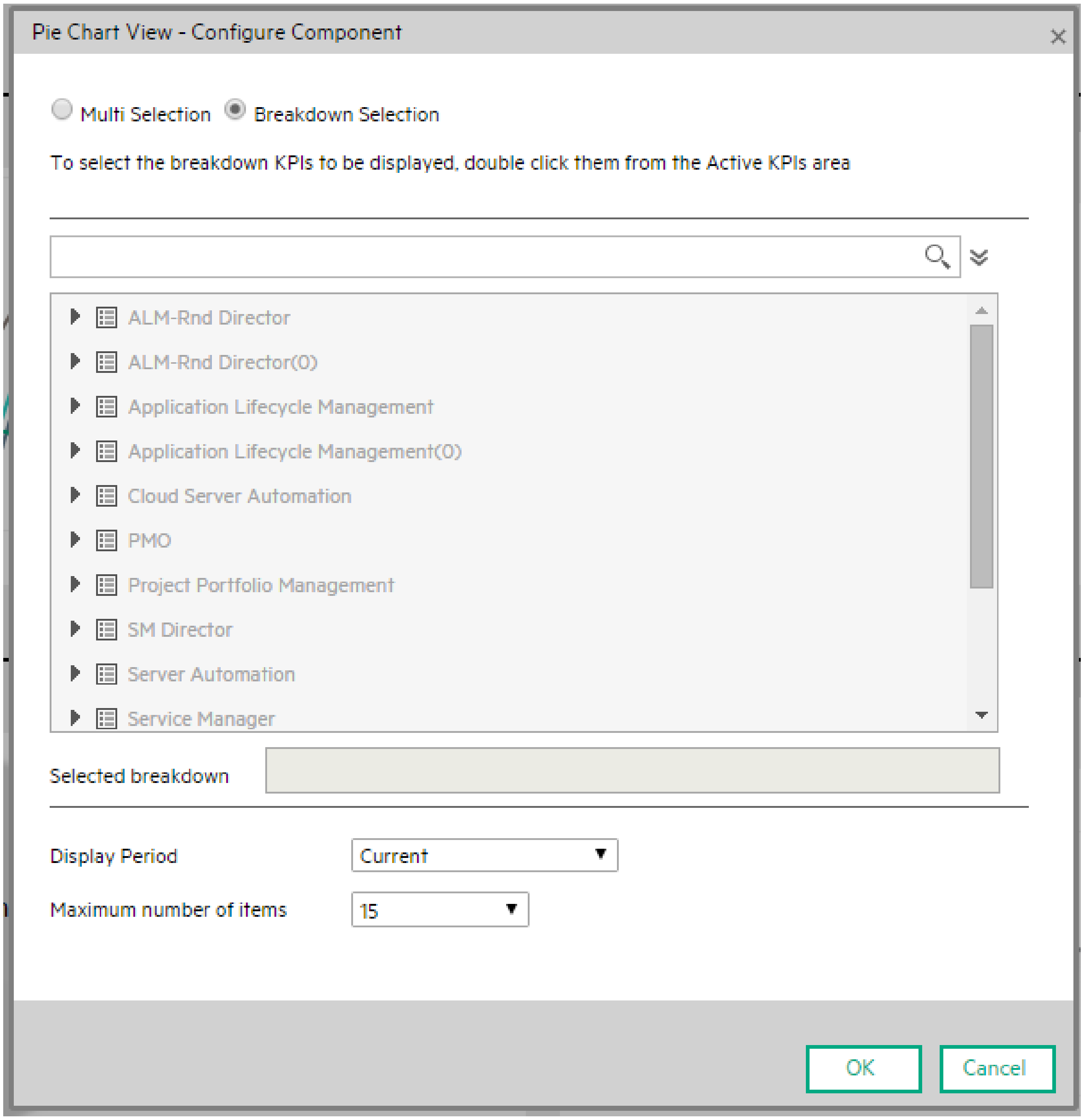
● Multi Selection ○ Breakdown Selection

To select the KPIs or Metrics to be displayed, move them from the Active KPIs area to the Selected KPIs area

Active KPIs

Selected KPIs: Status Order

Display Period: Current



Pie Chart View - Configure Component
×
ALM-Rnd Director
ALM-Rnd Director(0)
Application Lifecycle Management
Application Lifecycle Management(0)
Cloud Server Automation
PMO
Project Portfolio Management
SM Director
Server Automation
Service Manager
OK
Cancel

○ Multi Selection ● Breakdown Selection

To select the breakdown KPIs to be displayed, double click them from the Active KPIs area

Selected breakdown

Display Period: Current

Maximum number of items: 15

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

UI Element	Description
Multi Selection/ Breakdown Selection	• **Multi Selection.** You use this option when you want to compare several metrics or KPIs. For details, see below. • **Breakdown Selection.** Select this option when you want to compare the values of the selected KPI Breakdown dimension.For details, see below.
<Search>	Enter the relevant string to display, in the tree, only the Metrics or KPIs (or Metric or KPI Breakdowns) whose name includes the string.

<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr><td></td><td>In addition, the child KPIs or Metrics of the filtered items are also listed even when the child names do not include the string.</td></tr>
<tr><td>︾</td><td>
<table>
<tr><td><b>Multi Selection</b></td><td><b>Advanced Search.</b> Opens additional fields to help you refine the component's filter:
<ul>
<li><b>Status:</b> Select one of the <b>All</b>, <b>Good</b>, <b>Warning</b>, <b>Critical</b>, or <b>No Data</b> values to display only the elements with the selected status, in the Active KPIs or in the tree area. When you select <b>No Data</b>, the search returns only the elements with no data.</li>
<li><b>Type.</b> Select:
<ul>
<li><b>All.</b> To display all the elements in the Active KPIs or in the tree with the selected Status.</li>
<li><b>KPIs.</b> To display, in the Active KPIs or in the tree, only the KPIs.</li>
<li><b>Objective.</b> To display in the Active KPIs or in the tree, only the Objectives and their KPIs.</li>
<li><b>Metrics.</b> To display, in the tree, only the Metrics.</li>
</ul></li>
</ul>
You can then select the relevant item if any.</td></tr>
<tr><td><b>Breakdown Selection</b></td><td><b>Advanced Search.</b> Opens additional fields to help you refine the component's filter:
<ul>
<li><b>Status:</b> Select one of the <b>All</b>, <b>Good</b>, <b>Warning</b>, <b>Critical</b>, or <b>No Data</b> values to display only the elements with the selected status, in the Active KPIs area. When you select <b>No Data</b>, the search returns only the elements with no data.</li>
<li><b>Type.</b> Select:
<ul>
<li><b>All.</b> To display, in the tree, all the elements.</li>
<li><b>KPIs.</b> To display, in the tree, only the KPIs.</li>
<li><b>Objective.</b> To display in the tree, only the Objectives and their KPIs.</li>
<li><b>Metrics.</b> To display, in the tree, only the Metrics.</li>
</ul></li>
</ul>
You can then select the relevant KPI or Metric Breakdown if any.</td></tr>
</table>
</td></tr>
<tr><td><b>Active KPIs</b></td><td>Displayed only when you select <b>Multi Selection</b>.
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 (if you have selected <b>Breakdown selection</b>, only the</td></tr>
</table>

UI Element	Description
	KPI Breakdowns are highlighted). To select or deselect 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. **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.
Selected KPIs	Displayed only when you select **Multi Selection**. The box lists all the selected metrics or KPIs that you want to display in the component. To select or deselect 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. **<Status sort>** • **Status sort** to sort the selected elements in status order. You can then click the icon to the right of the box to select the reverse order. Depending on the selection, the icon can be one of the following: ↑|↓. • **Alphabetical sort** to sort the selected elements in alphabetical order. You can then click the icon to the right of the box to select the reverse order. Depending on the selection, the icon can be one of the following: ↑|↓.
<Tree>	Displayed only when you select **Breakdown Selection**. 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. 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.
Selected metrics	Displayed only when you select **Breakdown Selection**. The box lists the selected KPI or Metric Breakdowns. To deselect the item, remove it from the **Selected metrics** box.
Display Period	Select the time period to display in the component: • **Current**. The values of the selected Metrics or KPIs (**Multi Selection**) or KPIs or Metric Breakdown dimensions (**Breakdown Selection**) 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 **Multi Selection** or KPIs

UI Element	Description
	or Metric Breakdown dimensions (**Breakdown Selection**) whose calculation period has already completed according to the selected metrics or KPIs configured periodicity. - **Yearly/Monthly/Quarterly/Weekly/Daily.** The list of time periods represents the longest periodicity configured for the selected Metrics or KPIs (**Multi Selection**) or KPIs or Metric Breakdown dimensions (**Breakdown Selection**). When you select **Yearly/Monthly/Quarterly/Weekly/Daily**, 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 **Multi Selection** or KPIs or Metric Breakdown dimensions (**Breakdown Selection**) that have completed for the selected periods.
Maximum number of slices	This field is displayed only when you select **Breakdown Selection**. Specify the number of KPI Breakdowns to display in the component.

The Scorecard Component

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.

To configure the component, where possible, click the **Configure Component** button in the component to display the component filter, or click **here** in **Click Here to configure** in the center of the component.

Learn More | Tasks | UI Description

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).
- **Permissions.** In the Dashboard components and in their configuration dialog boxes, you can only see the Scorecards, Perspectives, Objectives, KPIs, or KPI Breakdowns for which you have permission. If you do not have permission, you do not see that element. If you do not have permission to see all the elements in a component, the error message **Data is not displayed because it does not exist or you do not have the correct viewing permissions. Contact your administrator** is displayed.

Tasks

Main task: "Dashboard Display" on page 195

Add a Component to a Dashboard Page

To add a component to a page that is already formatted:

1. In the 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, click or double-click the component to place it in the layout area, or select the component and drag it to an area on the page.

   Note that double-click only works if you open the Component Gallery from the layout itself and not from the toolbar.

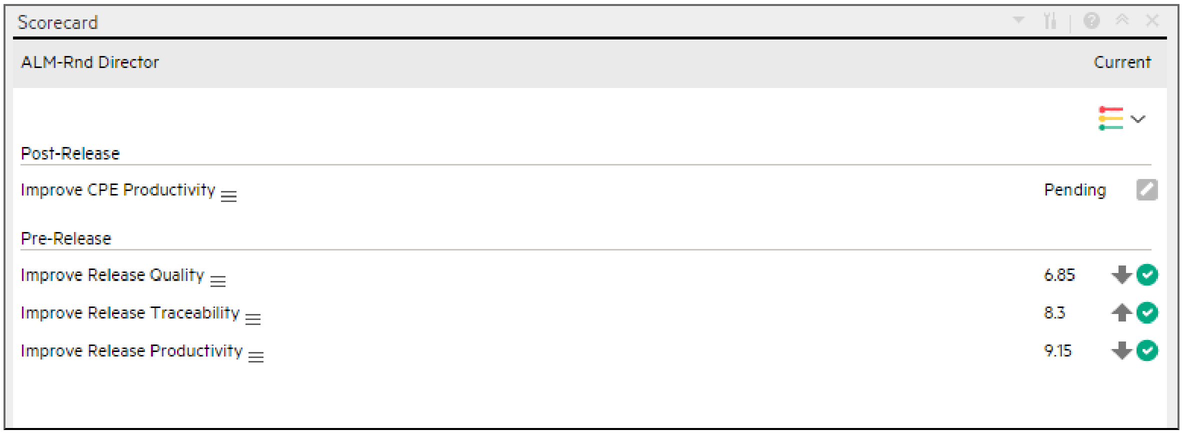
   - If the target area is hidden by the Component Gallery dialog box, click the Component Gallery dialog box title bar and drag it to another location on your screen.
   - If you are dragging a new component to a target area that already has a component defined, drag the new component to the title bar of the target area, and not to the part of the component that is colored white.
4. Close the Component Gallery page. For user interface details, see "Component Gallery and Component Categories" on page 223.
5. In the component, click the **Configure Component** button or click **here** in **Click Here to configure** in the center of the component.
6. In the component Filter dialog box that opens, select the information you want to display and click **OK**.

   The component displays the required information.

For more information, see "Page Layout and Components" on page 205.

UI Description

Scorecard Component



Scorecard

ALM-Rnd Director — Current

Post-Release

Improve CPE Productivity — Pending

Pre-Release

Improve Release Quality — 6.85

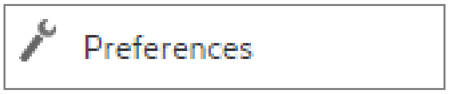
Improve Release Traceability — 8.3

Improve Release Productivity — 9.15

Component Toolbar

> **Note:** The component toolbar description is common to all components. Some of the elements might be disabled in some of the components.

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

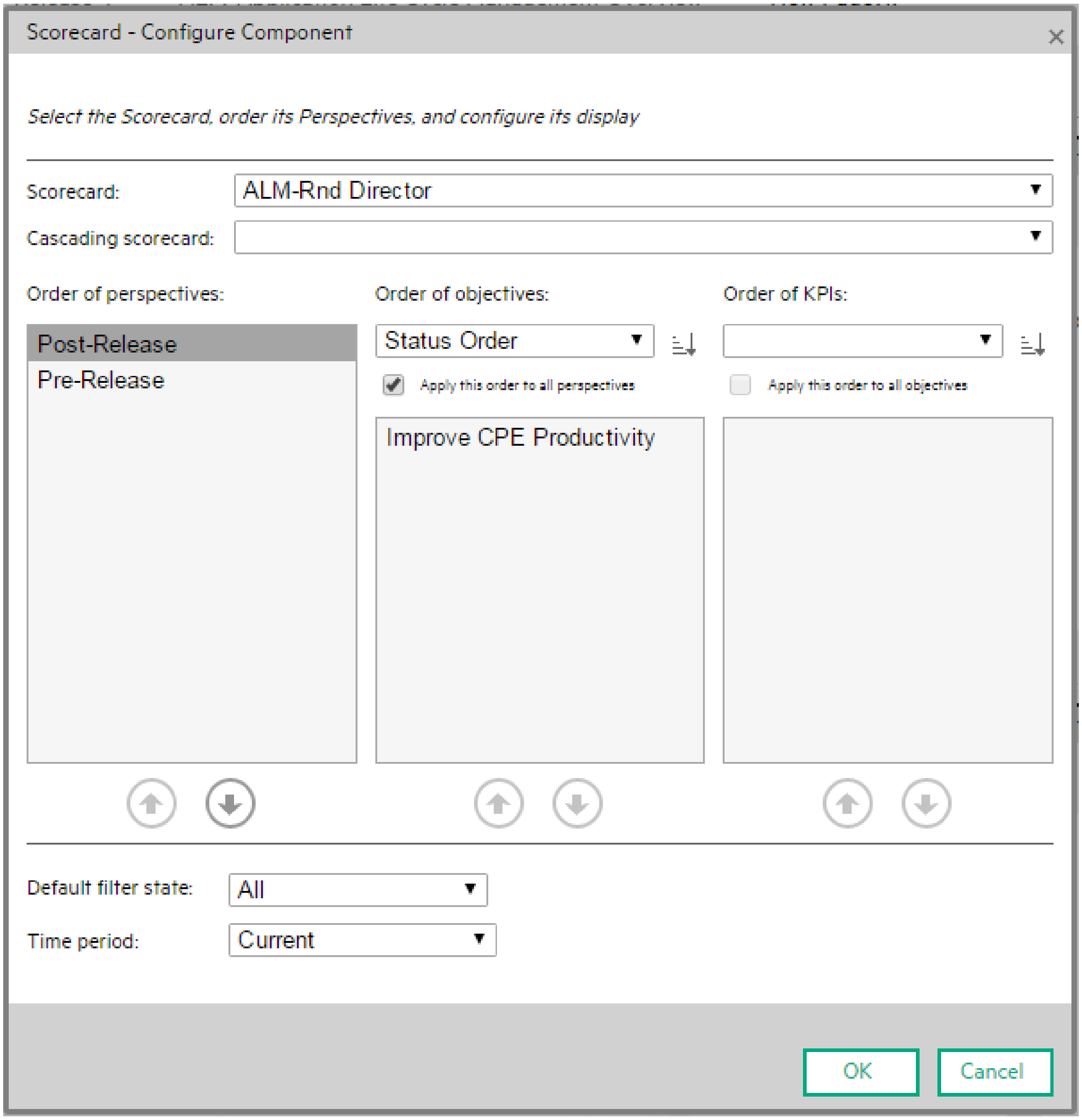
UI Element	Description
	details, see "Wiring Between Components" on page 429. - Refresh **Refresh.** Refreshes the display. The button is disabled in the Page Filter component. - Open in a New Window **Open in a New Window**. Opens the component in a new window.
	Configure Component. Opens the Configure Component dialog box for the relevant component. For details, see the relevant section below. **Note:** - The button is disabled in the Breakdown View component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired KPI View, Historical View, or Rolodex components, the Breakdown View component displays the values of the KPI Breakdown for the selected KPI. - The button is disabled in the Forecast component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired Historical View, the Forecast component displays the forecast data for the selected KPI. **Note:** You can also click **here** in **Click Here to configure it** in the center of the component
?	Opens the online documentation page relevant to the component you are currently configuring.
«	**Collapse component.** Collapses the component. To expand the collapsed component, click the ︾ button on the collapsed component.
	Drag the Resize handle to enlarge or reduce horizontally the area occupied by the 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>	The following information is displayed, from left to right: - The name of the Scorecard. Double-click the name to open the EXPLORER tab filtered for the selected element. - The timestamp of the Scorecard. It displays the period you selected in the **Time Period** box in the Scorecard - Configure Component Dialog Box. Current
☰ ⌄	Click the button in the top right corner of the Scorecard and select the relevant status: ☰ to display all the Objectives with any Status. ⊗ to display only the Objectives with an **Error** Status. ⚠ to display only the Objectives with a **Warning** status. The default selection is configured in the **Default filter state** field in the Scorecard - Component Filter dialog box. For details, see "The Scorecard Component" on page 355.
<Tooltip>	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 "First Level Navigation (FLN) for an Objective, a KPI, or a Metric" on page 490.

Scorecard - Configure Component Dialog Box



Scorecard - Configure Component

Select the Scorecard, order its Perspectives, and configure its display

Scorecard: ALM-Rnd Director

Cascading scorecard:

Order of perspectives:
- Post-Release
- Pre-Release

Order of objectives: Status Order

☑ Apply this order to all perspectives

- Improve CPE Productivity

Order of KPIs:

☐ Apply this order to all objectives

Default filter state: All

Time period: Current

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

UI Element	Description
Scorecard	Select the Scorecard you want to display in the component.

UI Element	Description
	The list of Scorecards that is displayed corresponds to the Scorecards that are permitted for your user. For details about permissions, see User Management in the *Administrator Guide*. The list of the Scorecard's Perspectives, Objectives, and KPIs are displayed in the **Order of Perspectives**, **Order of Objectives**, and **Order of KPIs** areas.
Cascading scorecard	If the selected Scorecard has Cascading Scorecards, you can select a Cascading Scorecard in the Cascading Scorecard list that is permitted for your user. For details about permissions, see User Management in the *Administrator Guide*. The Perspectives, Objectives, and KPIs of the selected Cascading Scorecard are then listed in the lower part of the dialog box, and you can select their orders as described below.
Order of perspectives	Select a Perspective and use ⬆ ⬇ at the bottom of the area to order the Perspectives as you want to display them in the Scorecard component in the Dashboard page. If needed, once you have selected the order of Perspectives, click each Perspective and order its Objectives in the **Order of Objectives** area.
Order of objectives	Select how to display the Objectives in the Scorecard component in the Dashboard page. **Status Order.** Select to sort the Objectives by status. This is the default. Click ↑↓ to select the ascending or descending order. **Alphabetical Order.** Select to sort the Objectives in alphabetical order. Click ↑↓ to select the ascending or descending order. **Manual Order.** Select to sort the Objectives manually. Use ⬆ ⬇ at the bottom of the area to order the Objectives as you want to display them in the Scorecard component in the Dashboard. **Apply this order to all perspectives.** If needed, select this option to apply the order you selected for the set of Objectives of the Perspective currently selected, to all the Objectives of all the Perspectives of the Scorecard. If needed, once you have selected the order of Objectives, click each Objective and order its KPIs in the **Order of KPIs** area.
Order of KPIs	Select how to display the KPIs in the KPI View components wired to the Scorecard component in the Dashboard page. **Status Order.** Select to sort the KPIs by status. This is the default. Click ↑↓ to select the ascending or descending order. **Alphabetical Order.** Select to sort the KPIs in alphabetical order. Click ↑↓ to select

UI Element	Description
	the ascending or descending order. **Manual Order.** Select to sort the KPIs manually. Use ⬆ ⬇ at the bottom of the area to order the KPIs as you want to display them in the components wired to the Scorecard component in the Dashboard page. **Apply this order to all Objectives.** If needed, select this option to apply the order you selected for the set of KPIs currently displayed to all the KPIs of all the Objectives of the Scorecard. This sorting includes the KPIs of child Objectives of the Objectives of the Scorecard.
Default filter state	Select the icon that is automatically selected in the Scorecard display: • **All** • **Critical and Warning** • **Critical**
Time period	Select the time period to be displayed in the component: • **Current**. In the Dashboard, the component displays the selected Scorecard, its Perspectives, and under the Perspectives, the Objectives, their values, trends, and statuses corresponding to the current period. • **Last Closed.** In the Dashboard, the component displays the selected Scorecard, its Perspectives, and under the Perspectives, the Objectives, their values, trends, and statuses corresponding to their last closed periods. • **Yearly.** When you select **Yearly** an additional field opens. The additional field displays the list of past years that have completed (not the current year) and during which the Objectives have been calculated. In the Dashboard, the component displays the selected Scorecard, its Perspectives, and under the Perspectives, the Objectives, their values, trends, and statuses corresponding to the end of the period you selected in the additional field. • **Quarterly.** When you select **Quarterly** an additional field opens. The additional field displays the list of past quarters that have completed (not the current quarter) and during which the Objectives have been calculated. In the Dashboard, the component displays the selected Scorecard, its Perspectives, and under the Perspectives, the Objectives, their values, trends, and statuses corresponding to the end of the period you selected in the additional field. • **Monthly.** When you select **Monthly** an additional field opens. The additional field displays the list of past months that have completed (not the current month) and during which the Objectives have been calculated. In the Dashboard, the component displays the selected Scorecard, its

UI Element	Description
	Perspectives, and under the Perspectives, the Objectives, their values, trends, and statuses corresponding to the end of the period you selected in the additional field. • **Weekly.** When you select **Weekly** an additional field opens. The additional field displays the list of past weeks that have completed (not the current week) and during which the Objectives have been calculated. In the Dashboard, the component displays the selected Scorecard, its Perspectives, and under the Perspectives, the Objectives with calculations that have completed during the period you selected in the additional field. • **Daily.**When you select **Daily** an additional field opens. The additional field displays the list of past days that have completed (not the current day) and during which the Objectives have been calculated. In the Dashboard, the component displays the selected Scorecard, its Perspectives, and under the Perspectives, the Objectives with calculations that have completed during the period you selected in the additional field. **Note:** • If you select the **Current** Time Period, each Objective displays the results of its current period. • If you select the **Last Closed** Time Period, each Objective displays the results corresponding to its last closed period. • If you select a specific period in the Scorecard component configuration in the Dashboard and the Objectives in the Scorecard have different periodicities, then only the highest Periodicity is listed and available for selection. • If in the Dashboard Scorecard component, the Scorecard has Objectives with different time periods, the Scorecard filter displays only the longest time period between the Scorecard Objectives in its Time Period list. For example: if the configured Scorecard includes Objective-1 with a monthly periodicity and Objective-2 with a weekly periodicity then all Time Periods less than monthly will be not accessible in the configuration window. Time Periods larger than monthly might be available depending on the calculations that were performed on the relevant context.

The Stacked Bar Chart View Component

The Stacked Bar Chart View component displays the list of selected KPIs or Metrics, and their value, trend, and status for the measurement period in stacked bar format, by default.

To access:

You can view the report in the relevant page in the Dashboard.

To configure the component, where possible, click the **Configure Component** button in the component to display the component filter, or click **here** in **Click Here to configure** in the center of the component.

Learn More | Tasks | UI Description

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).
- **Permissions.** In the Dashboard components and in their configuration dialog boxes, you can only see the Scorecards, Perspectives, Objectives, KPIs, or KPI Breakdowns for which you have permission. If you do not have permission, you do not see that element. If you do not have permission to see all the elements in a component, the error message **Data is not displayed because it does not exist or you do not have the correct viewing permissions. Contact your administrator** is displayed.

Tasks

Main task: "Dashboard Display" on page 195

Add the Component to a Dashboard Page

To add a component to a page that is already formatted:

1. In the 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, click or double-click the component to place it in the layout area, or select the component and drag it to an area on the page.

   Note that double-click only works if you open the Component Gallery from the layout itself and not from the toolbar.

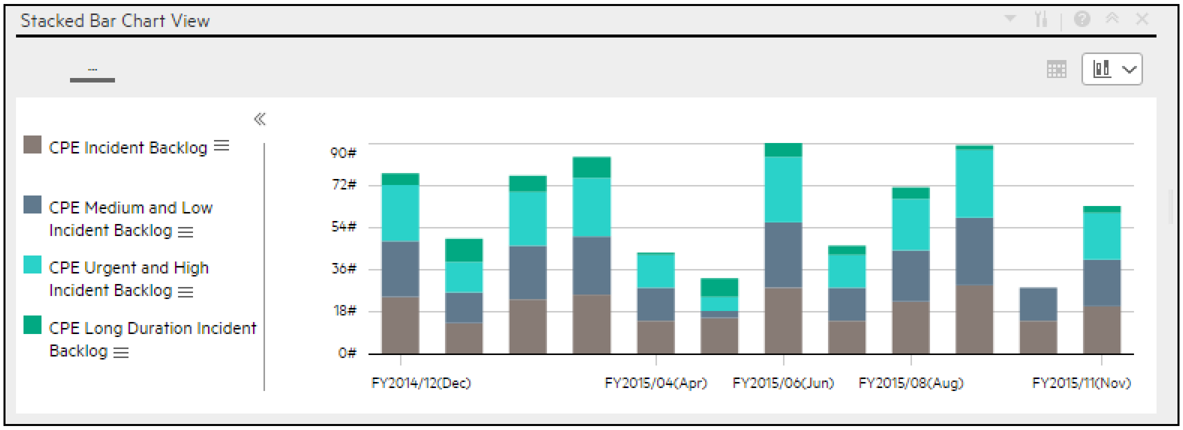
   - If the target area is hidden by the Component Gallery dialog box, click the Component Gallery dialog box title bar and drag it to another location on your screen.
   - If you are dragging a new component to a target area that already has a component defined, drag the new component to the title bar of the target area, and not to the part of the component that is colored white.
4. Close the Component Gallery page. For user interface details, see "Component Gallery and Component Categories" on page 223.
5. In the component, click the **Configure Component** button or click **here** in **Click Here to configure** in the center of the component.
6. In the component Filter dialog box that opens, select the information you want to display and click **OK**.

   The component displays the required information.

For more information, see "Page Layout and Components" on page 205.

UI Description

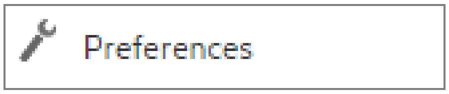
Stacked Bar Chart View Component



Component Toolbar

> **Note:** The component toolbar description is common to all components. Some of the elements might be disabled in some of the components.

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 "Wiring Between Components" on page 429.

UI Element	Description
	• ⟳ Refresh **Refresh.** Refreshes the display. The button is disabled in the Page Filter component. • ⧉ Open in a New Window **Open in a New Window**. Opens the component in a new window.
🔧	**Configure Component.** Opens the Configure Component dialog box for the relevant component. For details, see the relevant section below. **Note:** • The button is disabled in the Breakdown View component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired KPI View, Historical View, or Rolodex components, the Breakdown View component displays the values of the KPI Breakdown for the selected KPI. • The button is disabled in the Forecast component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired Historical View, the Forecast component displays the forecast data for the selected KPI. **Note:** You can also click **here** in **Click Here to configure it** in the center of the component
?	Opens the online documentation page relevant to the component you are currently configuring.
«	**Collapse component.** Collapses the component. To expand the collapsed component, click the ︾ button on the collapsed component.
▯	Drag the Resize handle to enlarge or reduce horizontally the area occupied by the 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
▦	Enables the on-demand periodicity temporary recalculation and display. For details, see On-demand Periodicity in Component Display.
<Display format>	You can modify the format of the display of some of the components on the fly, by selecting the relevant format. Some of the formats are not applicable to some of the components. The formats you can select are: • - To display the contents of the component using the enriched vertical column format. For details, see Column Format. • - To display the contents of the component using the horizontal Rolodex or gauge format. For details, see Rolodex - Gauge format. • - To display the content using the multiple line format. For details, see Multiple or single line format. • - To display the content using the pie format. For details, see Pie format. • - To display the content using the bar format. For details, see Bar format • - To display the content using the horizontal enriched column format. For details, see Column format. • - To display the content using the vertical Rolodex or gauge format. For details, see Rolodex - Gauge format. • - To display the content using the single line graph format. For details, see Multiple or single line format. • - To display the content using the cluster bar format. For details, see Cluster Bar format. • - To display the content using the stacked bar format. For details, see Stacked Bar format. • - To display the content using the bar and line format. For details, see Bar and Line format. • - To display the content using the bubble chart format. For details, see Bubble Chart format. • - To display the content using the list format. For details, see List format.

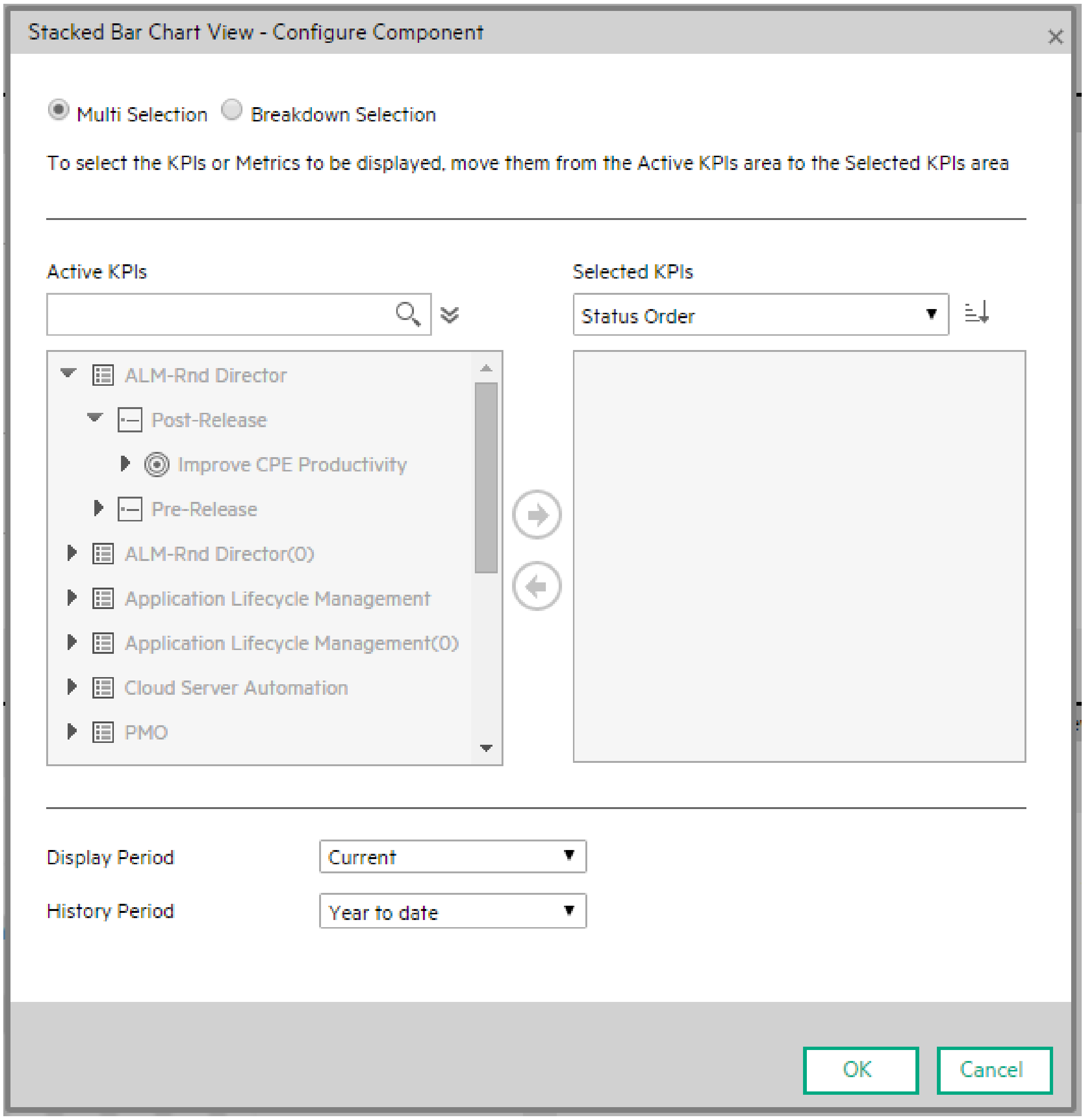
UI Element	Description
	For details, see On-the-fly Display Format Change in Dashboard Page Components.

Stacked Bar Chart View - Configure Component Dialog Box

You can select the Multi Selection or Breakdown Selection options:

- **Multi Selection**

  You use this option when you want to compare several metrics or KPIs.



Stacked Bar Chart View - Configure Component

● Multi Selection ○ Breakdown Selection

To select the KPIs or Metrics to be displayed, move them from the Active KPIs area to the Selected KPIs area

Selected KPIs: Status Order

Display Period: Current

History Period: Year to date

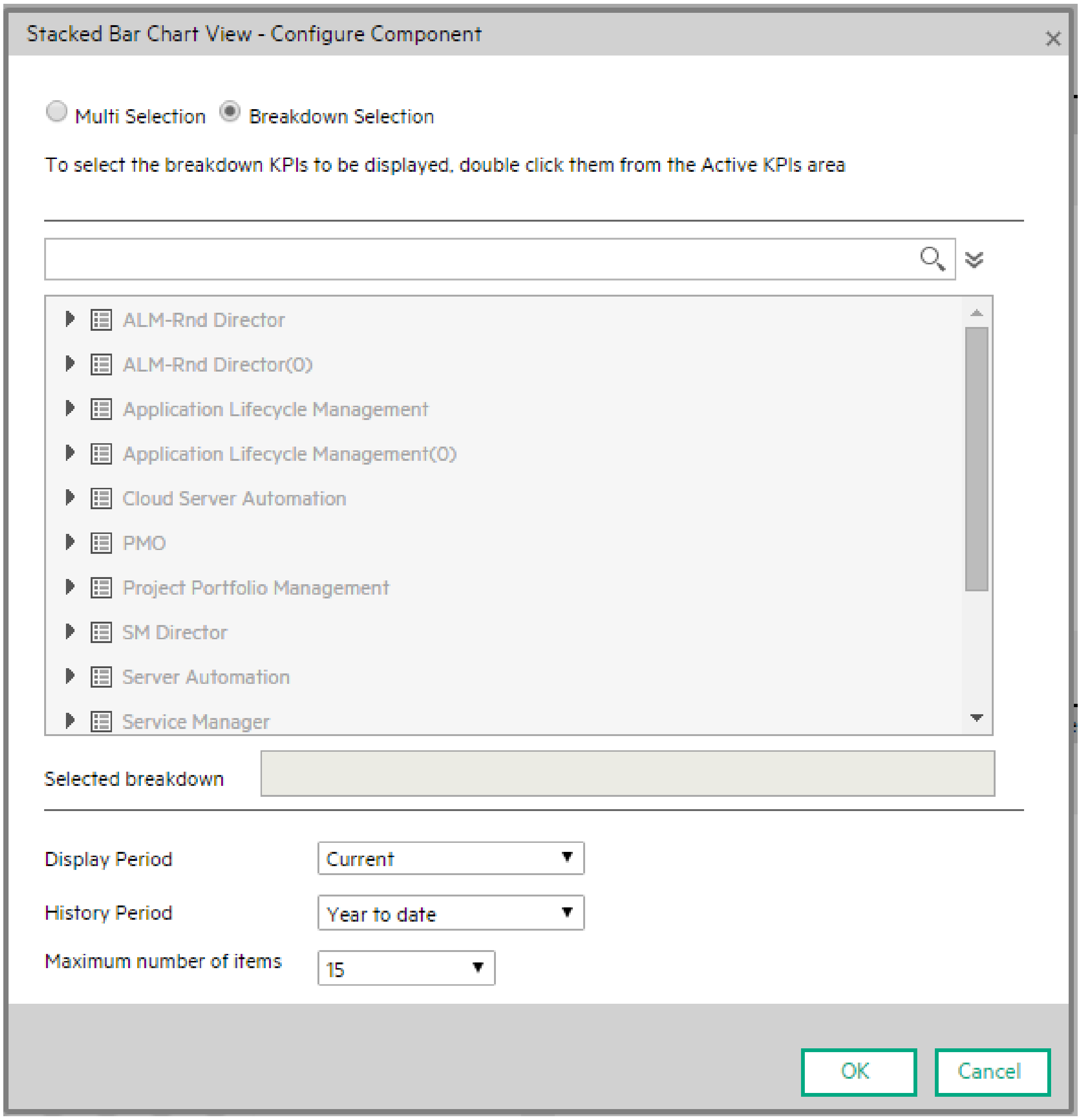
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
<Search>	Enter the relevant string to display, in the tree, only the Metrics or KPIs (or Metric or KPI Breakdowns) whose name includes the string. In addition, the child KPIs or Metrics of the filtered items are also listed even when the child names do not include the string.
︾	**Advanced Search.** Opens additional fields to help you refine the component's filter: ◦ **Status:** Select one of the **All**, **Good**, **Warning**, **Critical**, or **No Data** values to display only the elements with the selected status, in the Active KPIs or in the tree area. When you select **No Data**, the search returns only the elements with no data. ◦ **Type.** Select: • **All.** To display all the elements in the Active KPIs or in the tree with the selected Status. • **KPIs.** To display, in the Active KPIs or in the tree, only the KPIs. • **Objective.** To display in the Active KPIs or in the tree, only the Objectives and their KPIs. • **Metrics.** To display, in the tree, only the Metrics. You can then select the relevant item if any.
Active KPIs	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 (if you have selected **Breakdown selection**, only the KPI Breakdowns are highlighted). To select or deselect 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. **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.
Selected KPIs	The box lists all the selected metrics or KPIs that you want to display in the component. To select or deselect 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

UI Element	Description
	other. **<Status sort>** ◦ **Status sort** to sort the selected elements in status order. You can then click the icon to the right of the box to select the reverse order. Depending on the selection, the icon can be one of the following: ↑|↓. ◦ **Alphabetical sort** to sort the selected elements in alphabetical order. You can then click the icon to the right of the box to select the reverse order. Depending on the selection, the icon can be one of the following: ↑|↓.
Display Period	Select the time period to display in the component: ◦ **Current**. The values of the selected Metrics or KPIs (**Multi Selection**) or KPIs or Metric Breakdown dimensions (**Breakdown Selection**) 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 **Multi Selection** or KPIs or Metric Breakdown dimensions (**Breakdown Selection**) whose calculation period has already completed according to the selected metrics or KPIs configured periodicity. ◦ **Yearly/Monthly/Quarterly/Weekly/Daily.** The list of time periods represents the longest periodicity configured for the selected Metrics or KPIs (**Multi Selection**) or KPIs or Metric Breakdown dimensions (**Breakdown Selection**). When you select **Yearly/Monthly/Quarterly/Weekly/Daily**, 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 **Multi Selection** or KPIs or Metric Breakdown dimensions (**Breakdown Selection**) that have completed for the selected periods.

- **Breakdown Selection**

  Select this option when you want to compare the values of the selected KPI Breakdown dimension.



Stacked Bar Chart View - Configure Component

○ Multi Selection ● Breakdown Selection

To select the breakdown KPIs to be displayed, double click them from the Active KPIs area

ALM-Rnd Director
ALM-Rnd Director(0)
Application Lifecycle Management
Application Lifecycle Management(0)
Cloud Server Automation
PMO
Project Portfolio Management
SM Director
Server Automation
Service Manager

Selected breakdown

Display Period: Current

History Period: Year to date

Maximum number of items: 15

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

UI Element	Description
<Search>	Enter the relevant string to display, in the tree, only the Metrics or KPIs (or Metric or KPI Breakdowns) whose name includes the string.

UI Element	Description
	In addition, the child KPIs or Metrics of the filtered items are also listed even when the child names do not include the string.
︾	**Advanced Search.** Opens additional fields to help you refine the component's filter: ◦ **Status:** Select one of the **All**, **Good**, **Warning**, **Critical**, or **No Data** values to display only the elements with the selected status, in the Active KPIs area. When you select **No Data**, the search returns only the elements with no data. ◦ **Type.** Select: • **All.** To display, in the tree, all the elements. • **KPIs.** To display, in the tree, only the KPIs. • **Objective.** To display in the tree, only the Objectives and their KPIs. • **Metrics.** To display, in the tree, only the Metrics. You can then select the relevant KPI or Metric Breakdown if any.
<Tree>	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. 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.
Selected metrics	The box lists the selected KPI or Metric Breakdown.
Display Period	Select the time period to display in the component: ◦ **Current**. The values of the selected Metrics or KPIs (**Multi Selection**) or KPIs or Metric Breakdown dimensions (**Breakdown Selection**) 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 **Multi Selection** or KPIs or Metric Breakdown dimensions (**Breakdown Selection**) whose calculation period has already completed according to the selected metrics or KPIs configured periodicity. ◦ **Yearly/Monthly/Quarterly/Weekly/Daily.** The list of time periods represents the longest periodicity configured for the selected Metrics or KPIs (**Multi Selection**) or KPIs or Metric Breakdown dimensions (**Breakdown Selection**). When you select **Yearly/Monthly/Quarterly/Weekly/Daily**, 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 **Multi Selection** or KPIs or Metric Breakdown dimensions

UI Element	Description
	(**Breakdown Selection**) that have completed for the selected periods.
History Period	Select one of the following options: ◦ **Quarter to date.** The report's display period starts 3 months prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. ◦ **Half a year to date.** The report's display period starts 6 months prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. ◦ **Year to date.** The report's display period starts 1 year prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. ◦ **2 years to date.** The report's display period starts 2 years prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. ◦ **3 years to date.** The report's display period starts 3 years prior to the current date or prior to the selected year, month, quarter, week, or day in the **Display Period**. **Note:** ◦ 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. **Example** If you select the 4th Quarter of 2013 in the **Display Period** field, and **3 years to date** in the **History Period** field, the rightmost point in the X-axis is the end of the 4th Quarter of 2013 (December 31st, 2013), and the leftmost point is the 4th Quarter of 2011. ◦ Each point in the chart between the two end points represents the end of a Quarter between December 31st, 2010, and December 31st, 2013. ◦ 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.
Maximum Number of Items	This field is displayed only when you select **Breakdown Selection**. Specify the number of KPI Breakdowns to display in the component.

The SWF Report Viewer Component

The SWF Report Viewer component enables the user to view the selected SWF file from Xcelsius or from other sources. SWF files have a **.swf** suffix.

To access:

You can view the report in the relevant page in the Dashboard.

To configure the component, where possible, click the **Configure Component** button in the component to display the component filter, or click **here** in **Click Here to configure** in the center of the component.

Learn More | Tasks | UI Description

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> **Tip:** A SWF Report Viewer component displays only one SWF file.If you want to display more than one SWF file in the Dashboard, you can create multiple SWF Report Viewer components and rename each component.

> **Note:** You cannot wire a SWF Reports Viewer (Flash) component with a Page Filter component in a Dashboard page.

Tasks

Main task: "Dashboard Display" on page 195

This section includes the following topics:

Add a Component to a Dashboard Page

> **Note:** To view a list of the available SWF files, you must copy the reports **.swf** files to the following location:
> **<HP_BA>/glassfish/glassfish/domains/BTOA/xcelsius** directory.

To add a component to a page that is already formatted:

1. In the 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, click or double-click the component to place it in the layout area, or select the component and drag it to an area on the page.

   Note that double-click only works if you open the Component Gallery from the layout itself and not from the toolbar.

   - 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 page. For user interface details, see "Component Gallery and Component Categories" on page 223.
5. In the component, click the **Configure Component** button or click **here** in **Click Here to configure** in the center of the component.
6. In the component Filter dialog box that opens, select the information you want to display and click **OK**.

   The component displays the required information.

For more information, see "Page Layout and Components" on page 205.

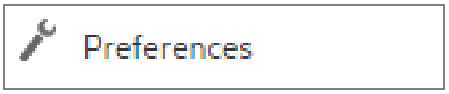
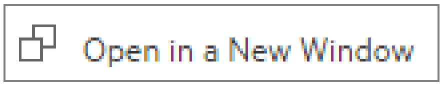
UI Description

SWF Report Viewer Component

Component Toolbar

> **Note:** The component toolbar description is common to all components. Some of the elements might be disabled in some of the components.

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 "Wiring Between Components" on page 429. • **Refresh.** Refreshes the display. The button is disabled in the Page Filter component. •  **Open in a New Window**. Opens the component in a new window.
	Configure Component. Opens the Configure Component dialog box for the relevant component. For details, see the relevant section below. **Note:**

UI Element	Description
	• The button is disabled in the Breakdown View component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired KPI View, Historical View, or Rolodex components, the Breakdown View component displays the values of the KPI Breakdown for the selected KPI. • The button is disabled in the Forecast component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired Historical View, the Forecast component displays the forecast data for the selected KPI. **Note:** You can also click **here** in **Click Here to configure it** in the center of the component
?	Opens the online documentation page relevant to the component you are currently configuring.
«	**Collapse component.** Collapses the component. To expand the collapsed component, click the ⌄ button on the collapsed component.
▯	Drag the Resize handle to enlarge or reduce horizontally the area occupied by the component.
✕	**Remove Component.** Removes the component from the page.

SWF Report Viewer - Configure Component Dialog Box

> **Note:** ITBA does not provide out-of-the-box SWF reports.

The US Map Component

The US Map component displays the status, value, and trend of a KPI or the value of a Metric on a United States of America map. The KPI or Metric must have a Breakdown by State.

To access:

You can view the component in the relevant page in the Dashboard.

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- 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).
- **Permissions.** In the Dashboard components and in their configuration dialog boxes, you can only see the Scorecards, Perspectives, Objectives, KPIs, or KPI Breakdowns for which you have permission. If you do not have permission, you do not see that element. If you do not have permission to see all the elements in a component, the error message **Data is not displayed because it does not exist or you do not have the correct viewing permissions. Contact your administrator** is displayed.
- The US Map component is automatically wired to the KPI View component. For details, see "The KPI View Component" on page 309.

Tasks

This section includes:

Prerequisites

To enjoy the capabilities of the US Map component:

- The KPI or Metric must have only one breakdown, by State. If the KPI or Metric has more than one breakdown, for example, by Organization, the US Map component does not display data.
- You must add a KPI View component to the page. The US Map component is automatically wired to the KPI View. This means that when you click a KPI in the KPI View, its breakdowns values are displayed in the US Map component.
- The names of the States you are using for the KPI or Metric Breakdown per State must have standard names corresponding to the States used in the map.

Add a Component to a Dashboard Page

In a Dashboard page, add the KPI View component and the relevant US Map component. For details on how to add a component to a page, see the procedure below.

To add a component to a page that is already formatted:

1. In the 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, click or double-click the component to place it in the layout area, or select the component and drag it to an area on the page.

   Note that double-click only works if you open the Component Gallery from the layout itself and not from the toolbar.

   - 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 page. For user interface details, see "Component Gallery and Component Categories" on page 223.

5. In the component, click the **Configure Component** button or click **here** in **Click Here to configure** in the center of the component.
6. In the component Filter dialog box that opens, select the information you want to display and click **OK**.

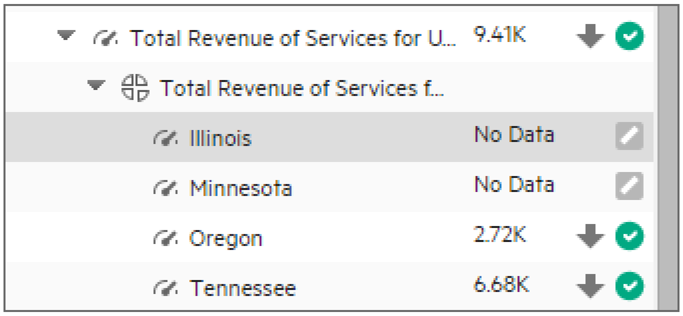
   The component displays the required information.

For more information, see "Page Layout and Components" on page 205.

Display the data in map format

In the Dashboard page you created:

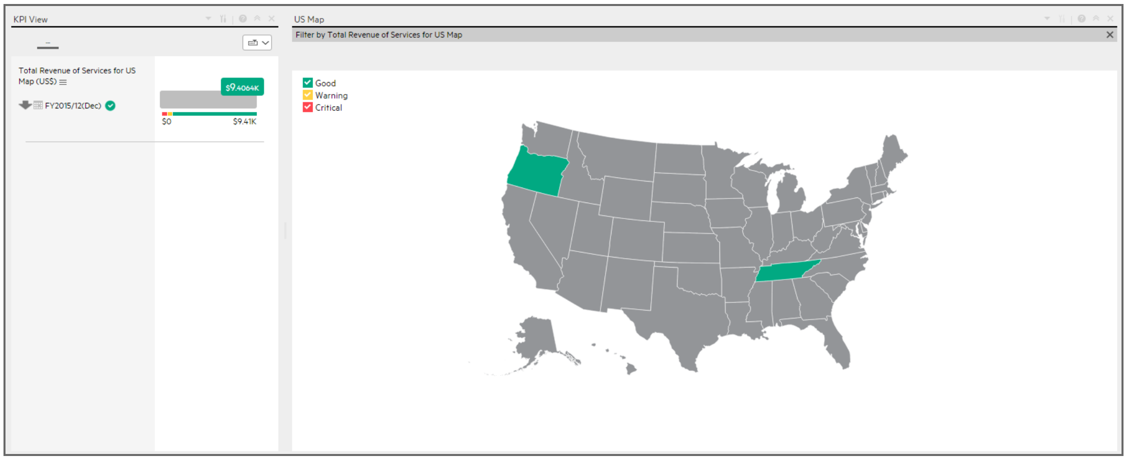
1. In the KPI View component, click and select the relevant KPI or Metric and save. The KPI or Metric must have breakdown by State. For example:

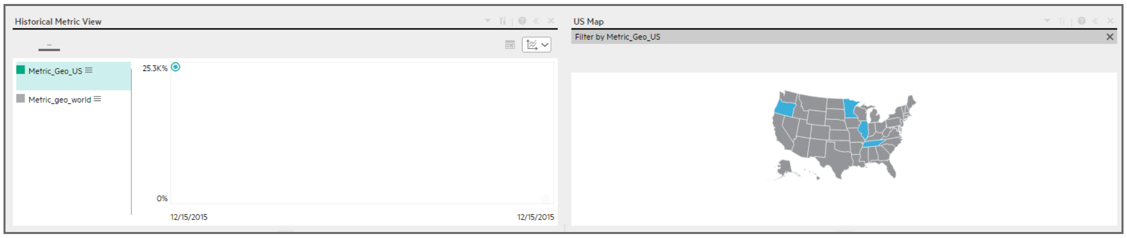
Total Revenue of Services for U...	9.41K
Total Revenue of Services f...	
Illinois	No Data
Minnesota	No Data
Oregon	2.72K
Tennessee	6.68K

2. In the Dashboard page, in the KPI View component, click the relevant KPI or Metric.

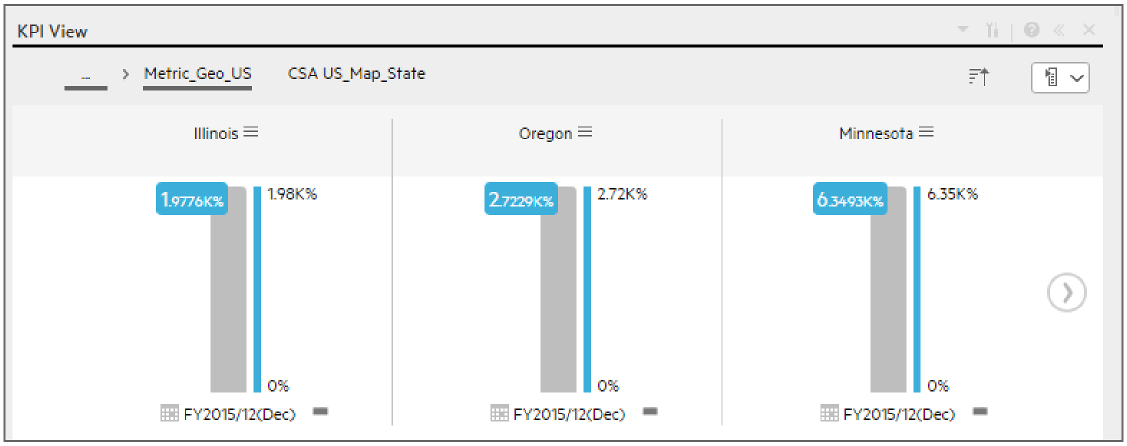
   If the KPI has a Breakdown by State, the US Map component displays the color corresponding to the value of the KPI or Metric for the State.


KPI View
Total Revenue of Services for US Map (US$)
FY2015/12(Dec)
$9.4064K
$0
$9.41K
US Map
Filter by Total Revenue of Services for US Map
Good
Warning
Critical

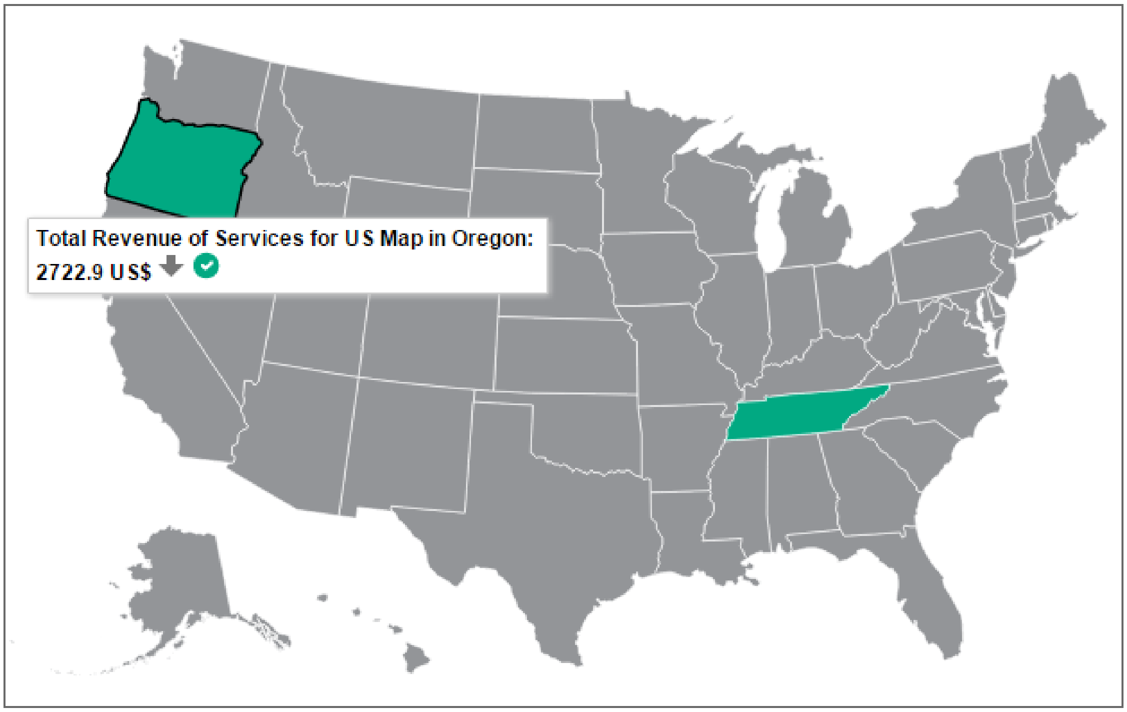
If the Metric has a Breakdown by State, the US Map component displays the State with a blue background when the Metric has a value for the State or gray when there is no data for the State.



Note that when you click the KPI or Metric in the KPI View, the corresponding list of KPI Breakdowns per State is displayed in the KPI View component.



3. In the US Map component, hover above the relevant State to display a tooltip that provides details about the KPI or Metric.



Total Revenue of Services for US Map in Oregon:
2722.9 US$ ⬇ ✓

The US Map component legend provides details about the meaning of the colors:

- ☑ Good
- ☑ Warning
- ☑ Critical

4. Click the relevant state to open the KPI/Metric Breakdown for the relevant state in Explorer.

Reference

Supported US States Names

Only the English names of the States are supported. They must correspond to the list below:

Alabama
Alaska
Arizona
Arkansas

California
Colorado
Connecticut
Delaware
Florida
Georgia
Hawaii
Idaho
Illinois
Indiana
Iowa
Kansas
Kentucky
Louisiana
Maine
Maryland
Massachusetts
Michigan
Minnesota
Mississippi
Missouri
Montana
Nebraska
Nevada
New Hampshire
New Jersey
New Mexico
New York
North Carolina
North Dakota
Ohio
Oklahoma
Oregon
Pennsylvania
Rhode Island
South Carolina
South Dakota
Tennessee
Texas

Utah
Vermont
Virginia
Washington
West Virginia
Wisconsin
Wyoming

The Web Intelligence Report Viewer Component

The Web Intelligence Report Viewer component enables the user to view the selected SAP BusinessObjects report.

> **Tip:** When you want to include a Web Intelligence Report Viewer or Web Intelligence Static Report Viewer component in a Dashboard page, it is recommended to include only one report on each page.

To access:

You can view the report in the relevant page in the Dashboard.

To configure the component, where possible, click the **Configure Component** button in the component to display the component filter, or click **here** in **Click Here to configure** in the center of the component.

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> **Tip:** 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.

Impact of the size of Web Intelligence reports

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.

Tasks

Main task: "Dashboard Display" on page 195

This section includes:

Add a Component to a Dashboard Page

To add a component to a page that is already formatted:

1. In the 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, click or double-click the component to place it in the layout area, or select the component and drag it to an area on the page.

   Note that double-click only works if you open the Component Gallery from the layout itself and not from the toolbar.

   - 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 page. For user interface details, see "Component Gallery and Component Categories" on page 223.
5. In the component, click the **Configure Component** button or click **here** in **Click Here to configure** in the center of the component.
6. In the component Filter dialog box that opens, select the information you want to display and click

OK.

The component displays the required information.

For more information, see "Page Layout and Components" on page 205.

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 "The Page Filter Component" on page 333.

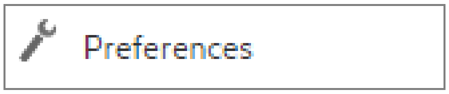
UI Description

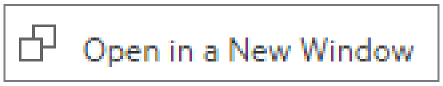
Web Intelligence Report Viewer Component

Component Toolbar

> **Note:** The component toolbar description is common to all components. Some of the elements might be disabled in some of the components.

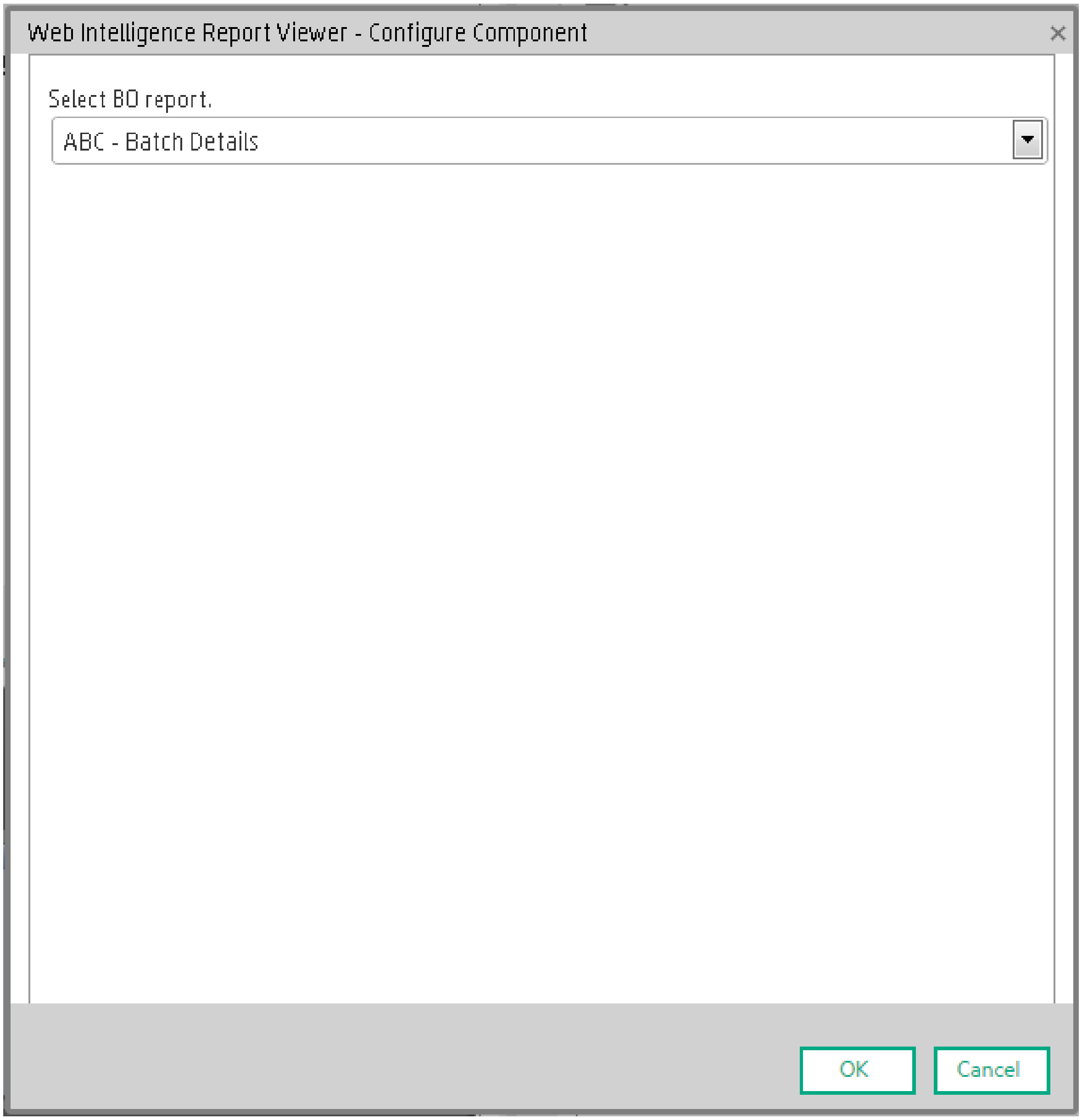
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

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

UI Element	Description
	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 "Wiring Between Components" on page 429. • **Refresh.** Refreshes the display. The button is disabled in the Page Filter component. •  **Open in a New Window**. Opens the component in a new window.
	Configure Component. Opens the Configure Component dialog box for the relevant component. For details, see the relevant section below. **Note:** • The button is disabled in the Breakdown View component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired KPI View, Historical View, or Rolodex components, the Breakdown View component displays the values of the KPI Breakdown for the selected KPI. • The button is disabled in the Forecast component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired Historical View, the Forecast component displays the forecast data for the selected KPI. **Note:** You can also click **here** in **Click Here to configure it** in the center of the component
?	Opens the online documentation page relevant to the component you are currently configuring.
«	**Collapse component.** Collapses the component. To expand the collapsed component, click the ⌄ button on the collapsed component.

UI Element	Description
▯	Drag the Resize handle to enlarge or reduce horizontally the area occupied by the component.
✕	**Remove Component.** Removes the component from the page.

Web Intelligence Report Viewer - Configure Component Dialog Box



Select BO report.

ABC - Batch Details

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.

The Web Intelligence Static Report Viewer Component

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.

> **Tip:** When you want to include a Web Intelligence Report Viewer or Web Intelligence Static Report Viewer component in a Dashboard page, it is recommended to include only one report on each page.

> **Note:** You cannot wire a Web Intelligence Static Report Viewer component with a Page Filter component in a Dashboard page.

To access:

You can view the report in the relevant page in the Dashboard.

To configure the component, where possible, click the **Configure Component** button in the component to display the component filter, or click **here** in **Click Here to configure** in the center of the component.

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About BO reports

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:
> **<HP-BA>\glassfish\glassfish\domains\BTOA\xcelsius** directory.

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.

Impact of the size of Web Intelligence reports

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.

Tasks

Main task: "Dashboard Display" on page 195

Add a Component to a Dashboard Page

To add a component to a page that is already formatted:

1. In the 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, click or double-click the component to place it in the layout area, or select the component and drag it to an area on the page.

Note that double-click only works if you open the Component Gallery from the layout itself and not from the toolbar.

- 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 page. For user interface details, see "Component Gallery and Component Categories" on page 223.
5. In the component, click the **Configure Component** button or click **here** in **Click Here to configure** in the center of the component.
6. In the component Filter dialog box that opens, select the information you want to display and click **OK**.

   The component displays the required information.

For more information, see "Page Layout and Components" on page 205.

UI Description

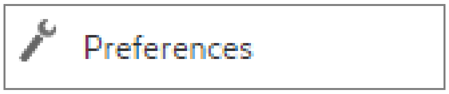
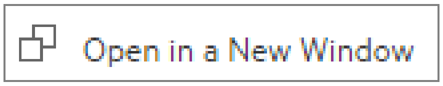
Web Intelligence Static Report Component Viewer (Display)

> **Note:** ITBA does not provide out-of-the-box Web Intelligence Static reports.

Component Toolbar

> **Note:** The component toolbar description is common to all components. Some of the elements might be disabled in some of the components.

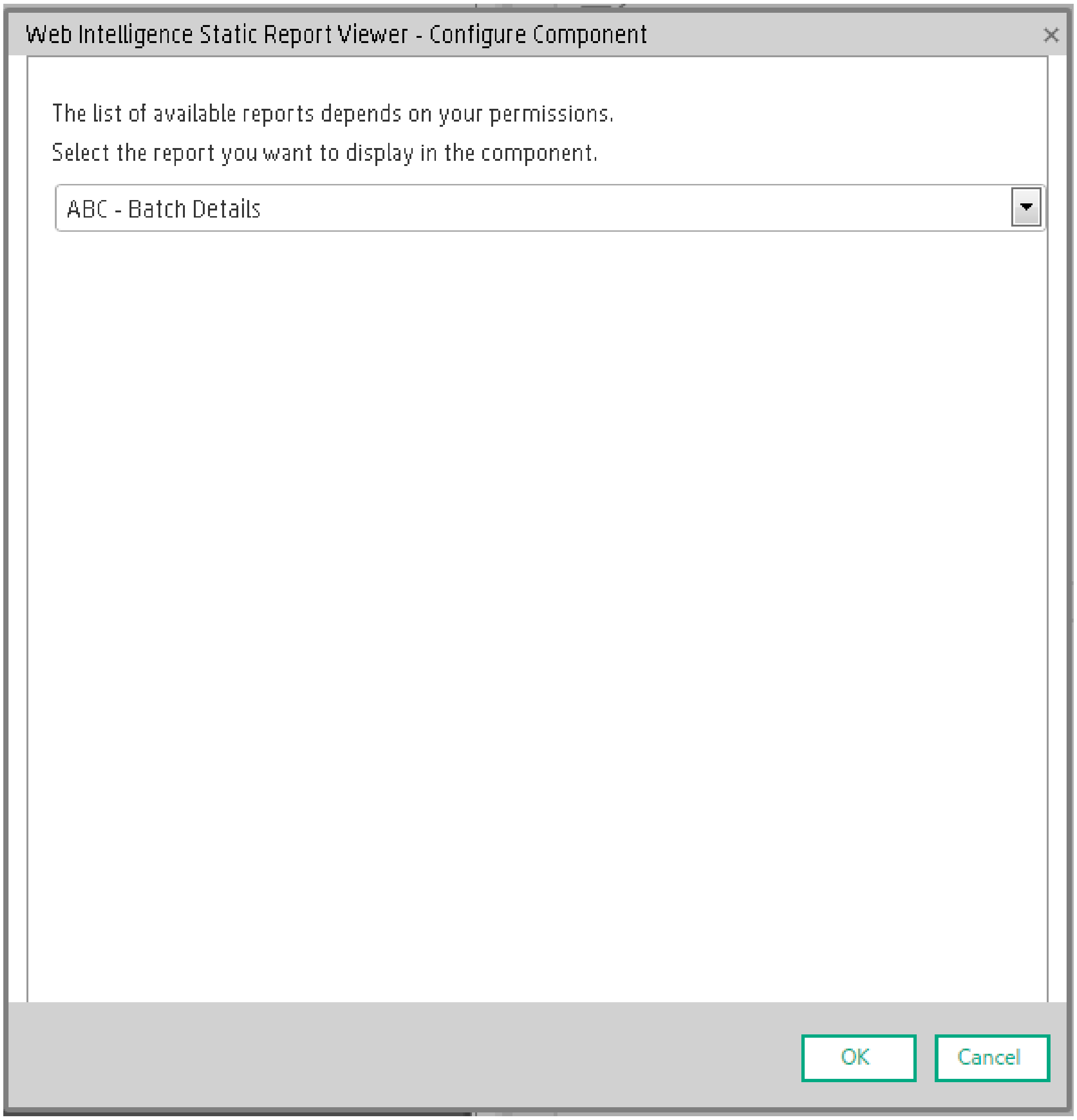
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

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 "Wiring Between Components" on page 429. - **Refresh.** Refreshes the display. The button is disabled in the Page Filter component. -  **Open in a New Window**. Opens the component in a new window.
	Configure Component. Opens the Configure Component dialog box for the relevant component. For details, see the relevant section below. **Note:** - The button is disabled in the Breakdown View component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired KPI View, Historical View, or Rolodex components, the Breakdown View component displays the values of the KPI Breakdown for the selected KPI. - The button is disabled in the Forecast component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired Historical View, the Forecast component displays the forecast data for the selected KPI. **Note:** You can also click **here** in **Click Here to configure it** in the center of the component

UI Element	Description
?	Opens the online documentation page relevant to the component you are currently configuring.
«	**Collapse component.** Collapses the component. To expand the collapsed component, click the ︾ button on the collapsed component.
▯	Drag the Resize handle to enlarge or reduce horizontally the area occupied by the component.
×	**Remove Component.** Removes the component from the page.

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.



The list of available reports depends on your permissions.
Select the report you want to display in the component.

ABC - Batch Details

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.

Webi Report Categories

In the Central 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.

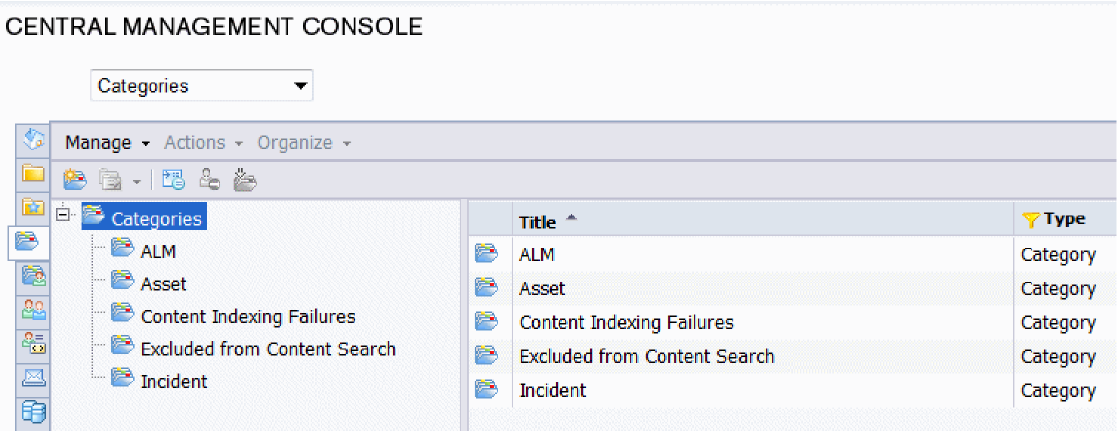
To access:

Access the Central Management Console console.

Tasks

Create categories

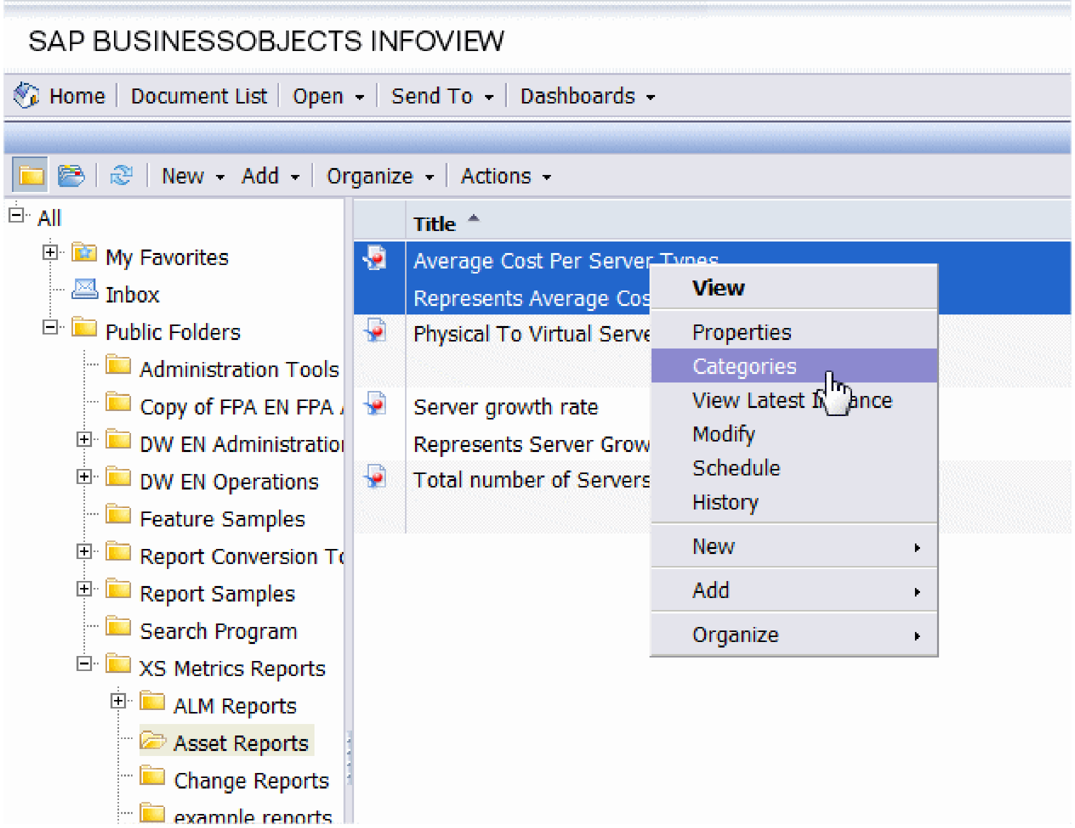
1. Access the Central Management Console console.
2. Create the categories:


CENTRAL MANAGEMENT CONSOLE
Categories
Manage
Actions
Organize
Categories
ALM
Asset
Content Indexing Failures
Excluded from Content Search
Incident

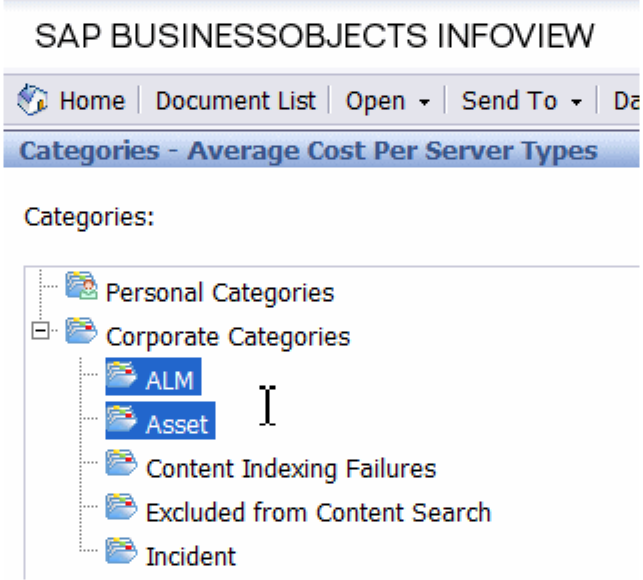
Title	Type
ALM	Category
Asset	Category
Content Indexing Failures	Category
Excluded from Content Search	Category
Incident	Category

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.

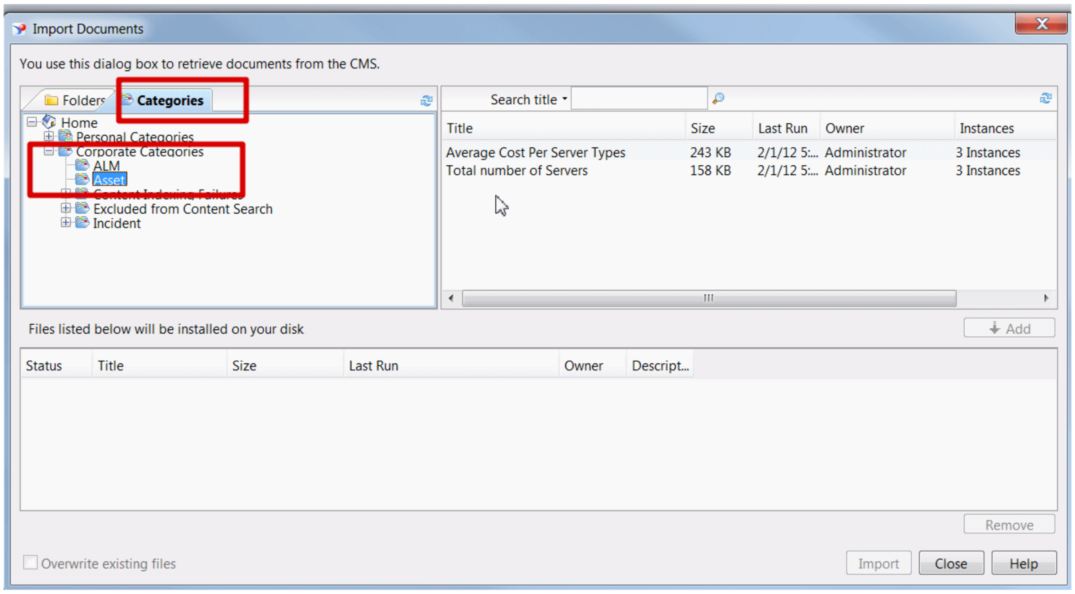


b. Select the relevant categories for the selected report, and click **OK**


SAP BUSINESSOBJECTS INFOVIEW
Home
Document List
Open
Send To
Da
Categories - Average Cost Per Server Types
Categories:
Personal Categories
Corporate Categories
ALM
Asset
Content Indexing Failures
Excluded from Content Search
Incident

c. Launch the Web Intelligence Rich Client, then 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.



Import Documents

You use this dialog box to retrieve documents from the CMS.

Title	Size	Last Run	Owner	Instances
Average Cost Per Server Types	243 KB	2/1/12 5:...	Administrator	3 Instances
Total number of Servers	158 KB	2/1/12 5:...	Administrator	3 Instances

Files listed below will be installed on your disk

Status	Title	Size	Last Run	Owner	Descript...

☐ Overwrite existing files

The World Map Component

The World Map component displays the status, value, and trend of a KPI or the value of a Metric on a world map. The KPI or Metric must have a Breakdown by country.

To access:

You can view the component in the relevant page in the Dashboard.

Learn More Tasks Reference

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).
- **Permissions.** In the Dashboard components and in their configuration dialog boxes, you can only see the Scorecards, Perspectives, Objectives, KPIs, or KPI Breakdowns for which you have permission. If you do not have permission, you do not see that element. If you do not have permission to see all the elements in a component, the error message **Data is not displayed because it does not exist or you do not have the correct viewing permissions. Contact your administrator** is displayed.
- The World Map component is automatically wired to the KPI View component. For details, see "The KPI View Component" on page 309.

Tasks

This section includes:

Prerequisites

To enjoy the capabilities of the World Map component:

- The KPI or Metric must have only one breakdown, by Country. If the KPI or Metric has more than one breakdown, for example, by Organization, the World Map component does not display data.
- You must add a KPI View component to the page. The World Map component is automatically wired to the KPI View. This means that when you click a KPI in the KPI View, its breakdowns values are displayed in the World Map component.
- The names of the countries you are using for the KPI or Metric Breakdown per country must have standard names corresponding to the country names used in the maps.

Add a Component to a Dashboard Page

In a Dashboard page, add the KPI View component and the relevant World Map component. For details on how to add a component to a page, see the procedure below.

To add a component to a page that is already formatted:

1. In the 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, click or double-click the component to place it in the layout area, or select the component and drag it to an area on the page.

   Note that double-click only works if you open the Component Gallery from the layout itself and not from the toolbar.

   - 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 page. For user interface details, see "Component Gallery and Component Categories" on page 223.

5. In the component, click the **Configure Component** button or click **here** in **Click Here to configure** in the center of the component.
6. In the component Filter dialog box that opens, select the information you want to display and click **OK**.

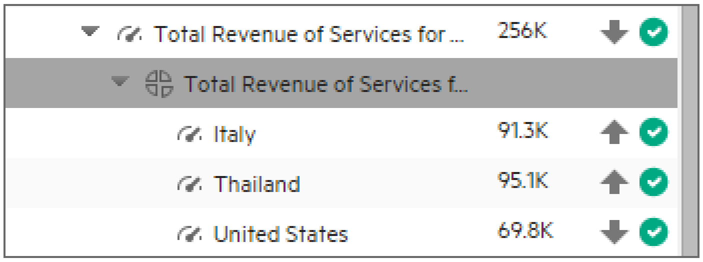
   The component displays the required information.

For more information, see "Page Layout and Components" on page 205.

Display the data in map format

In the Dashboard page you created:

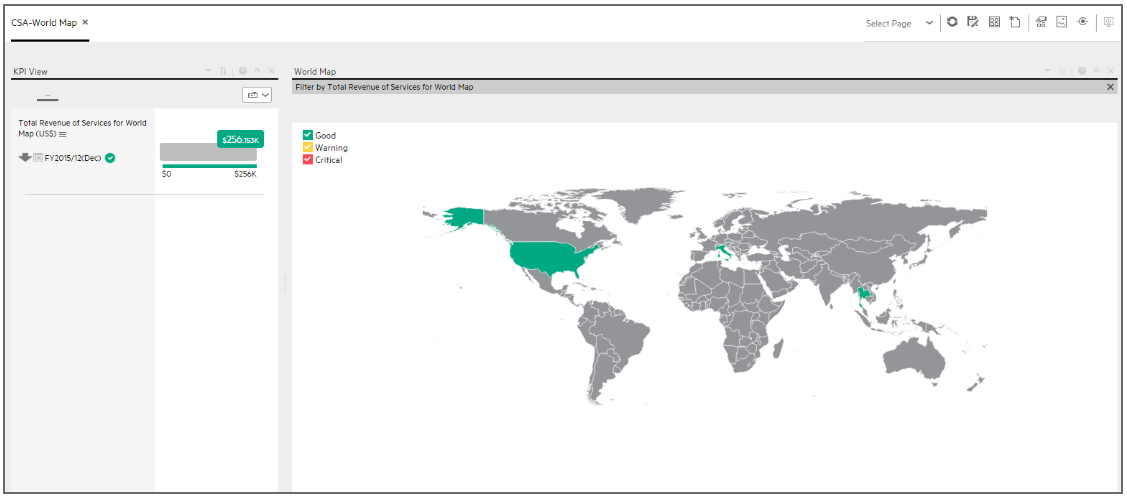
1. In the KPI View component, click and select the relevant KPI or Metric and save. The KPI or Metric must have breakdown per country. For example:

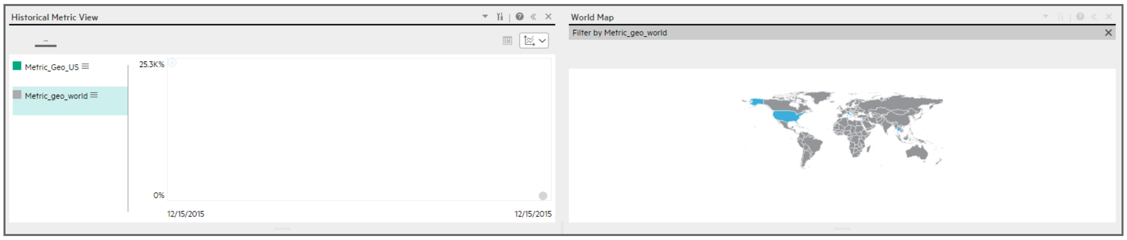
   Total Revenue of Services for ... 256K ↓ ✓
   Total Revenue of Services f...
   Italy 91.3K ↑ ✓
   Thailand 95.1K ↑ ✓
   United States 69.8K ↓ ✓

2. In the Dashboard page, in the KPI View component, click the relevant KPI or Metric.

   If the KPI has a Breakdown by country, the World Map component displays the color corresponding to the value of the KPI or Metric for the country.

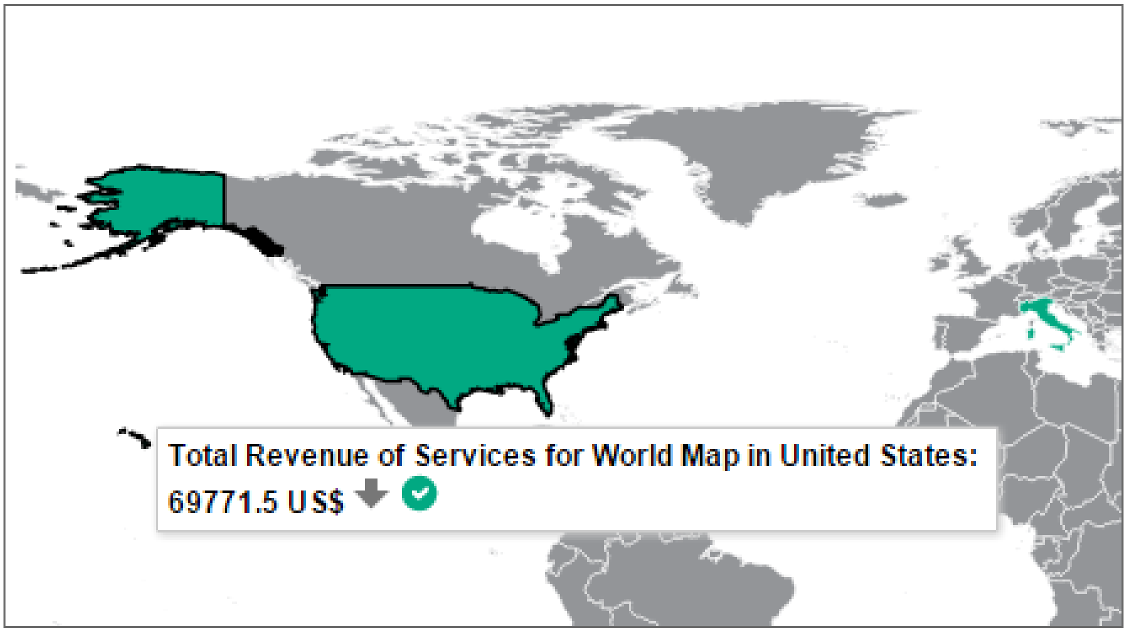

CSA-World Map ×
Select Page
KPI View
Total Revenue of Services for World Map (US$)
FY2015/12(Dec)
$256.153K
$0
$256K
World Map
Filter by Total Revenue of Services for World Map
Good
Warning
Critical

If the Metric has a Breakdown by country, the World Map component displays the country with a blue background when the Metric has a value for the country or gray when there is no data for the country.



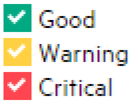
Note that when you click the KPI or Metric in the KPI View, the corresponding list of KPI Breakdowns per country is displayed in the KPI View component.

3. In the World Map component, hover above the relevant country to display a tooltip that provides details about the KPI or Metric.



Total Revenue of Services for World Map in United States: 69771.5 US$

The World Map component legend provides details about the meaning of the colors:



☑ Good
☑ Warning
☑ Critical

4. Click the relevant country to open the KPI/Metric Breakdown for the relevant country in Explorer.

Reference

Supported Country Names

Only the English names of the countries are supported. They must correspond to the list below:

Afghanistan
Akrotiri
Albania
Algeria

American Samoa
Andorra
Angola
Anguilla
Antarctica
Antigua and Barbuda
Argentina
Armenia
Aruba
Ashmore and Cartier Islands
Australia
Austria
Azerbaijan
Bahamas
Bahrain
Bangladesh
Barbados
Bassas da India
Belarus
Belgium
Belize
Benin
Bermuda
Bhutan
Bolivia
Bosnia and Herzegovina
Botswana
Bouvet Island
Brazil
British Indian Ocean Territory
British Virgin Islands
Brunei
Bulgaria
Burkina Faso
Burma
Burundi
Cambodia
Cameroon
Canada

Cape Verde
Cayman Islands
Central African Republic
Chad
Chile
China
Christmas Island
Clipperton Island
Cocos (Keeling) Islands
Colombia
Comoros
Cook Islands
Coral Sea Islands
Costa Rica
Cote d'Ivoire
Croatia
Cuba
Cyprus
Czech Republic
Democratic Republic of the Congo
Denmark
Dhekelia
Djibouti
Dominica
Dominican Republic
East Timor
Ecuador
Egypt
El Salvador
Equatorial Guinea
Eritrea
Estonia
Ethiopia
Europa Island
Falkland Islands
Faroe Islands
Federated States of Micronesia
Fiji
Finland

France
French Guiana
French Polynesia
French Southern Territories
Gabon
Gambia
Gaza Strip
Georgia
Germany
Ghana
Gibraltar
Glorioso Islands
Greece
Greenland
Grenada
Guadeloupe
Guam
Guatemala
Guernsey
Guinea
Guinea-Bissau
Guyana
Haiti
Heard Island and McDonald Islands
Holy See (Vatican City)
Honduras
Hong Kong
Hungary
Iceland
India
Indonesia
Iran
Iraq
Ireland
Isle of Man
Israel
Italy
Ivory Coast
Jamaica

Jan Mayen
Japan
Jersey
Jordan
Juan de Nova Island
Kazakhstan
Kenya
Kiribati
Kosovo
Kuwait
Kyrgyzstan
Laos
Latvia
Lebanon
Lesotho
Liberia
Libya
Liechtenstein
Lithuania
Luxembourg
Macau
Macedonia
Madagascar
Malawi
Malaysia
Maldives
Mali
Malta
Marshall Islands
Martinique
Mauritania
Mauritius
Mayotte
Mexico
Moldova
Monaco
Mongolia
Montenegro
Montserrat

Morocco
Mozambique
Myanmar
Namibia
Nauru
Navassa Island
Nepal
Netherlands
Netherlands Antilles
New Caledonia
New Zealand
Nicaragua
Niger
Nigeria
Niue
Norfolk Island
North Korea
Northern Mariana Islands
Norway
Oman
Pakistan
Palau
Panama
Papua New Guinea
Paracel Islands
Paraguay
Peru
Philippines
Pitcairn Islands
Poland
Portugal
Puerto Rico
Qatar
Republic of Serbia
Republic of the Congo
Reunion
Romania
Russia
Rwanda

Saint Helena
Saint Kitts and Nevis
Saint Lucia
Saint Pierre and Miquelon
Saint Vincent and the Grenadines
Samoa
San Marino
Sao Tome and Principe
Saudi Arabia
Senegal
Serbia and Montenegro
Seychelles
Sierra Leone
Singapore
Slovakia
Slovenia
Solomon Islands
Somalia
Somaliland
South Africa
South Georgia and the South Sandwich Islands
South Korea
South Sudan
Spain
Spratly Islands
Sri Lanka
Sudan
Suriname
Svalbard
Swaziland
Sweden
Switzerland
Syria
Taiwan
Tajikistan
Thailand
Togo
Tokelau
Tonga

Trinidad and Tobago
Tromelin Island
Tunisia
Turkey
Turkmenistan
Turks and Caicos Islands
Tuvalu
Uganda
Ukraine
United Arab Emirates
United Kingdom
United Republic of Tanzania
United States
Uruguay
Uzbekistan
Vanuatu
Venezuela
Vietnam
Virgin Islands
Wake Island
Wallis and Futuna
West Bank
Western Sahara
Yemen
Zambia
Zimbabwe

The Xcelsius Reports Viewer (Flash) Component

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.

To configure the component, where possible, click the **Configure Component** button in the component to display the component filter, or click **here** in **Click Here to configure** in the center of the component.

Learn More | Tasks | UI Description

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.

Tasks

Main task: "Dashboard Display" on page 195

This section includes:

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:

   - **Self-developed reports** - Self-developed reports show data as is.

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 **Component Gallery** 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 "Component Gallery and Component Categories" on page 223.
   - 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, or click **here** in **Click Here to configure** in the center of the component.
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.

Create your own Flash report to be displayed in the Xcelsius Reports Viewer (Flash) Component

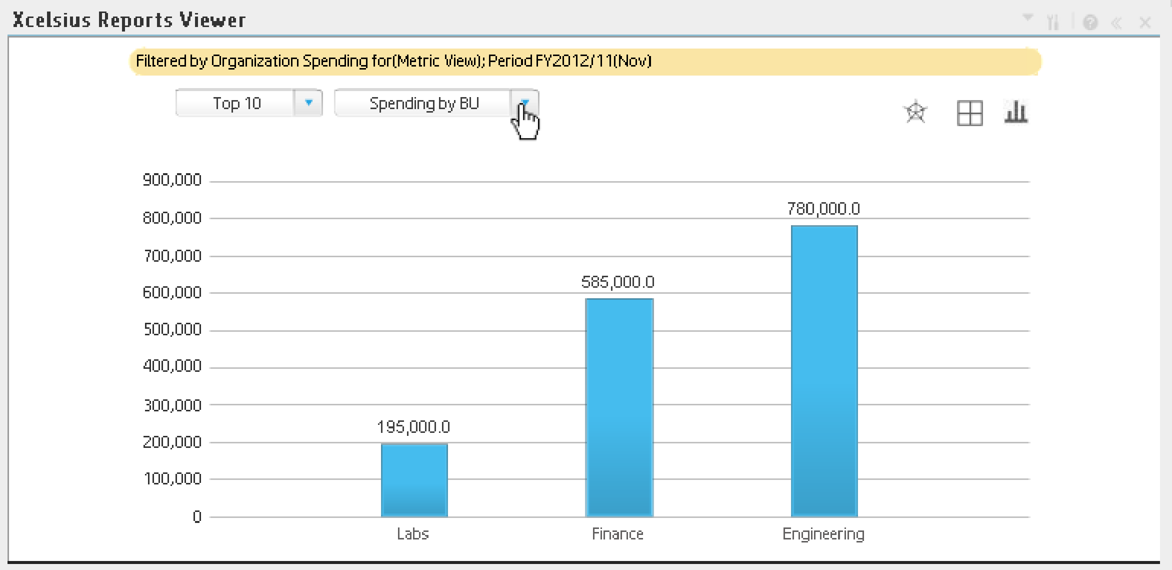
Create your Flash report in Xcelsius and make sure that:

- 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

This is an example of the Xcelsius report viewer with a Metric Breakdown report.



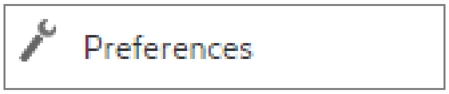
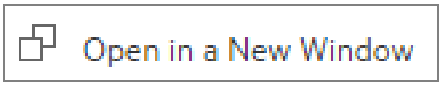
Filtered by Organization Spending for(Metric View); Period FY2012/11(Nov)

Component Toolbar

> **Note:** The component toolbar description is common to all components. Some of the elements might be disabled in some of the components.

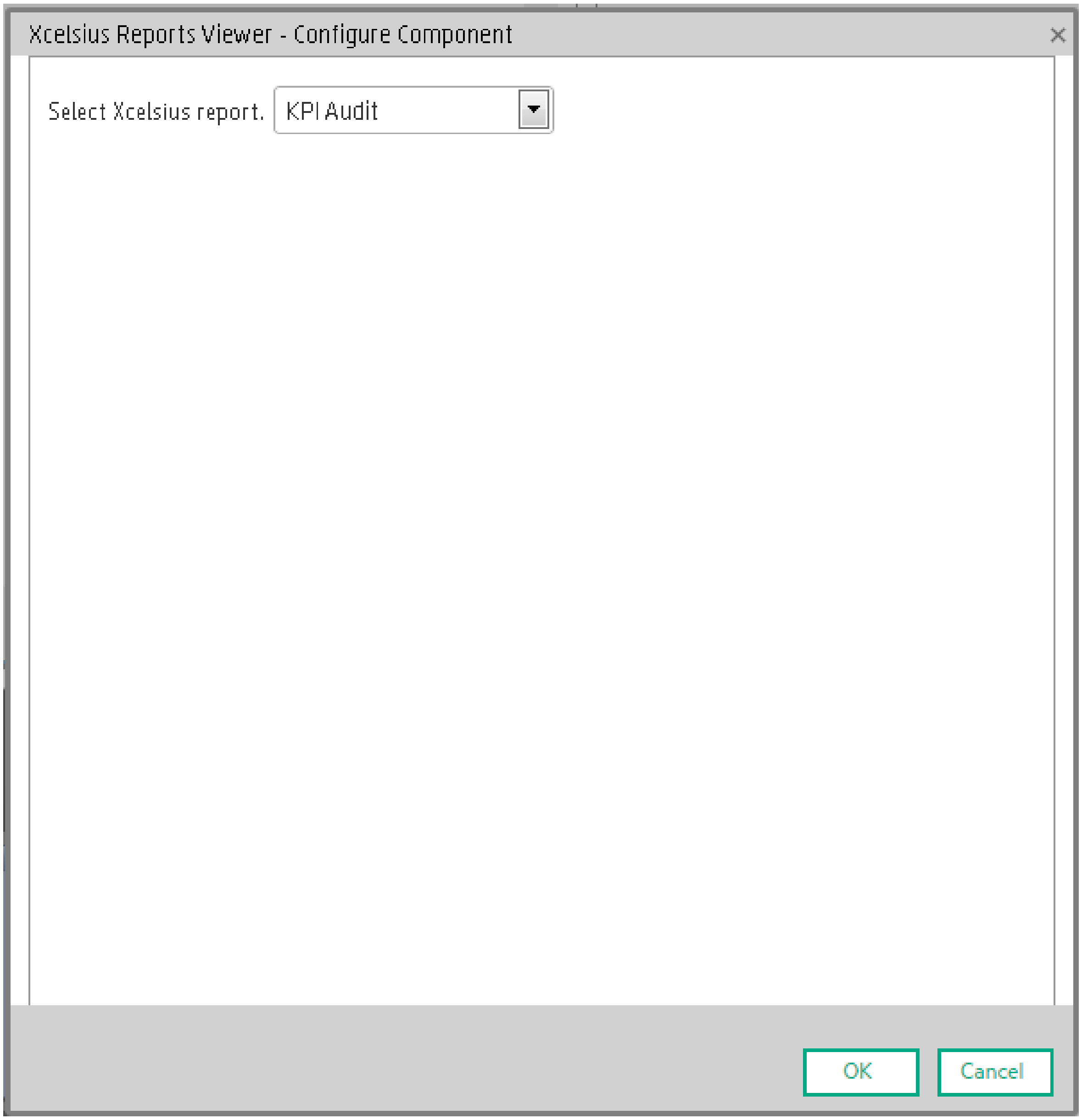
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
▾	**Component Menu.** Opens a menu where you can select:

UI Element	Description
	•  Preferences **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 **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 "Wiring Between Components" on page 429. • Refresh **Refresh.** Refreshes the display. The button is disabled in the Page Filter component. •  Open in a New Window **Open in a New Window**. Opens the component in a new window.
🔧	**Configure Component.** Opens the Configure Component dialog box for the relevant component. For details, see the relevant section below. **Note:** • The button is disabled in the Breakdown View component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired KPI View, Historical View, or Rolodex components, the Breakdown View component displays the values of the KPI Breakdown for the selected KPI. • The button is disabled in the Forecast component, as the component is filtered by the relevant automatically wired components on the same Dashboard page. When you select an item in one of these wired Historical View, the Forecast component displays the forecast data for the selected KPI. **Note:** You can also click **here** in **Click Here to configure it** in the center of the component
?	Opens the online documentation page relevant to the component you are currently configuring.
«	**Collapse component.** Collapses the component. To expand the collapsed component, click the ︾ button on the collapsed

UI Element	Description
	component.
▯	Drag the Resize handle to enlarge or reduce horizontally the area occupied by the component.
✕	**Remove Component.** Removes the component from the page.

Xcelsius Reports Viewer (Flash) - Configure Component Dialog Box



Xcelsius Reports Viewer - Configure Component

Select Xcelsius report. KPI Audit

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. **Note:** To display data in the Metric Breakdown report in an Xcelsius component or in a Metric Breakdown component, you must add the Historical Metric View component to the page . When you click the graph of a specific Metric in the Historical Metric View component, the list of its Metric Breakdowns is displayed in the Metric Breakdown report list. You can then display the relevant Metric Breakdown information.

Customized Static or Dynamic URL 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 | Tasks | UI Description

Learn More

> **Note:** The URL for an external component must begin with one of the following: **https://**, **http://**, or **ftp://**.

Tasks

Main task: "Dashboard Display" on page 195

This section includes:

Create a simple URL component

1. In the Dashboard, click the **Component Gallery** 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.

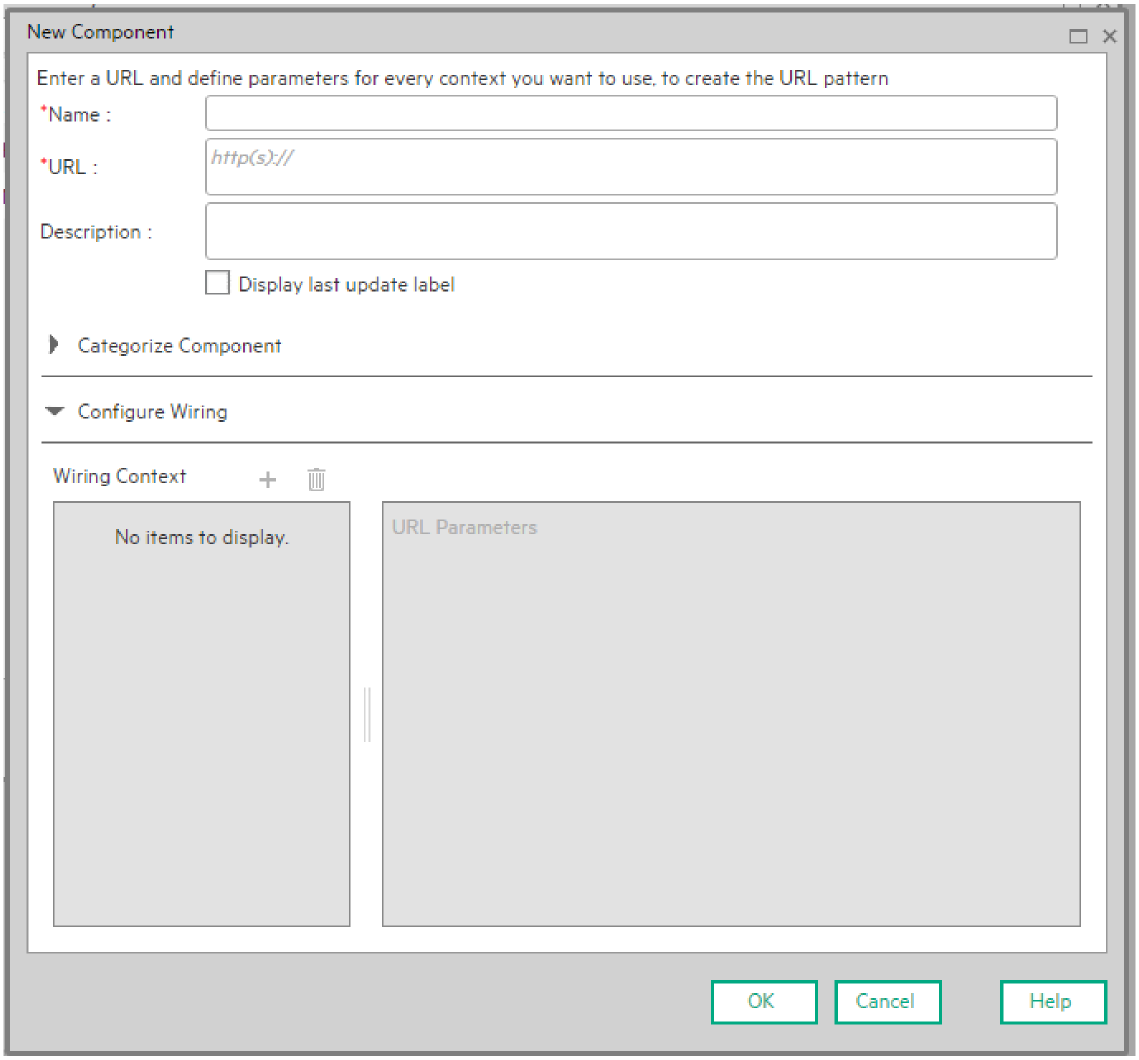
Create a dynamic URL

1. In the Dashboard, click the **Component Gallery** 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



Enter a URL and define parameters for every context you want to use, to create the URL pattern

*Name :

*URL : http(s)://

Description :

☐ Display last update label

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

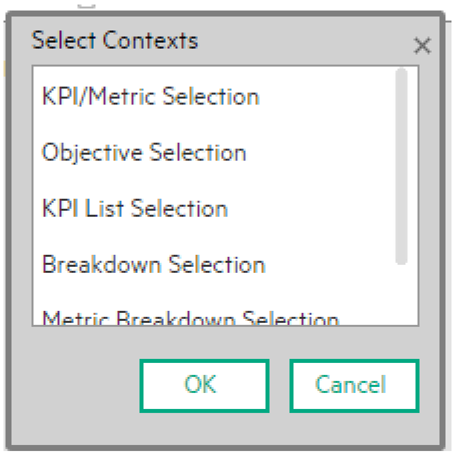
<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr><td><b><Upper Pane></b></td><td>
<table>
<tr><td>🔄</td><td><b>Refresh</b>. If you have edited the static part of the URL, click refresh to update the URL pattern below.</td></tr>
<tr><td><b>Name</b></td><td>Enter the name you want to assign to the component.</td></tr>
<tr><td><b>URL</b></td><td>Enter the URL of the component.
If you are creating a dynamic URL using parameters, enter the static part of the URL here.
<b>Example</b> The URL to search for the string <b>hp</b> in Google.com uses the following format: <b>http://www.google.com/search?q=hp</b>. The static part of this URL is the section before the question mark: <b>http://www.google.com/search</b>.
If you are creating a static URL, and you are using HTTP, your browser might block the link as it might consider it an unsafe script because ITBA runs on HTTPS, which is secure. If you are using Chrome there will be a little shield to the right of the URL bar. If you are using IE, go to <b>Internet Options > Security > Internet > Custom level...</b>, and make sure that the Enable box under <b>Display mixed content</b> is checked. If, in addition, you get a certificate error (e.g. self signed), some browsers will not load the page within frames. In this case, ensure that you can load the page without any errors (e.g. importing the certificate into trusted store) and try again.</td></tr>
<tr><td><b>Description</b></td><td>The description of the component.</td></tr>
</table>
</td></tr>
<tr><td><b>Categorize Component</b></td><td>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 "Component Gallery and Component Categories" on page 223.</td></tr>
<tr><td><b>Configure Wiring</b></td><td>This area enables you to select one or more contexts whose attributes are used to define the URL pattern.
<table>
<tr><td><b>Wiring Context</b></td><td>Lists the wiring contexts you have already configured. Each line represents a context whose attributes can be used to create the URL pattern.</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr><td></td><td>
<table>
<tr><td>+</td><td>

Add Context. Click to add a context whose attributes can be used to define the URL pattern.

You must enter a URL in the URL box before you click the **Add Context** button.

The Select Contexts dialog box enables you to select which context to add.



You can select:

- **KPI List Selection**. The context is sent to the target component, when you select a KPI in the source component.
- **Objective Selection**.The context is sent to the target component, when you select an Objective in the source component.

</td></tr>
<tr><td>🗑</td><td>

Remove. Select a wiring context and click the button to remove it from the list.

</td></tr>
</table>
</td></tr>
<tr><td>

URL Parameters and Values Area for KPI List Selection or Objective Selection

</td><td>

This area enables you to add URL parameters and values to build the URL pattern, using wiring context attributes.

<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr><td>✱</td><td>

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**:

Path. The parameter is used in the path part of the URL.

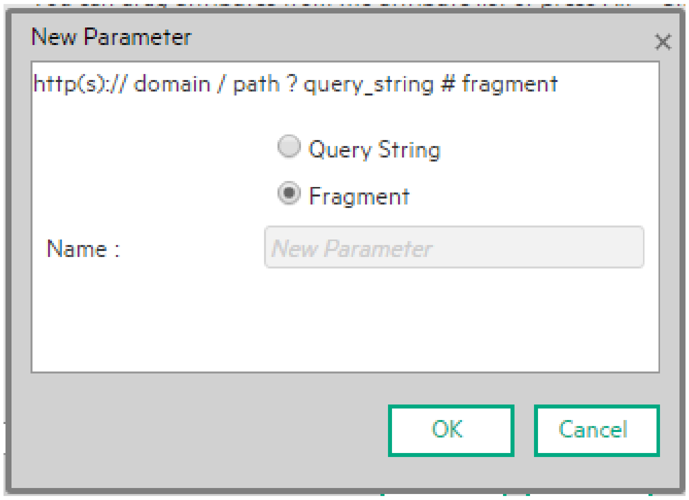
</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr><td></td><td>
<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr><td></td><td>

Query String. The parameter is used in the query string of the URL.

Fragment. The parameter is used in the rest of the URL.

Type the parameter name in the **Name** box in the URL Parameters dialog box that appears.



New Parameter

http(s):// domain / path ? query_string # fragment

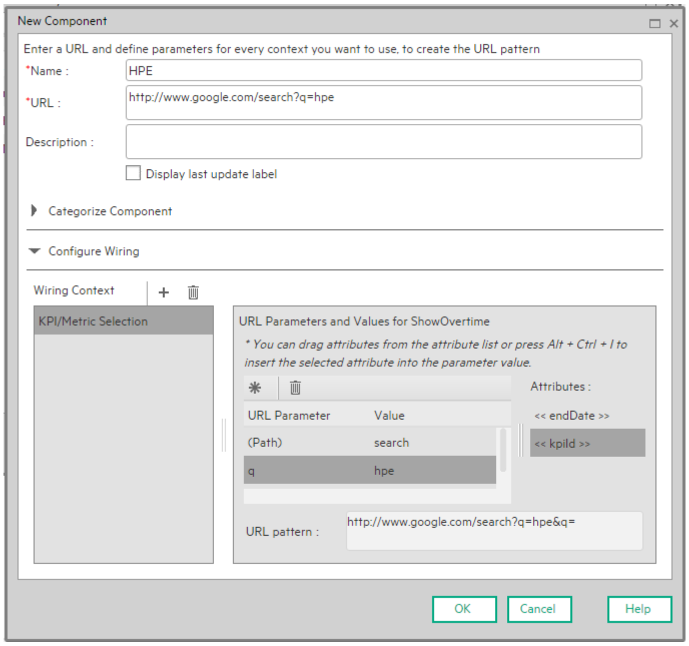
○ Query String

● Fragment

Name : New Parameter

Example To create a dynamic URL based on **http://www.google.com/search?q=hp**, add a URL parameter named q.

</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr><td></td><td>
<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr><td></td><td>
New Component
Enter a URL and define parameters for every context you want to use, to create the URL pattern
*Name : HPE
*URL : http://www.google.com/search?q=hpe
Description :
☐ Display last update label
URL Parameters and Values for ShowOvertime
* You can drag attributes from the attribute list or press Alt + Ctrl + I to insert the selected attribute into the parameter value.
URL Parameter | Value
(Path) | search
q | hpe
Attributes : << endDate >> << kpiId >>
URL pattern : http://www.google.com/search?q=hpe&q=
</td></tr>
<tr><td>🗑</td><td><b>Remove.</b> Select a URL parameter and click this button to remove it from the list.</td></tr>
<tr><td><b>URL Parameter and Value</b></td><td>Lists the URL parameters you have already configured.

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 <b>Attributes</b> area to the <b>Value</b> area of the URL parameter.

To edit a parameter value, click the value itself and edit its contents.</td></tr>
<tr><td><b>Attributes</b></td><td>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.

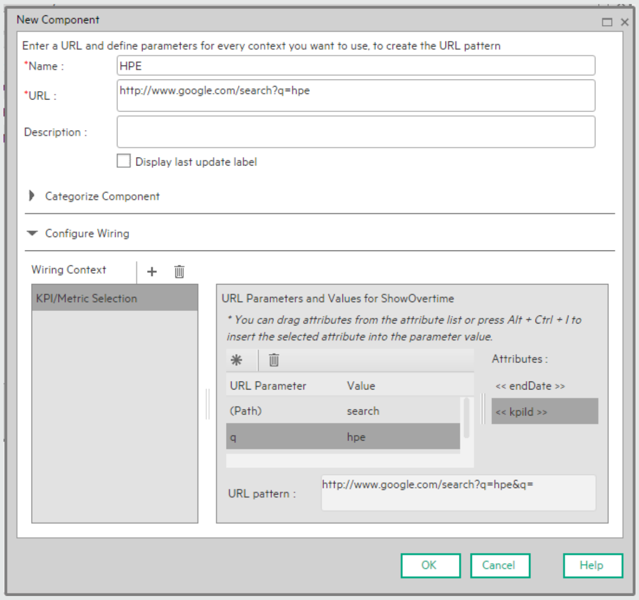
• If you select KPIChange in the Wiring Context area, the attribute <b><<kpiId>></b>is available to build your URL pattern. The parameter represents the ID of the KPI on which you click in the source component to run the external URL with the ID of the KPI as a parameter.

• If you select ObjectiveChanges in the Wiring Context area, the attributes <b><<id>></b> and <b><<type>></b> are available</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr><td></td><td>
<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr><td></td><td>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.

To use an attribute as the value of a URL parameter, drag the attribute from this area to the Value area of the parameter.</td></tr>
<tr><td><b>URL Pattern</b></td><td>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.

<b>Example</b> The result of the creation of a dynamic URL based on http://www.google.com/search?q=.


New Component
Enter a URL and define parameters for every context you want to use, to create the URL pattern
*Name : HPE
*URL : http://www.google.com/search?q=hpe
Description :
☐ Display last update label
Categorize Component
Configure Wiring
Wiring Context
KPI/Metric Selection
URL Parameters and Values for ShowOvertime
* You can drag attributes from the attribute list or press Alt + Ctrl + I to insert the selected attribute into the parameter value.
URL Parameter | Value
(Path) | search
q | hpe
Attributes :
<< endDate >>
<< kpiId >>
URL pattern : http://www.google.com/search?q=hpe&q=
 </td></tr>
</table>
</td></tr>
</table>

Wiring Between Components

Dashboard is provided with default components. The default components are located in the Component Gallery.

You can also add external components. The external components are also located in the Component Gallery. For details, see "Customized Static or Dynamic URL Component" on page 422.

You can define the wiring between components to determine how components on a Dashboard page interact with one another. Wiring components consists in defining the source components that control the display in the target components. When the end-user clicks a KPI or Metric in a source component, all the target components that are wired to the source component display the data relevant to the clicked KPI or Metric using the format of the target component.

To access:

Click the **Wiring** button located in the Dashboard toolbar.

Learn More | Tasks | UI Description

Learn More

Wiring

Wiring is between components. It does not depend on the component internal format.

If you drill down (to Breakdowns) in a specific component that is wired to another component on the same page, and you click the triggering component, the component with the Breakdowns is restored to its top level and filtered according to the triggering component.

The wiring between components is set up as follows:

Source Components	Contexts	Target Components
• KPI Rolodex Component • The Breakdown View Component • The Bubble Chart View Component • The Cluster Bar Chart View Component • The Line and Bar Chart View Component • The Historical Metric View Component	KPI/Metric Selection	The Historical View Component The Forecast Component

Source Components	Contexts	Target Components
• The Historical View Component • The KPI View Component • The Pie Chart Component • The Stacked Bar Chart View Component • The KPI List Component	Breakdown Selection	The Breakdown View Component The World Map Component The US Map Component
	Metric Breakdown Selection	The Breakdown View Component The World Map Component The US Map Component
• The KPI List Component	KPI List Selection	
Scorecard	Objective Selection	The KPI View Component

For details, see "Wiring Dialog Box" on page 435.

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.

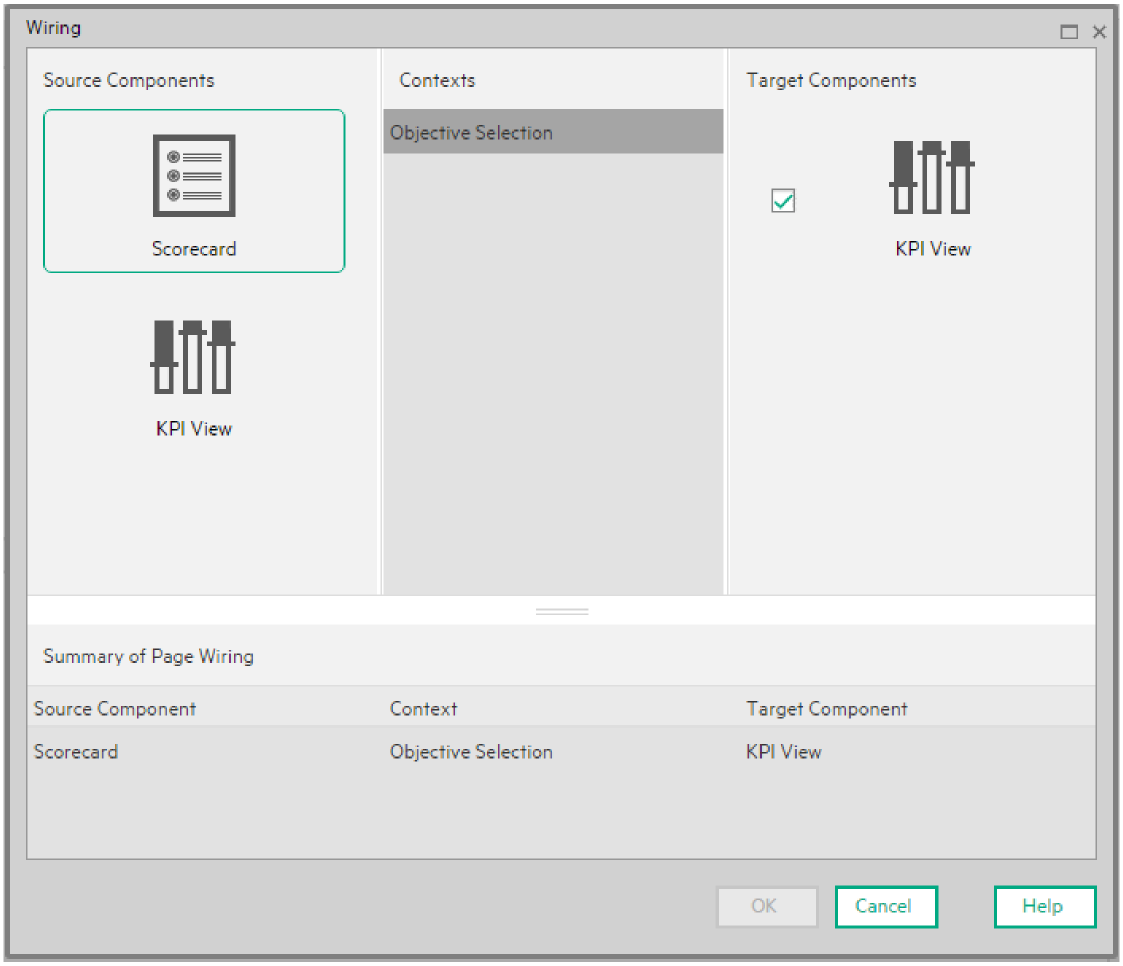
> **Example** The selection of one KPI in the KPI View component causes the display of the details of the same KPI in the Historical View component on the same page, if the two components are wired and the KPI View component is the source.

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 **Objective Selection**. For a list of the contexts and their description, see below.

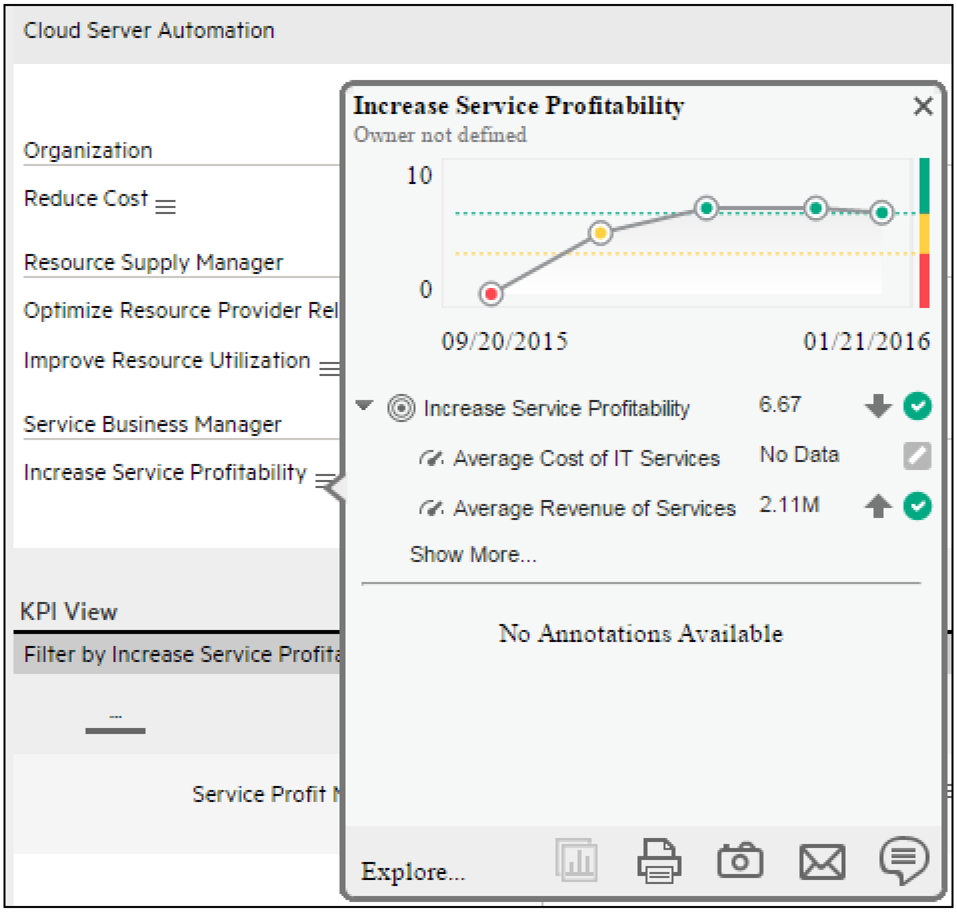


Source Component	Context	Target Component
Scorecard	Objective Selection	KPI View

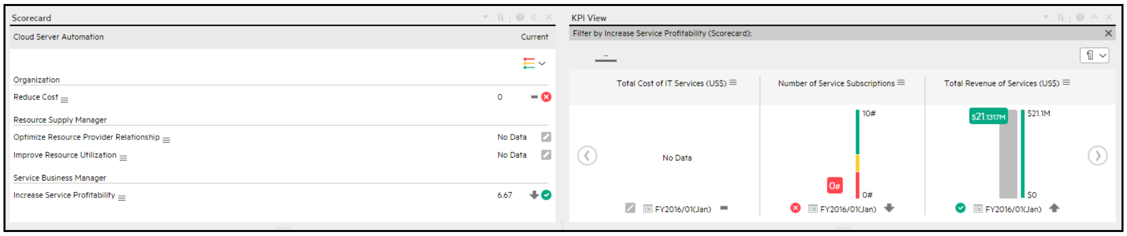
4. In the list of Target Components on the right side of the Wiring dialog box, select one or more component that will receive contexts from the source component. For example, select KPI View.
5. Click **OK**.

The **Summary of Page Wiring** area displays all of the wiring defined for the page.

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: **Costs by dimensions**.


Cloud Server Automation
Organization
Reduce Cost
Resource Supply Manager
Optimize Resource Provider Rel
Improve Resource Utilization
Service Business Manager
Increase Service Profitability
KPI View
Filter by Increase Service Profita
Service Profit
Increase Service Profitability
Owner not defined
10
0
09/20/2015
01/21/2016
Increase Service Profitability 6.67
Average Cost of IT Services No Data
Average Revenue of Services 2.11M
Show More...
No Annotations Available
Explore...

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: **Costs by dimensions**. 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.



Cloud Server Automation	Current
Organization	
Reduce Cost	0
Resource Supply Manager	
Optimize Resource Provider Relationship	No Data
Improve Resource Utilization	No Data
Service Business Manager	
Increase Service Profitability	6.67

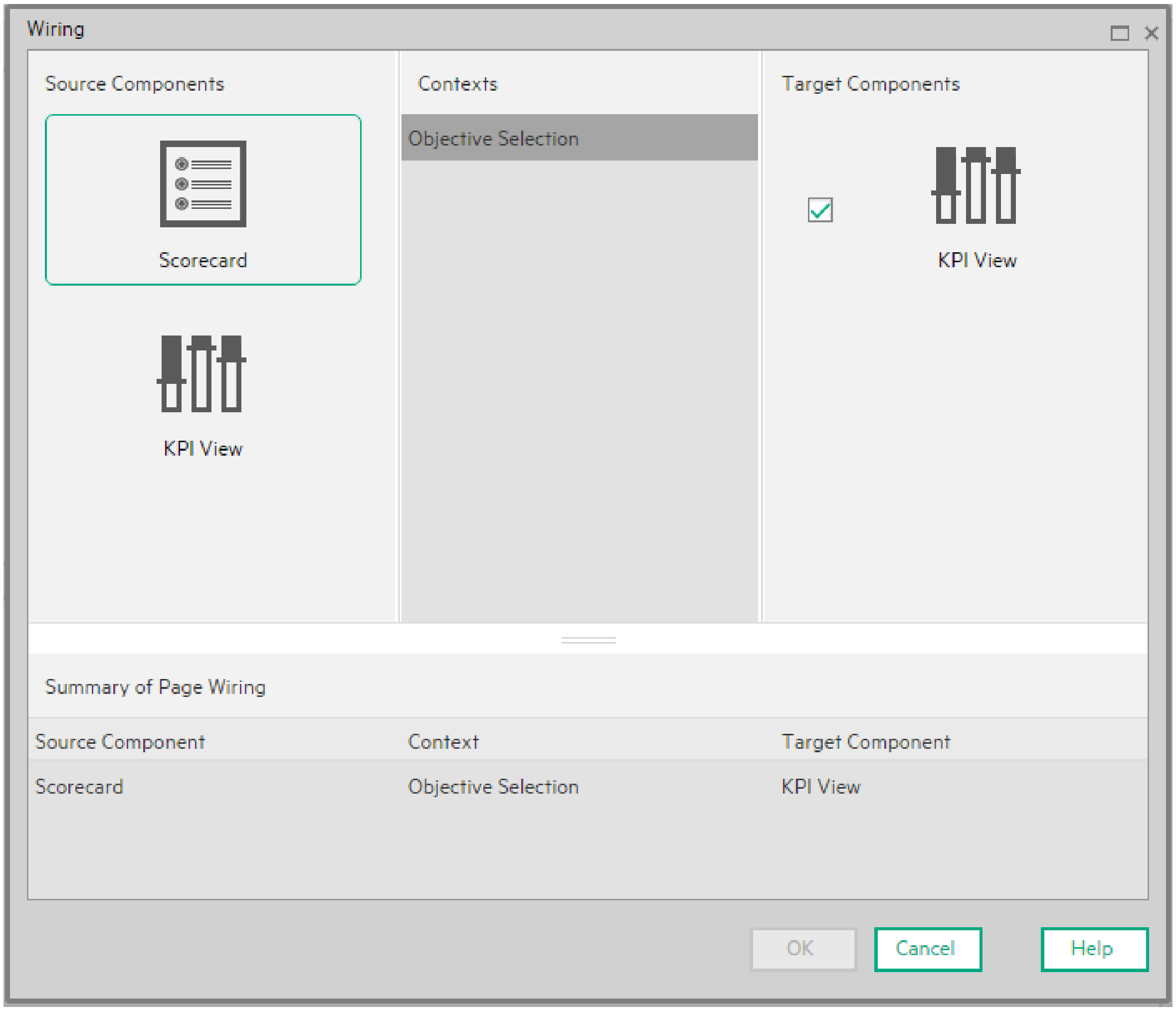
Filter by Increase Service Profitability (Scorecard);

Total Cost of IT Services (US$)
No Data
FY2016/01(Jan)
Number of Service Subscriptions
10#
0#
0#
FY2016/01(Jan)
Total Revenue of Services (US$)
$21.1317M
$21.1M
$0
FY2016/01(Jan)

8. To restore the original display of the KPI View component, click X on the yellow message.

UI Description

Wiring Dialog Box

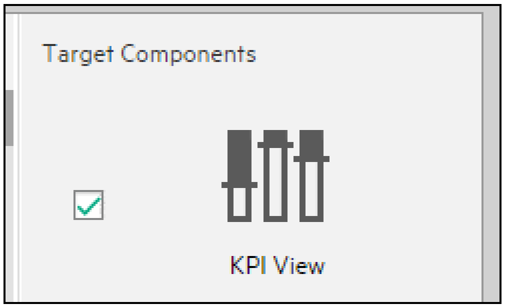
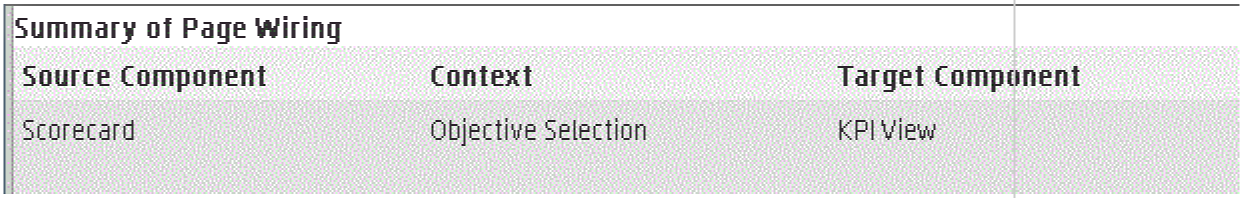


Source Component	Context	Target Component
Scorecard	Objective Selection	KPI View

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

UI Element	Description
Source	This column displays all of the page components that have the ability to send contexts

components	to other components. Select a source component, then select the context and the target components.
Contexts	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. Select the context you want to send to one or more targets, and then select the target component. The contexts are: • **KPIs/Metrics Selection.** When the user selects a KPI/Metric in the source component, a KPI or Metric Selection event is published. The target component wired to the source component receives that event and its display is updated to show the relevant information. • **Breakdown Selection.** When the user selects a KPI in the source component, a Breakdown Selection event is published. The target component wired to the source component receives that event and its display is updated to show the relevant information. • **Metric Breakdown Selection.** When the user selects a Metric in the source component, a Metric Breakdown Selection event is published. The target component wired to the source component receives that event and its display is updated to show the relevant information. • **Objective Selection**. When the user selects an Objective in the Scorecard component, an Objective Selection event is published. The target component that is wired to the Scorecard component receives that event and updates its display to show the details of Objective children (the first level KPIs). • **KPI List Selection.** When the user selects a KPI in the source component, a KPI Selection event is published. The target component wired to the source component receives that event and its display is updated to show the relevant information. • **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 listed in "Wiring" on page 430.
Target components	This column displays all the page components that have the ability to receive contexts from other components on the page. After you select a source component and context, this displays all of the page components with the ability to receive this context from the specified source. Select one or more target components that can receive contexts from the source component by clicking the check box.

<table>
<tr>
<td></td>
<td> </td>
</tr>
<tr>
<td><b>Summary of page wiring</b></td>
<td>This displays a summary of the wiring that has been defined for the page. Each line shows a source, the context it sends, and the target component receiving this context from this source.

Summary of Page Wiring
<table>
<tr><th>Source Component</th><th>Context</th><th>Target Component</th></tr>
<tr><td>Scorecard</td><td>Objective Selection</td><td>KPI View</td></tr>
</table>
</td>
</tr>
</table>

Personalize a Dashboard Page

You can personalize a Dashboard page by adding the user's picture to the Dashboard frame.

Learn More
Tasks

Learn More

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, .png, .tif, or .bmp
- For best display, the recommended image ratio is 3 x 4.

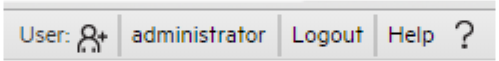
During the image upload, the image is automatically resized to 100 x 100 pixels and the size of the file is reduced.

Tasks

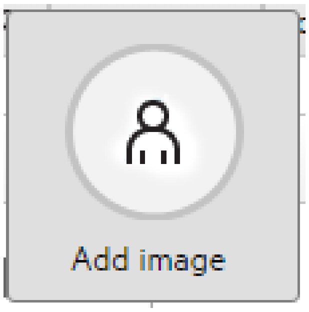
Add the user's picture to the Dashboard frame

To add the user's picture to the Dashboard frame.

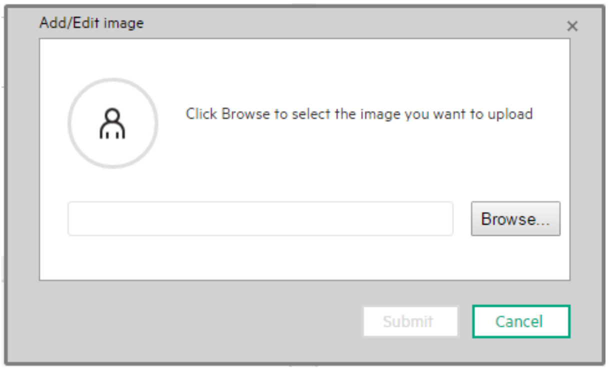
1. Move the cursor above the graphic next to **User**:



2. Click the **Add Image** button that is displayed.

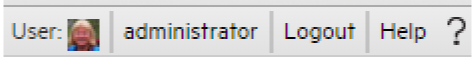


3. In the **Add/Edit image** dialog box that opens, locate the relevant picture. The image is displayed in the dialog box. The change is saved only when you click **Submit**.



Click Browse to select the image you want to upload

The relevant picture is now displayed in the Dashboard frame.



View and Analyze the Business Objectives

You can view and analyze the business objectives you have set for your group as follows:

- 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. For details, see "Dashboard" on the next page.
- 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, status, and the annotations added to the KPI by other users. For details, see "First Level Navigation (FLN) for an Objective, a KPI, or a Metric" on page 490.
- The Explorer tab includes configuration details and historical information about the selected item and provides additional research, analytical, and data exploration capabilities. It allows a comprehensive understanding of the available data. The analytical capabilities focus around the IT Business Analytics main flow entities such as KPIs and Metrics and provides the ability to drill down into the details of the formula used to calculate the KPI or Metric, to see the building blocks of the calculation results, and to analyze the data used for the calculation. In addition, you can also view a tree of nodes that represents the display of the impact of the selected KPI, or KPI Breakdown on the relevant Objectives, Perspectives, and Scorecards. For details, see "About Explorer" on page 501.

Dashboard

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.

Permissions. In the Dashboard components and in their configuration dialog boxes, you can only see the Scorecards, Perspectives, Objectives, KPIs, or KPI Breakdowns for which you have permission. If you do not have permission, you do not see that element. If you do not have permission to see all the elements in a component, the error message **Data is not displayed because it does not exist or you do not have the correct viewing permissions. Contact your administrator** is displayed.

To access:

Click the relevant tabs in the Dashboard

Learn More Tasks

Learn More

Out-of-the-box pages

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 in the *Getting Started Guide*.

Decimal precision

For details, see "KPI and Metric Formulas, Filter, Threshold, Value, Trend, Score, and Decimal Precision" on page 97.

Tasks

This section includes:

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 specific Scorecard components or not. 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 about permissions, see User Management in the *Administrator Guide*.

In addition, the pages may include other components that provide additional information:

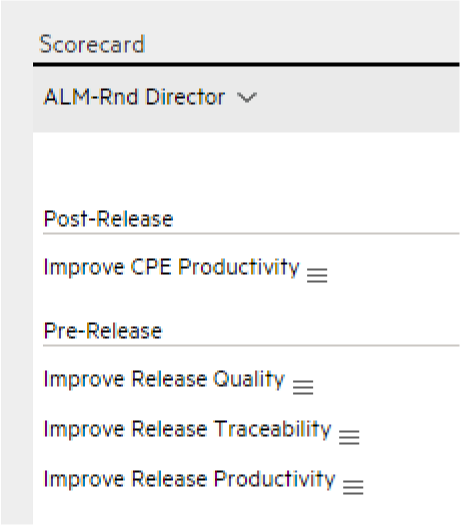
- Breakdown View component. For details, see "The Breakdown View Component" on page 230.
- Bubble Chart View component. For details, see "The Bubble Chart View Component" on page 237.
- Cluster Bar Chart View component. For details, see "The Cluster Bar Chart View Component" on page 248.
- Forecast component. For details, see "The Forecast Component" on page 261.
- Historical Metric View component. For details, see "The Historical View Component" on page 279.
- Historical View component. For details, see "The Historical View Component" on page 279.
- KPI List component. For details, see "The KPI List Component" on page 290.
- KPI Rolodex component. For details, see "The KPI Rolodex Component" on page 299.
- KPI View component. For details, see "The KPI View Component" on page 309.
- Line and Bar Combination Chart View component. For details, see "The Line and Bar Combination Chart View Component" on page 320.
- Page Filter component. For details, see "The Page Filter Component" on page 333.
- Pie Chart View component. For details, see "The Pie Chart Component" on page 344.
- Scorecard component. For details, see "The Scorecard Component" on page 355.
- Stacked Bar Chart View component. For details, see "The Stacked Bar Chart View Component" on page 364.
- US Map component. For details, see "The US Map Component" on page 380.
- Web Intelligence Reports Viewer component. For details, see "The Web Intelligence Report Viewer Component" on page 387.

- Web Intelligence Static Report Viewer component. For details, see "The Web Intelligence Static Report Viewer Component" on page 394.
- World Map component. For details, see "The World Map Component" on page 403
- Xcelsius Report component. For details, see "The SWF Report Viewer Component" on page 376.

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.

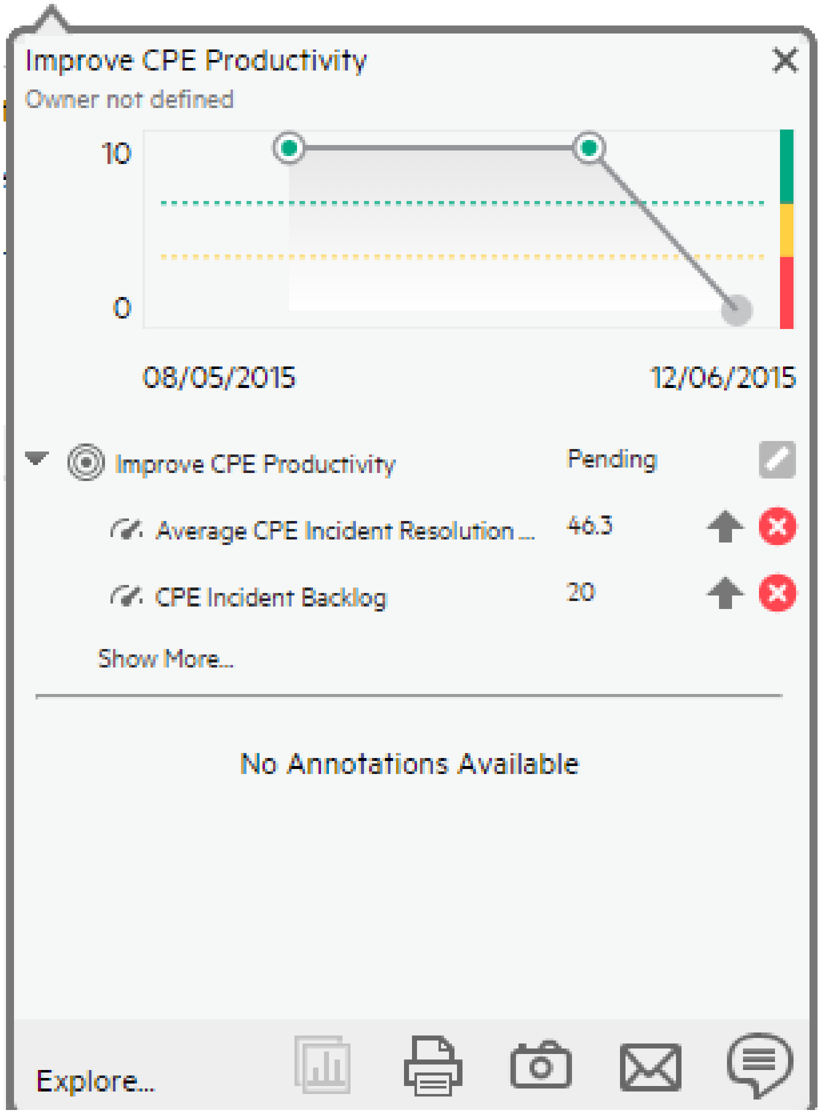
To return to the parent Scorecard, click the X to close the subordinate Scorecard display. Note that you can only access one level down (meaning that if the subordinate Scorecard has subordinates, to access their information, you must create a Scorecard component for the first level of subordinate Scorecard).

For details, see "The Scorecard Component" on page 355.

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 "First Level Navigation (FLN) for an Objective, a KPI, or a Metric" on page 490.

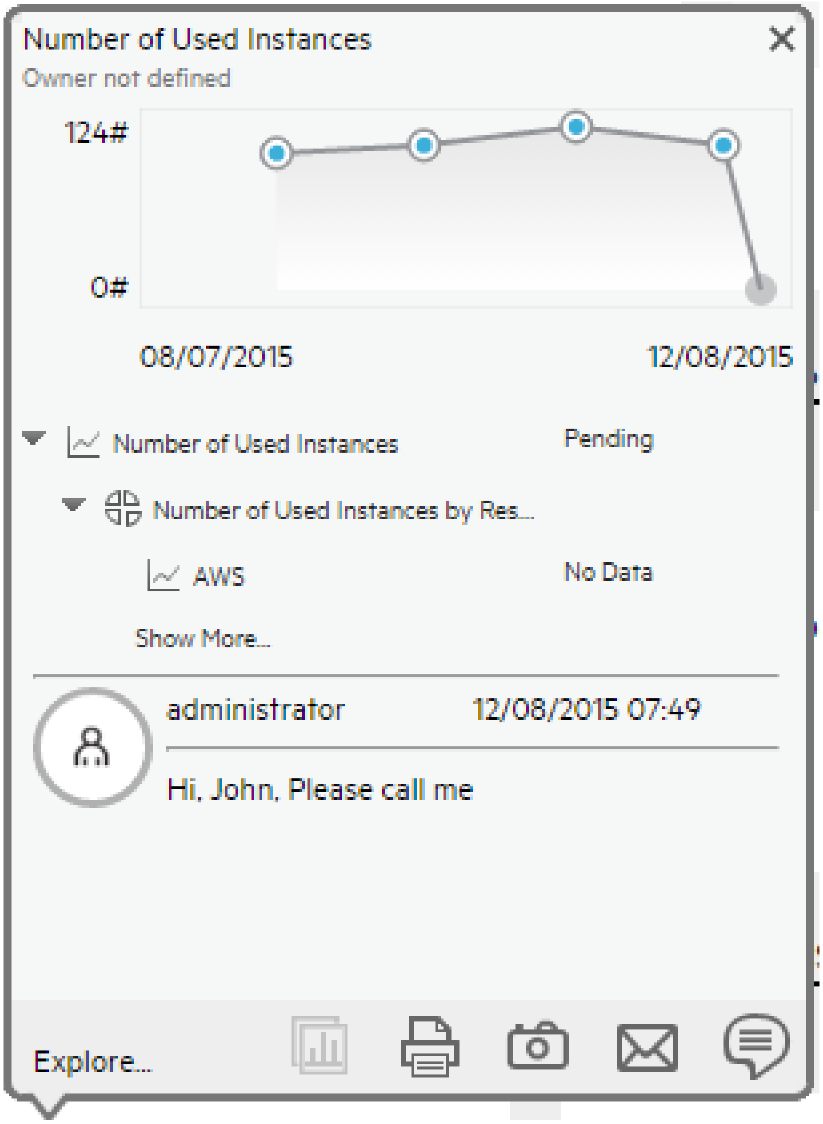


Improve CPE Productivity	Pending	
Average CPE Incident Resolution ...	46.3	↑ ✕
CPE Incident Backlog	20	↑ ✕
Show More...		

No Annotations Available

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 "First Level Navigation (FLN) for an Objective, a KPI, or a Metric" on page 490.



administrator 12/08/2015 07:49

Hi, John, Please call me

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.

> **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 "Wiring Between Components" on page 429

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 "About Explorer" on page 501.

View details about the Scorecards, Perspectives,Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns,or Unassigned KPIs in the EXPLORER tab

Depending on the selected type of entity (Scorecard, Perspective, Objective, KPI, KPI Breakdown, Metric, Metric Breakdown, or Unassigned 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 "About Explorer" on page 501.

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 49.

The Objectives include groups of KPIs of different types that can represent different aspects of the goal. For details, see "Activate Scorecards, Perspectives, Objectives, Metrics, or KPIs Using Templates" on page 47.

> **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 "KPI Breakdowns" on page 163.

Access the 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 **Analyze**. The EXPLORER tab opens for the selected item.

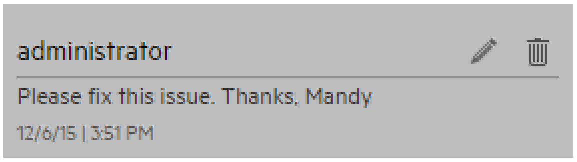
You can also click the **Explorer** tab to display the Active KPIs tree, and by clicking the Objectives and KPIs in the tree, display detailed information about the selected item in the EXPLORER tab.

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 "About Explorer" on page 501.

Add annotations to a specific Objective or KPI

1. In Explorer page, click the relevant Objective or KPI in the Active KPIs tree.
2. Examine the information displayed in the Explorer Overview, Data Set, and Goal Map tabs.
3. If you have comments, click the **Show annotations** 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.



administrator

Please fix this issue. Thanks, Mandy

12/6/15 | 3:51 PM

For additional details, see "About Explorer" on page 501.

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 Overview tab (chart, annotations, and additional information for the KPI or Objective), in PDF format, or you can print that snapshot.

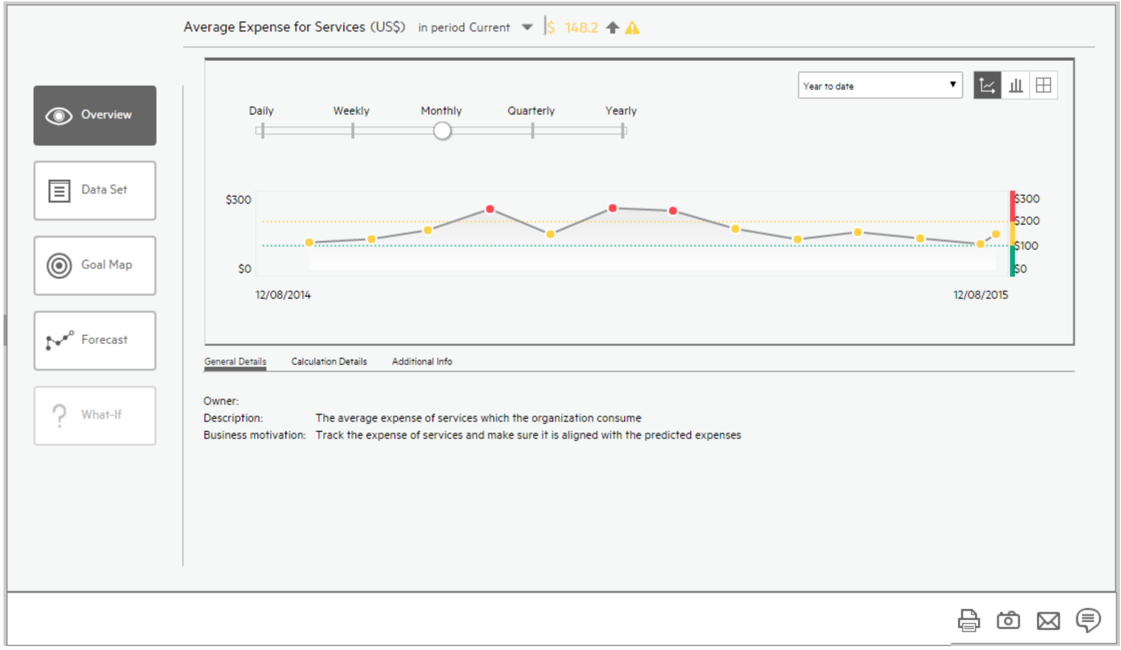
For additional details, see "About Explorer" on page 501

View a Scorecard, Objective, Perspective, KPI, KPI Breakdown, Metric, Metric Breakdown, or Unassigned KPI Details

1. In Explorer, click the relevant Scorecard, Objective, Perspective, KPI, KPI Breakdown, Metric, Metric Breakdown, or Unassigned KPI in the Active KPIs tree.
2. Click the **Overview** button.

   The Overview area in Explorer displays information about the selected Scorecard, Objective, Perspective, KPI, KPI Breakdown, Metric, Metric Breakdown, or Unassigned KPI, over time information beginning from the current period. You can also display past information by selecting a past period of time. The area displays different information depending on the type of item you selected.

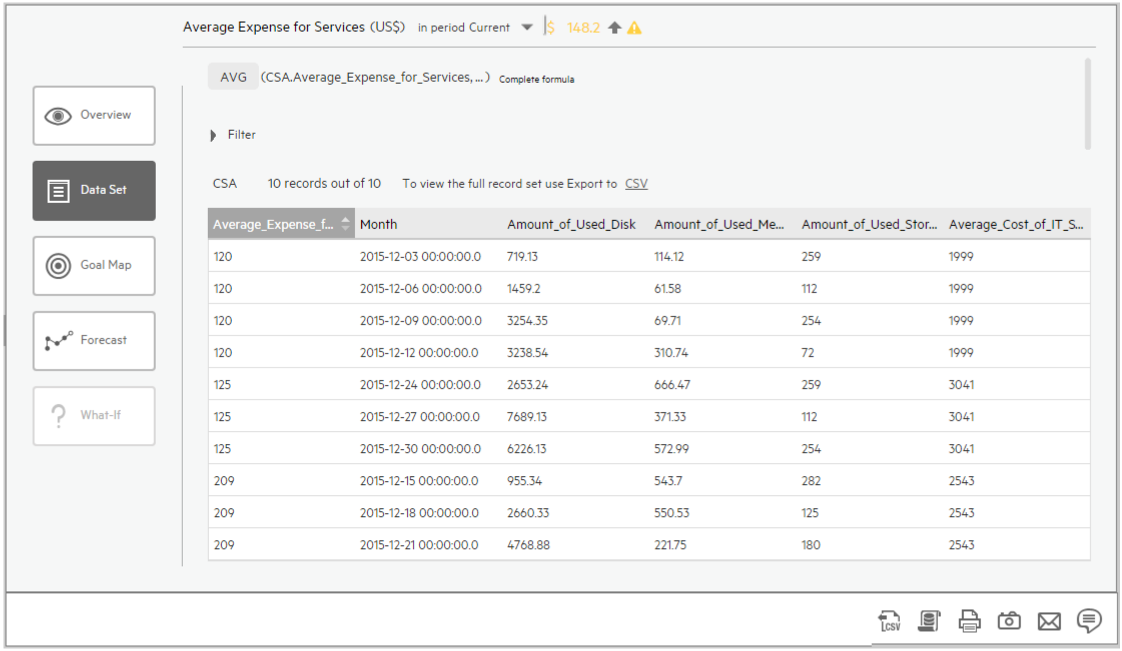
   For details, see "Explorer - Overview" on page 506.



Owner:
Description: The average expense of services which the organization consume
Business motivation: Track the expense of services and make sure it is aligned with the predicted expenses

Analyze the raw data for a KPI or Metrics

1. In Explorer, click the relevant KPI or Metric in the Active KPIs tree.
2. Click the **Data Set** button. It provides the ability to drill down into the details of the formula used to calculate the KPI or Metric, to see the building blocks of the calculation results, and to analyze the data used for the calculation. The page provides the formula, the filter, and the display of the data. For details, see "Explorer - Data Set" on page 524.


Average Expense for Services (US$) in period Current
$ 148.2
AVG (CSA.Average_Expense_for_Services, ...) Complete formula
Overview
Data Set
Goal Map
Forecast
What-If
Filter

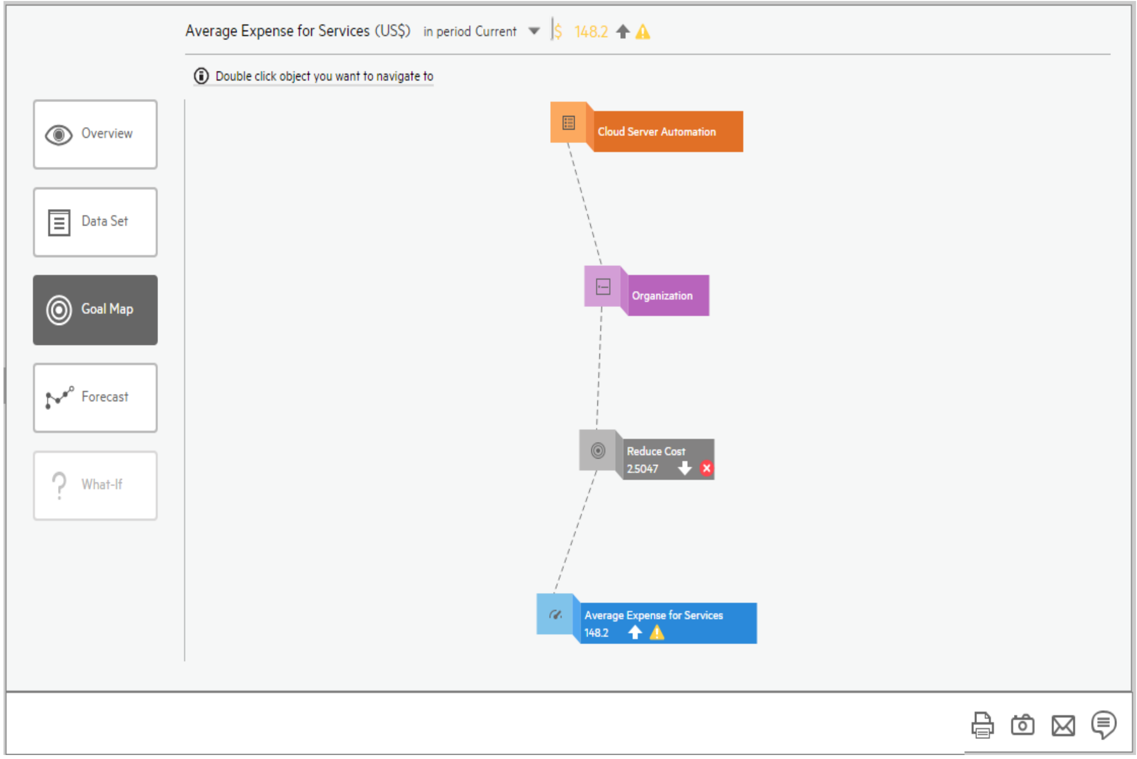
CSA 10 records out of 10 To view the full record set use Export to CSV

Average_Expense_f...	Month	Amount_of_Used_Disk	Amount_of_Used_Me...	Amount_of_Used_Stor...	Average_Cost_of_IT_S...
120	2015-12-03 00:00:00.0	719.13	114.12	259	1999
120	2015-12-06 00:00:00.0	1459.2	61.58	112	1999
120	2015-12-09 00:00:00.0	3254.35	69.71	254	1999
120	2015-12-12 00:00:00.0	3238.54	310.74	72	1999
125	2015-12-24 00:00:00.0	2653.24	666.47	259	3041
125	2015-12-27 00:00:00.0	7689.13	371.33	112	3041
125	2015-12-30 00:00:00.0	6226.13	572.99	254	3041
209	2015-12-15 00:00:00.0	955.34	543.7	282	2543
209	2015-12-18 00:00:00.0	2660.33	550.53	125	2543
209	2015-12-21 00:00:00.0	4768.88	221.75	180	2543

Understand the impact of one KPI on Objectives, Perspectives, and Scorecards

1. In Explorer, click the relevant KPI in the Active KPIs tree.
2. Click the **Goal Map** button. 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 Overview tab for the selected node and the current period. For details, see "Explorer - Goal Map" on page 542.



Average Expense for Services (US$) in period Current $ 148.2

Double click object you want to navigate to

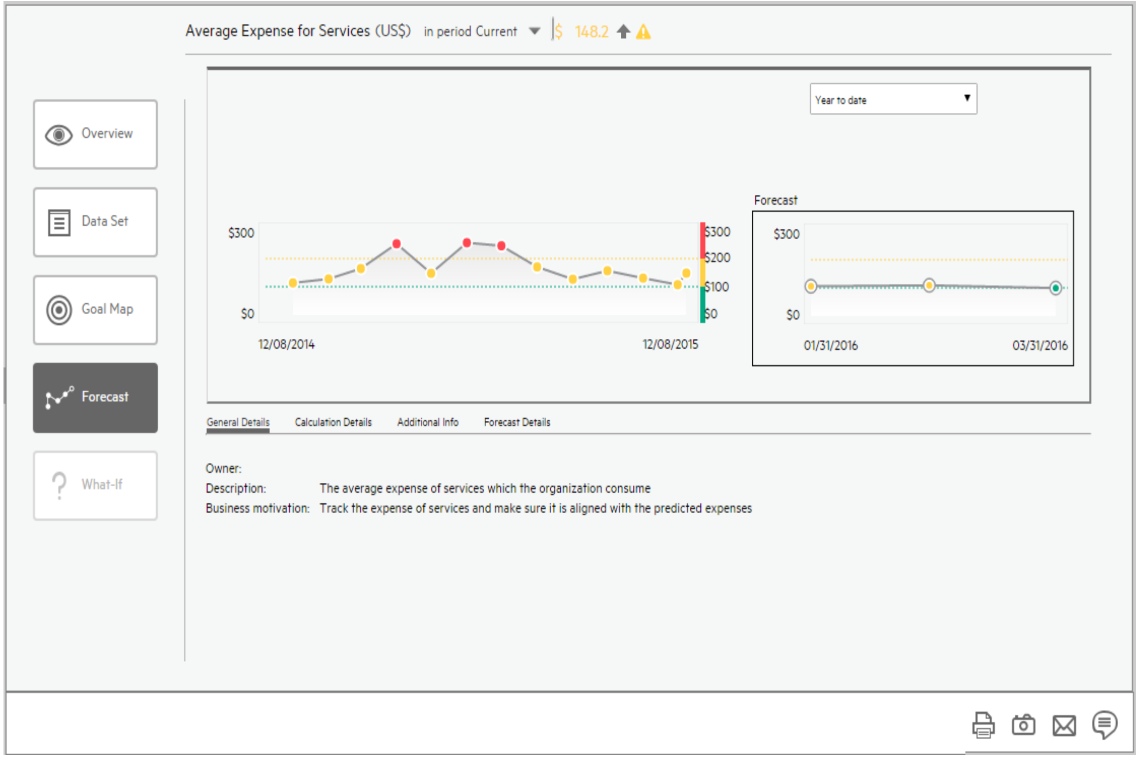
Analyze the Forecast for the KPI

1. In Explorer, click the relevant KPI in the Active KPIs tree.
2. Click the **Forecast** button.

   IT Business Analytics provides information regarding the status and values of Objectives, KPIs, or Metrics on the past and current periods in the Dashboard and Explorer tabs. The Forecast tab in Explorer provides a glimpse into the future by forecasting the entity future behavior, based on historical data, so you will be able more easily understand the underlying trend and to do all you can now to improve or maintain the desired behavior.

   You can view the forecast of the upcoming future of the selected Objectives, KPIs, or Metrics (for which you have permission), in a period of up to 1 year from the current period.

   For details, see "Explorer - Forecast" on page 550.



Average Expense for Services (US$) in period Current $ 148.2

Owner:
Description: The average expense of services which the organization consume
Business motivation: Track the expense of services and make sure it is aligned with the predicted expenses

Change, On-the-fly, the Component Display Format

In some Dashboard page components, you can select to change on-the-fly the format of the display.

To access:

In the relevant component, click and select the relevant format to modify the display on-the-fly.

Learn More Tasks

Learn More

Components where you can modify the display format, on-the-fly

In the following components, the icon indicates that you can modify the display format, on-the-fly. The components are:

- KPI Rolodex Component
- The Breakdown View Component
- The Bubble Chart View Component
- The Cluster Bar Chart View Component
- The Line and Bar Chart View Component
- The Historical Metric View Component
- The Historical View Component
- The KPI List Component
- The KPI View Component

- The Pie Chart Component
- The Stacked Bar Chart View Component

Available display formats

Some of the formats are not available for some of the components.

- - To display the contents of the component using the enriched vertical column format. For details, see Column Format.
- - To display the contents of the component using the horizontal Rolodex or gauge format. For details, see Rolodex - Gauge format.
- - To display the content using the multiple line format. For details, see Multiple or single line format.
- - To display the content using the pie format. For details, see Pie format.
- - To display the content using the bar format. For details, see Bar format
- - To display the content using the horizontal enriched column format. For details, see Column format.
- - To display the content using the vertical Rolodex or gauge format. For details, see Rolodex - Gauge format.
- - To display the content using the single line graph format. For details, see Multiple or single line format.
- - To display the content using the cluster bar format. For details, see Cluster Bar format.
- - To display the content using the stacked bar format. For details, see Stacked Bar format.
- - To display the content using the bar and line format. For details, see Bar and Line format.
- - To display the content using the bubble chart format. For details, see Bubble Chart format.
- - To display the content using the list format. For details, see List format.

> **Note:**

Selected KPIs and Metrics have:	Selected Format:	Automatically Changed to Format:
Different periodicity	Bar and Line Combination	Multiple Line
Different periodicity or different units	Cluster Bar or Stacked Bar	Multiple Line
Different periodicity or different units	Bubble, Bar, or Pie	Vertical Column
More than 15 selected (not Breakdowns)	Bar	Vertical Column
More than 15 selected (not Breakdowns)	Stacked Bar, Cluster Bar, or Bar and Line Combination	Multiple Line

On-Demand Breakdown Feature

The on-demand Breakdown feature is available in components where you can select the Gauge format (and), the Column format (and), the Pie format (), or the Bubble format (). For details, see "Change, On-Demand, the Breakdown Display" on page 484.

Tasks

Change On-the-fly the Component Display Format

To change, on-the-fly, the component display format:

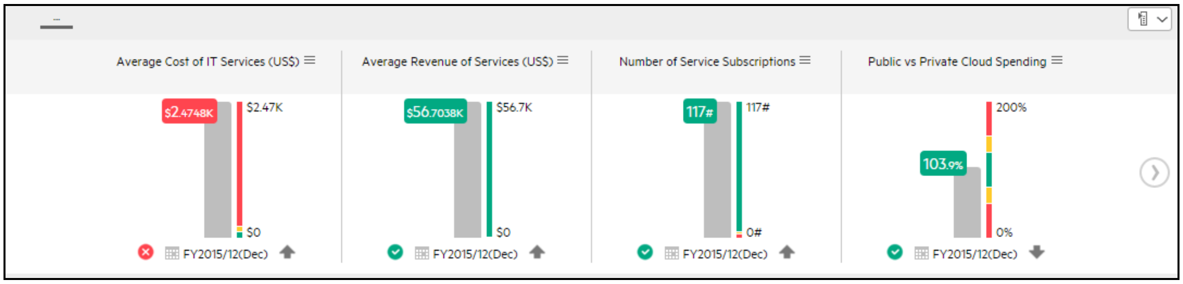
1. Click the icon in the one of the relevant components and select the relevant format - some of the formats are not available for some of the components. For a list of the possible formats, see the table of formats in the" UI Description" on the next page.
2. The display is automatically modified.

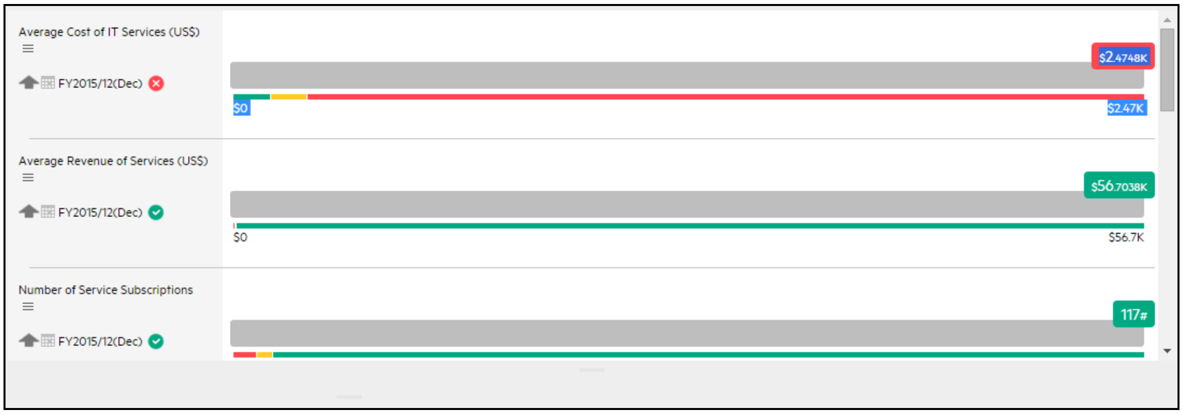
UI Description

Column format

The graphs display the data horizontally or vertically depending on your format selection.

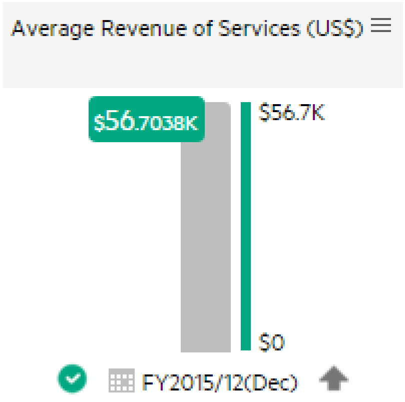
> **Note:** Drilling down to Breakdowns lists a maximum of 15 Breakdowns.


Average Cost of IT Services (US$)
Average Revenue of Services (US$)
Number of Service Subscriptions
Public vs Private Cloud Spending
$2.4748K
$2.47K
$0
$56.7038K
$56.7K
$0
117#
117#
0#
103.9%
200%
0%
FY2015/12(Dec)
FY2015/12(Dec)
FY2015/12(Dec)
FY2015/12(Dec)


Average Cost of IT Services (US$)
FY2015/12(Dec)
$2.4748K
$0
$2.47K
Average Revenue of Services (US$)
FY2015/12(Dec)
$56.7038K
$0
$56.7K
Number of Service Subscriptions
FY2015/12(Dec)
117#

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

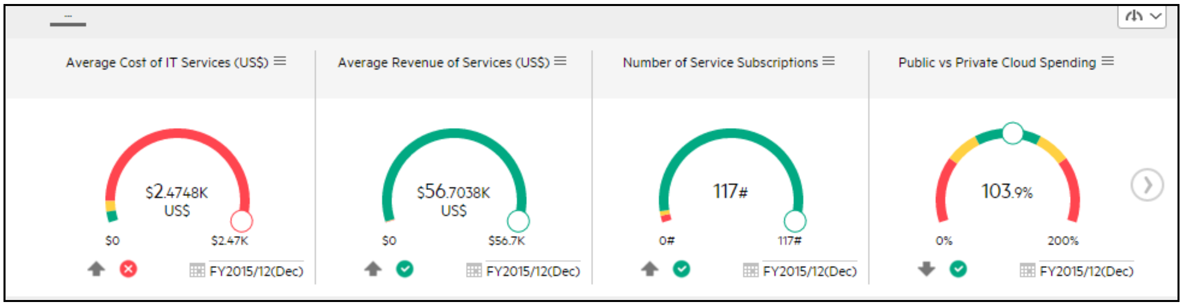
UI Element	Description
<Columns>	The column displays for each item: • The title (above the column for vertical layout or to the left of the column for a horizontal layout) is the name of the item. Double-click the title to open the EXPLORER tab filtered for the selected item.

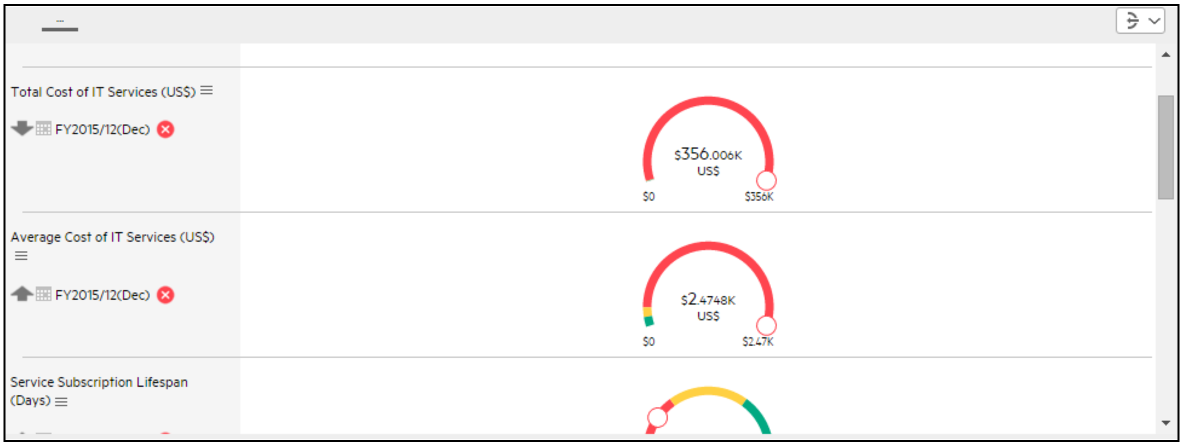
UI Element	Description
 Average Revenue of Services (US$) ≡ $56.7038K $56.7K $0 FY2015/12(Dec)	• ≡ Move the cursor above the icon to display the item tooltip that provides detailed information about the item and access to the Explorer in the context of the item. *≡ when a new annotation has been added to the item. Move the cursor above the icon to display the item tooltip that provides detailed information about the item and access to the Explorer in the context of the item. For details, see "First Level Navigation (FLN) for an Objective, a KPI, or a Metric" on page 490. • The value (at the top of the colored column for vertical layout or to the right of the column for a horizontal layout) represent the highest threshold value. • The value (at the bottom of the colored column for vertical layout or to the left of the column for a horizontal layout) represent the lowest threshold value. • The colors of the thin column represent the thresholds defined for the item. • The value with unit in a color block on the gray column shows the item value. The color of the block shows the item status. • The text (at the bottom of the column for vertical layout or under the item name on the left of the column for a horizontal layout) indicates the display period of the item. • 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 item during the display period: ○ ✓ 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 en error in the calculation.
❯ ❮	Use the arrows to scroll between the "pages" of horizontal columns. The width of the "page" or the number of columns displayed on a "page" depend on the width of the component in the Dashboard. When you get to the leftmost page, the left arrow disappears. When you get to the rightmost page, the right arrow disappears.

Rolodex - Gauge format

> **Note:** Drilling down to Breakdowns lists a maximum of 15 Breakdowns.

The graphs display the data horizontally or vertically depending on your format selection.


Average Cost of IT Services (US$) ≡
$2.4748K US$
$0
$2.47K
FY2015/12(Dec)
Average Revenue of Services (US$) ≡
$56.7038K US$
$0
$56.7K
FY2015/12(Dec)
Number of Service Subscriptions ≡
117#
0#
117#
FY2015/12(Dec)
Public vs Private Cloud Spending ≡
103.9%
0%
200%
FY2015/12(Dec)


Total Cost of IT Services (US$) ≡
FY2015/12(Dec)
$356.006K US$
$0
$356K
Average Cost of IT Services (US$) ≡
FY2015/12(Dec)
$2.4748K US$
$0
$2.47K
Service Subscription Lifespan (Days) ≡

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 filter dialog box.

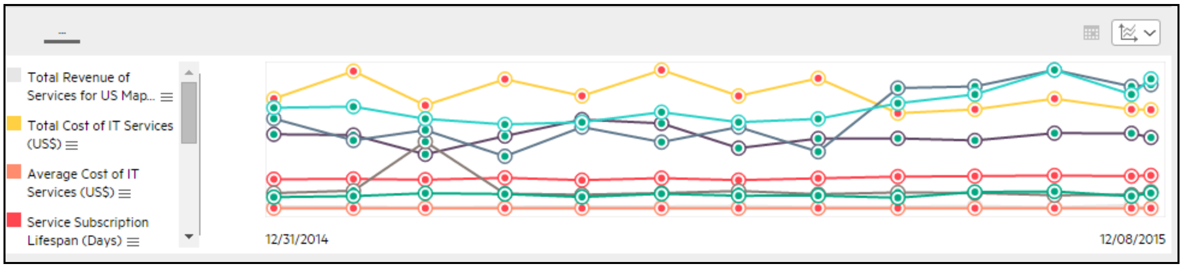
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

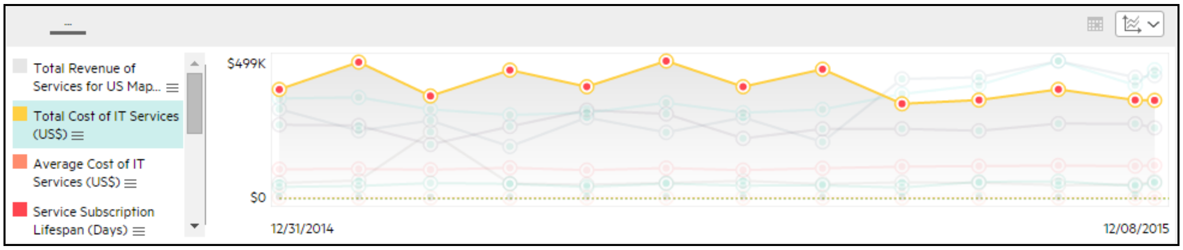
UI Element	Description
<Component contents>	The component displays the following information: • The name of the KPI above the gauge or on the left of the gauge. Double-click the name to open the EXPLORER tab filtered for the selected element. • ≡ Move the cursor above the icon to display the item tooltip that provides detailed information about the item and access to the Explorer in the context of

UI Element	Description
	the item. ✱☰ when a new annotation has been added to the item. Move the cursor above the icon to display the item tooltip that provides detailed information about the item and access to the Explorer in the context of the item. For details, see "First Level Navigation (FLN) for an Objective, a KPI, or a Metric" on page 490. • 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 circle corresponds to the KPI status. • The colors of the small bars represent the thresholds defined for the KPI. • The circle 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: ◦ ✔ 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 en error in the calculation. ◦ ▨ No Data is shown at the bottom of the gauge when 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. 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.
<Tooltip>	Move the mouse over the name of a KPI to display a tooltip that include additional information about the KPI. For details, see "First Level Navigation (FLN) for an Objective, a KPI, or a Metric" on page 490.
❯ ❮	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. When you get to the leftmost page, the left arrow disappears. When you get to the rightmost page, the right arrow disappears.

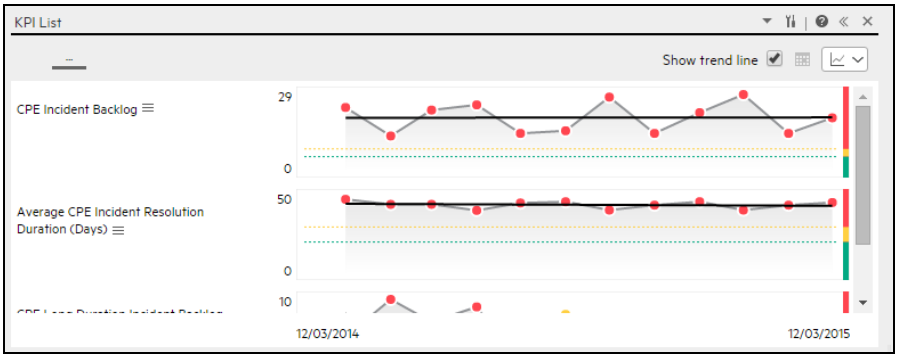
Multiple or single line format

The graphs display the data using multiple lines in a single graph (KPI units permitting) or in a group of one line graphs depending on the format you selected.


Total Revenue of Services for US Map...
Total Cost of IT Services (US$)
Average Cost of IT Services (US$)
Service Subscription Lifespan (Days)
12/31/2014
12/08/2015


Total Revenue of Services for US Map...
Total Cost of IT Services (US$)
Average Cost of IT Services (US$)
Service Subscription Lifespan (Days)
$499K
$0
12/31/2014
12/08/2015

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

UI Element	Description
Show trend line ☐	Select to display the trend line for the KPIs or Metrics. The check mark is only available on single line charts. The trend line shows the trend for the relevant time frame.  KPI List Show trend line ☑ CPE Incident Backlog 29 0 Average CPE Incident Resolution Duration (Days) 50 0 10 12/03/2014 12/03/2015
<Legend>	The legend displays for each selected item:

<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr><td></td><td>

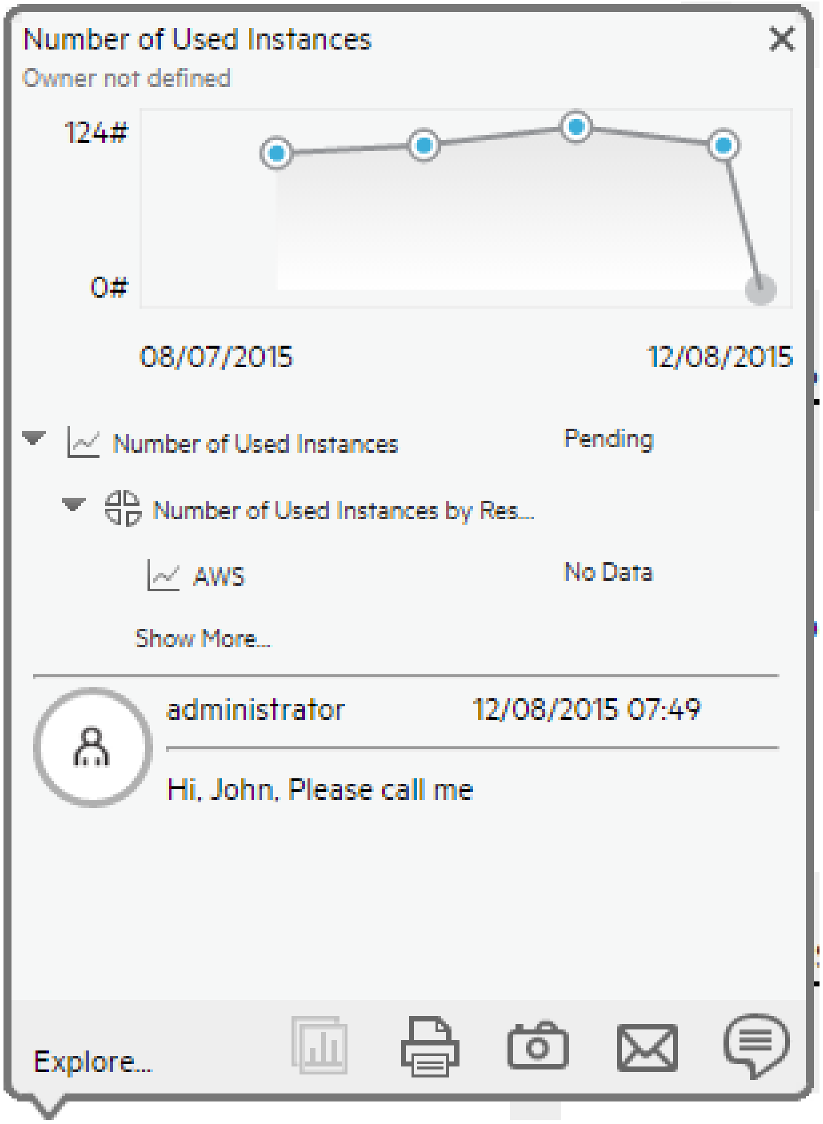
- The color used to represent the item in the graph.
- The name of the item. Click the item name to hide or display the relevant graph line.

</td></tr>
<tr><td>≡
*≡</td><td>

Indicates that this item does not have an annotation.

Indicates that this item has an annotation.

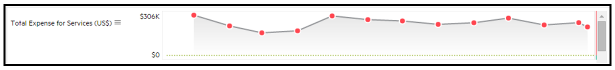
When you move the mouse over such a point, a tooltip displays the annotation information related to the point. For details, see "First Level Navigation (FLN) for an Objective, a KPI, or a Metric" on page 490.

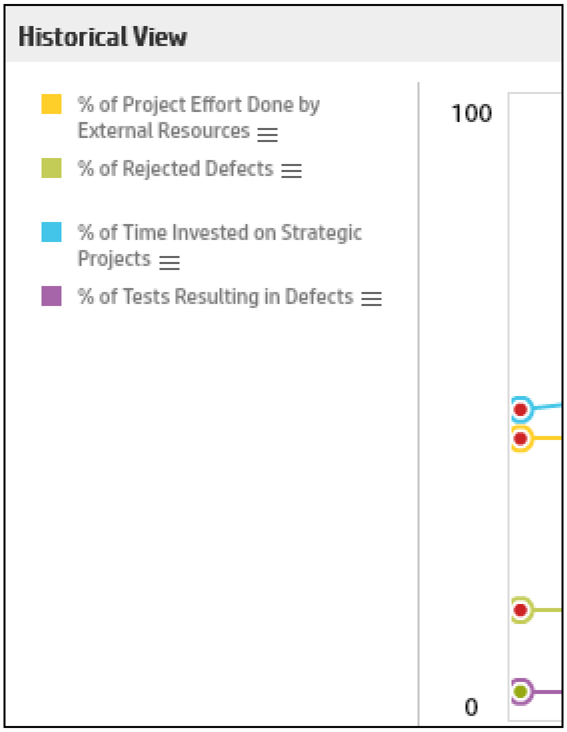
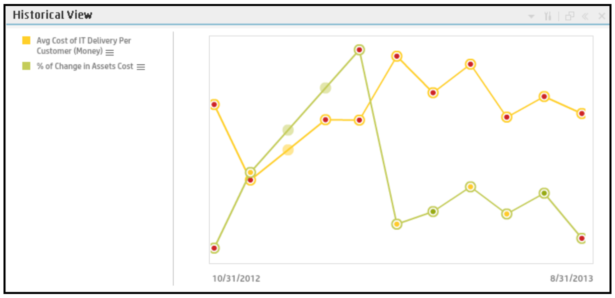
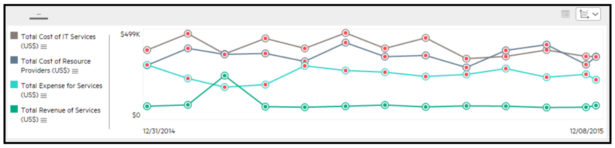


Hi, John, Please call me

The tooltip displays a maximum of three annotations. If there are more than 3 annotations, the first 2 are displayed followed by **Explore...**. Click **Explore...**

</td></tr>
</table>

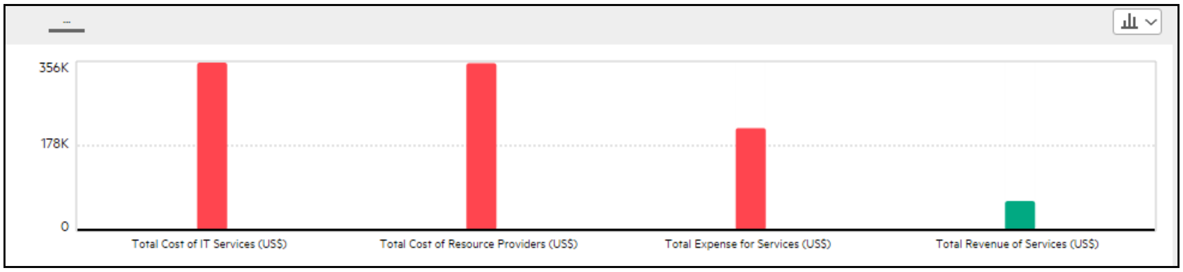
UI Element	Description
	open the EXPLORER tab in context, to view the whole list of annotations. For details, see "About Explorer" on page 501. Double-click the icon to open the EXPLORER tab filtered for the selected element.
◉	Indicates a point corresponding to a division of the time period selected for the report. The point has the color of the status (green: OK, yellow: warning, and red:critical). Double-click the "point" to display the item 's detailed information in the EXPLORER tab up to the period of time defined by the "point" with the time range corresponding to the item range definition selected in the EXPLORER tab. For details, see "About Explorer" on page 501. **Note:** Click the line in the graph to display a vertical line that provides information about the value of the item.
<Threshold>	The thresholds of the item are displayed on the right of the component. For charts that display a single item, the threshold bar and the dotted line appear by default. For charts that display more than one item, select an item by either clicking the relevant line or the legend item, and the graph will display both the Y-axis and the threshold bar with the dotted line. 
<Y-axis>	The Y-axis displays the values of the item in the relevant unit and when you selected one chart (📈 ⌄) when configuring the component: - **When the items have the same unit:** The Y-axis is displayed when all the selected items have the same unit.

UI Element	Description
	 Historical View % of Project Effort Done by External Resources % of Rejected Defects % of Time Invested on Strategic Projects % of Tests Resulting in Defects 100 0 - **When the items do not have the same unit:** The Y-axis is not displayed when the selected items have different units.  Historical View Avg Cost of IT Delivery Per Customer (Money) % of Change in Assets Cost 10/31/2012 8/31/2013 You can display the Y-axis, by selecting an item in the legend. In that case, the Y-axis corresponding to the selected item and the thresholds are displayed in the component will appear together with the thresholds.  Total Cost of IT Services (US$) Total Cost of Resource Providers (US$) Total Expense for Services (US$) Total Revenue of Services (US$) $499K $0 12/31/2014 12/08/2015
<X-axis>	The X-axis displays the time frame selected for the report, split into equal segments, depending on the Display Period. For details, see "Pie format" on the next page.

Bar format

Limitation:

- You can only display a maximum of 15 KPIs.
- Drilling down to Breakdowns lists a maximum of 14 Breakdowns. If there are more than 14 Breakdowns, an additional **Other** bar is displayed and represents the sum of all the other Breakdowns.
- The selected KPIs should have the same units and periodicity.



The component displays a bar for each selected item . The order of the bars in the component, correspond to the order of the selected items in the filter dialog box.

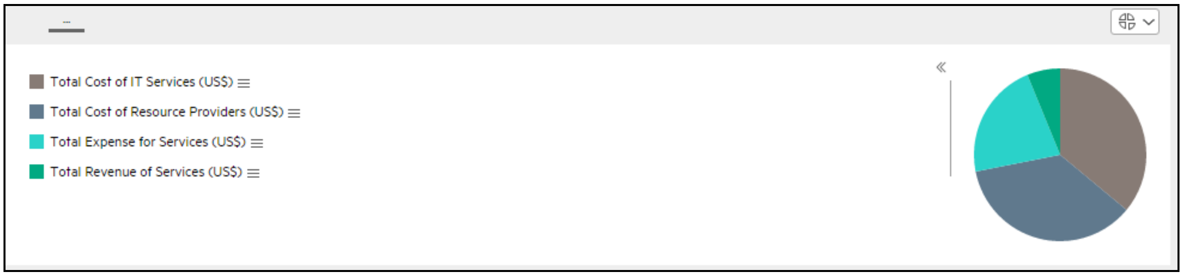
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
<Component contents>	The component displays the following information: • The name of the item below the bar. • The height of the bar corresponds to the value of the item. • The color of the bar indicates the threshold range of the value of the item.
<Tooltip>	Move the mouse over a bar to display a tooltip that include the value of the item and the name of the item.

Pie format

Limitation:

- The selected KPIs should have the same units and periodicity.
- Drilling down to Breakdowns lists a maximum of 14 Breakdowns. If there are more than 14 Breakdowns, an additional "Other" slice is displayed and represents the sum of all the other Breakdowns.


Total Cost of IT Services (US$)
Total Cost of Resource Providers (US$)
Total Expense for Services (US$)
Total Revenue of Services (US$)

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

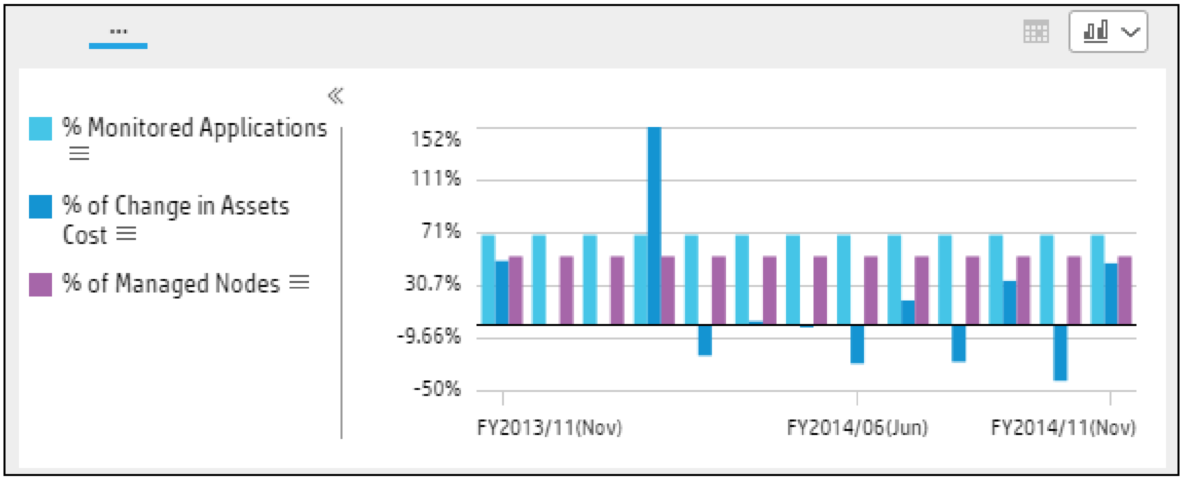
UI Element	Description
<Pie graph>	The pie graph displays slices that represent the selected items and show tooltips that display the value of the item and the percentage of the pie. • If you have added any component (except for a Pie component or a KPI List component) to a Dashboard page, and have selected the Pie format, the component can display up to 15 Breakdowns. Click the relevant slice to display a list of the available Breakdown dimensions. When you select a Breakdown dimension, the ⇅ icon is displayed. Use the ⇅ icon to display the 15 slices with the highest or lowest values of the selected Breakdown dimension. • If you have added a Pie component to a Dashboard page and: ○ If you have selected **Breakdown Selection**, and depending on the number of slices you have selected, you can view one of the following: • Each value of the KPI or Metric Breakdown dimension is represented by a slice of the pie. • One or more slices represent the highest values of the KPI or Metric Breakdown dimension, and one of the slices represents all the other values of the KPI or Metric 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: • Each selected item is represented by a slice in the pie. • One or more slices represent the selected items with the highest value, and

UI Element	Description
	one of the slices represents all the remaining items.
<Legend>	Lists one of the following: - If you have selected **Breakdown Selection**: ◦ The color of the slice followed by the name of the corresponding KPI or Metric Breakdown dimension's value. Double-click the name to open the EXPLORER tab filtered for the selected element. ◦ ≡ Move the cursor above the icon to display the item tooltip that provides detailed information about the item and access to the Explorer in the context of the item. *≡ when a new annotation has been added to the item. Move the cursor above the icon to display the item tooltip that provides detailed information about the item and access to the Explorer in the context of the item. For details, see "First Level Navigation (FLN) for an Objective, a KPI, or a Metric" on page 490. - If you have selected **Multi-Selection**: ◦ The color of the slice followed by the name of the corresponding Metric or KPI, followed by the unit. Double-click the name to open the EXPLORER tab filtered for the selected element. ◦ ≡ Move the cursor above the icon to display the tooltip that provides detailed information about the KPI or Metric Breakdown and access to the EXPLORER tab in the context of the KPI or Metric Breakdown. For details, see "First Level Navigation (FLN) for an Objective, a KPI, or a Metric" on page 490. ◦ *≡ when a new annotation has been added to the KPI or Metric Breakdown. Move the cursor above the icon to display the tooltip that provides detailed information about the KPI or Metric Breakdown and access to the EXPLORER tab in the context of the KPI or Metric Breakdown. For details, see "First Level Navigation (FLN) for an Objective, a KPI, or a Metric" on page 490.
<Tooltip>	Move the mouse over the pie slices to display a tooltip that include detailed information about the selected item.
>> <<	Click to display the legend or to hide the legend.

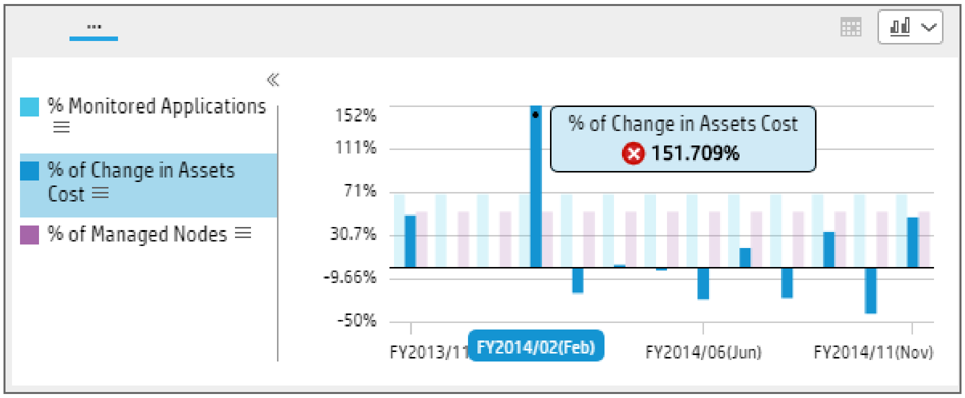
Cluster Bar format

Limitation:

- The selected KPIs or Metrics should have the same units and periodicity.
- This format can only display the overtime data of up to 15 KPIs or Metrics.



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

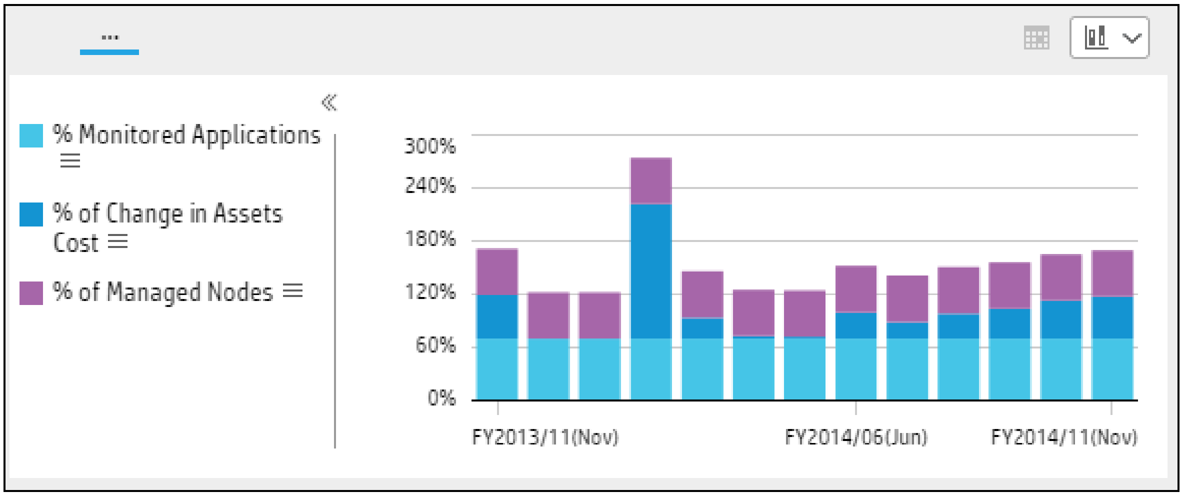
UI Element	Description
<Cluster bar graph>	The cluster bar graph displays bars that represent the values of the selected items over time. - Click the relevant bar to display the overtime values of the KPI or Metric corresponding to the selected bar.  ... % Monitored Applications % of Change in Assets Cost % of Managed Nodes 152% 111% 71% 30.7% -9.66% -50% % of Change in Assets Cost 151.709% FY2013/11 FY2014/02(Feb) FY2014/06(Jun) FY2014/11(Nov) - In the same way, click the relevant KPI or Metric in the legend to display only its bars and values.
<Legend>	Lists the selected KPIs or Metrics and the color used for the display of their value over time.

UI Element	Description
	≡ Move the cursor above the icon to display the item tooltip that provides detailed information about the item and access to the Explorer in the context of the item. *≡ when a new annotation has been added to the item. Move the cursor above the icon to display the item tooltip that provides detailed information about the item and access to the Explorer in the context of the item. For details, see "First Level Navigation (FLN) for an Objective, a KPI, or a Metric" on page 490.
<Tooltip>	Tooltips display the value of the KPI or Metric for the selected time frame (see above graph for an example).
>> or <<	Click to display the legend or to hide the legend.

Stacked Bar format

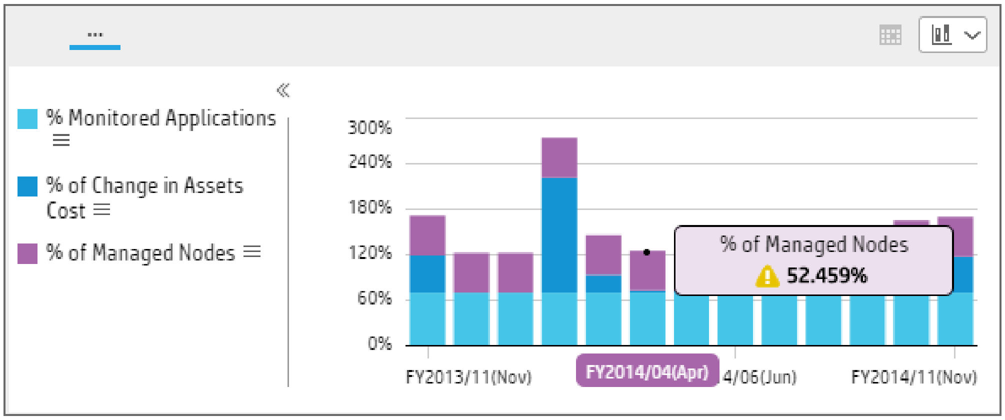
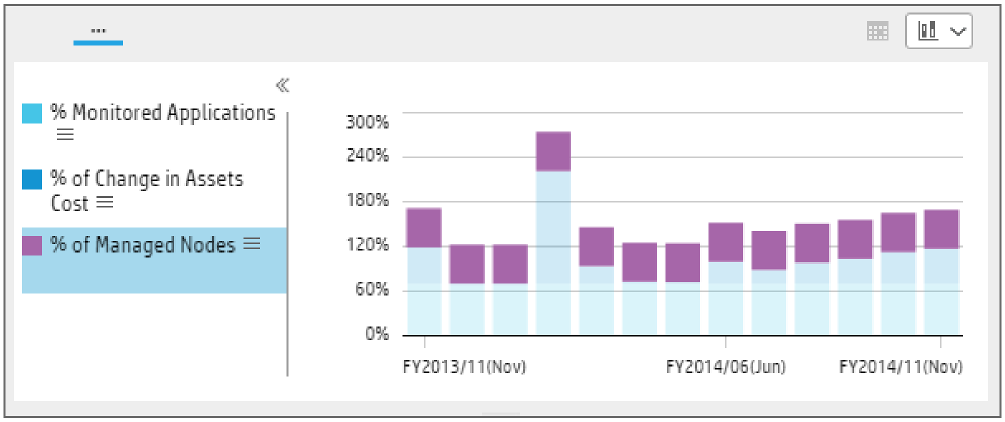
Limitation:

- The selected KPIs or Metrics should have the same units and periodicity.
- This format can only display the overtime data of up to 15 KPIs or Metrics.



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

UI Element	Description
<Stacked	The stacked bar graph displays bars that represent the absolute values of the selected

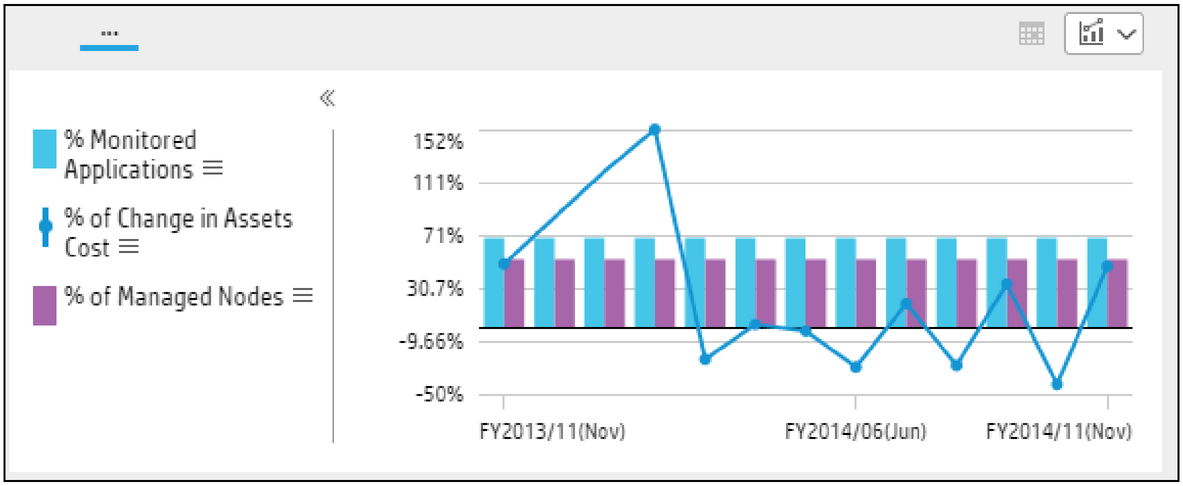
UI Element	Description
bar graph>	items over time. Hover over the relevant section of the bar to display the overtime values of the KPI or Metric corresponding to the selected section.  ... % Monitored Applications % of Change in Assets Cost % of Managed Nodes 300% 240% 180% 120% 60% 0% % of Managed Nodes 52.459% FY2013/11(Nov) FY2014/04(Apr) 4/06(Jun) FY2014/11(Nov)
<Legend>	Lists the selected KPIs or Metrics and the color used for the display of their value over time. Click the relevant KPI or Metric in the legend to display only its bars and values:  ... % Monitored Applications % of Change in Assets Cost % of Managed Nodes 300% 240% 180% 120% 60% 0% FY2013/11(Nov) FY2014/06(Jun) FY2014/11(Nov) Click the breadcrumbs blue line to automatically reselect all the items in the legend. ≡ Move the cursor above the icon to display the item tooltip that provides detailed information about the item and access to the Explorer in the context of the item. *≡ when a new annotation has been added to the item. Move the cursor above the icon to display the item tooltip that provides detailed information about the item and access to the Explorer in the context of the item. For details, see "First Level Navigation (FLN) for an Objective, a KPI, or a Metric" on page 490.
<Tooltip>	Tooltips display the value of the KPI or Metric for the selected time frame (see above graph for an example). The tooltip displays the value of the KPI or Metric (not the

UI Element	Description
	absolute value).
>> or <<	Click to display the legend or to hide the legend.

Line and Bar Combination format

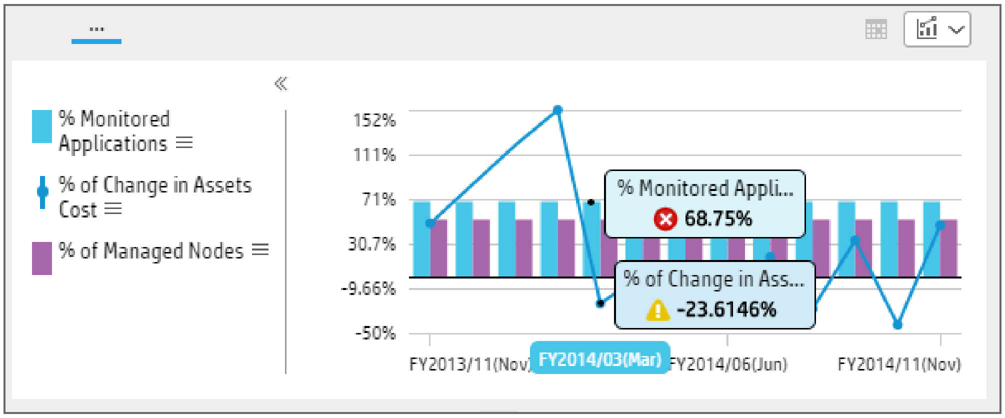
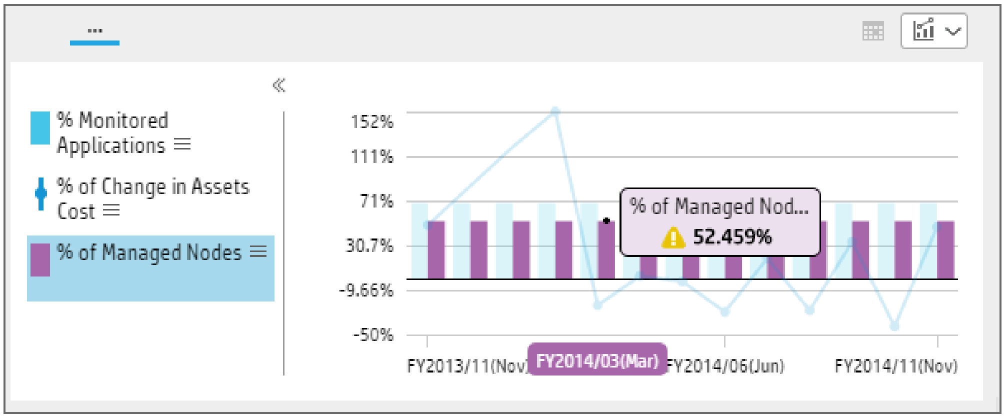
Limitation:

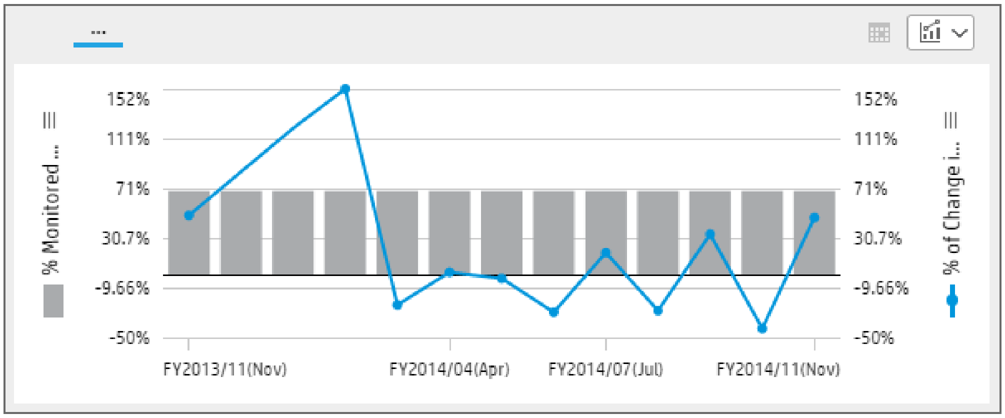
- The selected KPIs or Metrics should have the same periodicity.
- This format can only display the overtime data of up to 15 KPIs or Metrics.



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

UI Element	Description
Bar and line graph>	The Bar and Line Combination graph displays bars and lines that represent the values of the selected items over time. When you select the KPIs or Metrics you want to display, the Bar and Line Combination graph displays the first KPI or Metric in the selection alternatively with bars or a line. Click the relevant bar or line to display the overtime values of the KPI or Metric corresponding to the selected bar or line.

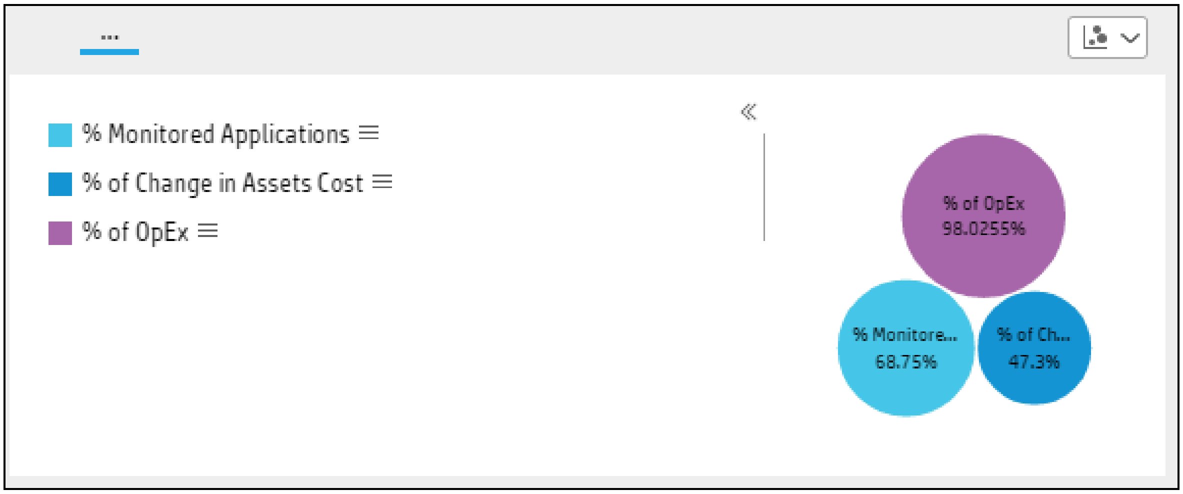
UI Element	Description
	 ... % Monitored Applications % of Change in Assets Cost % of Managed Nodes 152% 111% 71% 30.7% -9.66% -50% % Monitored Appli... 68.75% % of Change in Ass... -23.6146% FY2013/11(Nov) FY2014/03(Mar) FY2014/06(Jun) FY2014/11(Nov)
<Legend>	Lists the selected KPIs or Metrics and the color used for the display of their value over time. Click the relevant KPI or Metric in the legend to display only its bars or line and values.  ... % Monitored Applications % of Change in Assets Cost % of Managed Nodes 152% 111% 71% 30.7% -9.66% -50% % of Managed Nod... 52.459% FY2013/11(Nov) FY2014/03(Mar) FY2014/06(Jun) FY2014/11(Nov) Click the breadcrumbs blue line to automatically reselect all the items in the legend. Click the ╽ or the ■ in the legend to toggle between the bar format and the line format. The selection is persistent. When you have selected only two KPIs or Metrics, the Y-axis is displayed to the left and to the right of the graph. There is no legend. You can toggle between bar and line format for one of the selected KPI or Metric. The other KPI or Metric display format is automatically changed to the other format. Click again the format icon to switch formats.

UI Element	Description
	 ☰ Move the cursor above the icon to display the item tooltip that provides detailed information about the item and access to the Explorer in the context of the item. *☰ when a new annotation has been added to the item. Move the cursor above the icon to display the item tooltip that provides detailed information about the item and access to the Explorer in the context of the item. For details, see "First Level Navigation (FLN) for an Objective, a KPI, or a Metric" on page 490. For details, see "First Level Navigation (FLN) for an Objective, a KPI, or a Metric" on page 490.
<Tooltip>	Tooltips display the value of the KPI or Metric for the selected time frame (see above graph for an example).
>> or <<	Click to display the legend or to hide the legend.

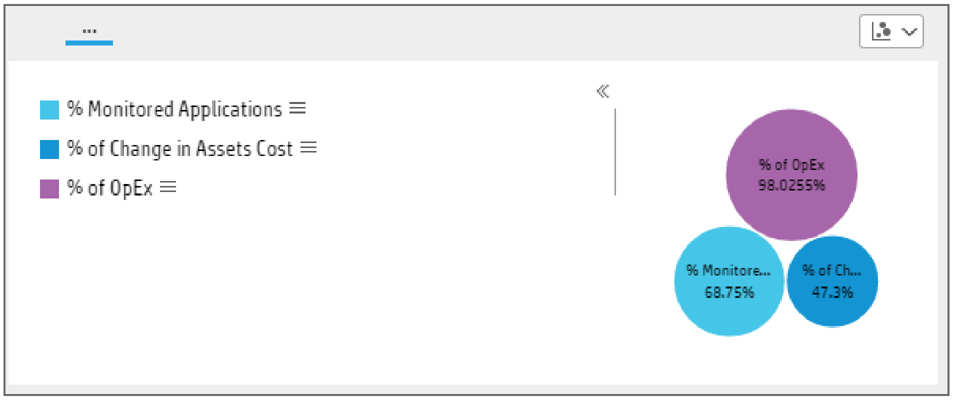
Bubble Chart format

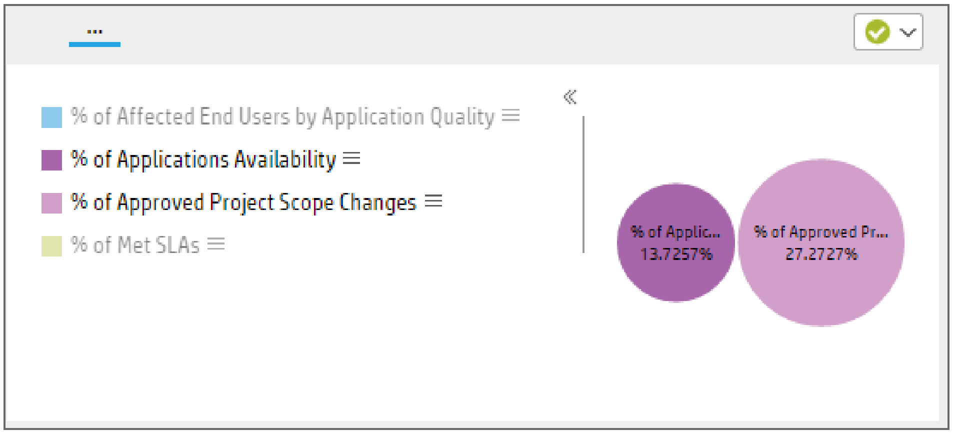
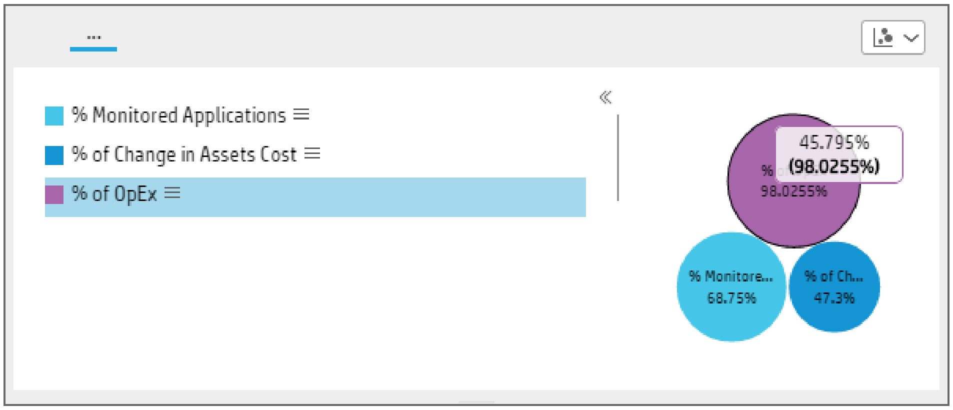
Limitation:

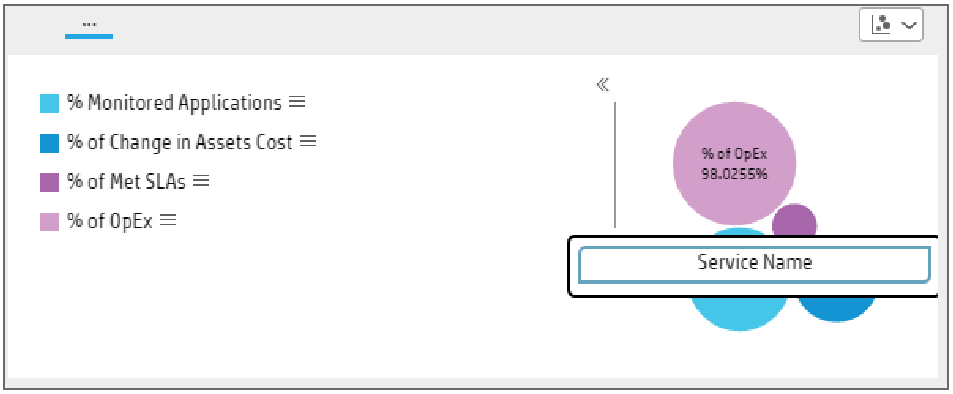
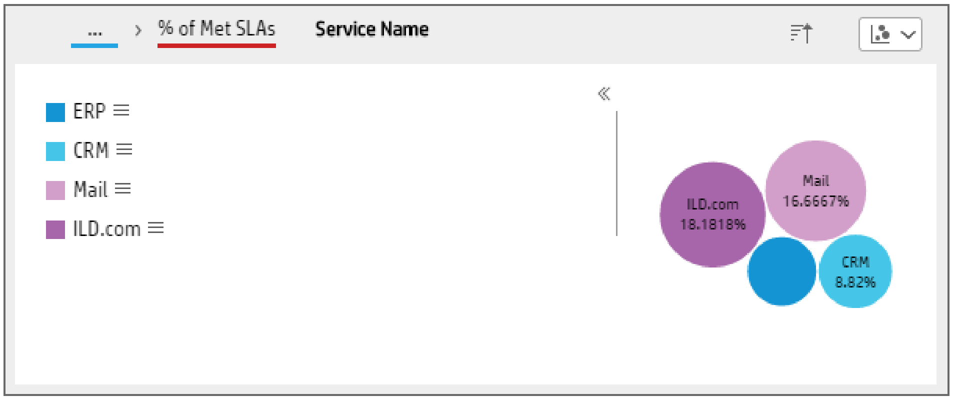
- The selected KPIs or Metrics should have the same units and periodicity.
- This format can only display the overtime data of up to 15 KPIs or Metrics.
- Drilling down to Breakdowns lists a maximum of 14 Breakdowns. If there are more than 14 Breakdowns, an additional "Other" slice is displayed and represents the sum of all the other Breakdowns.



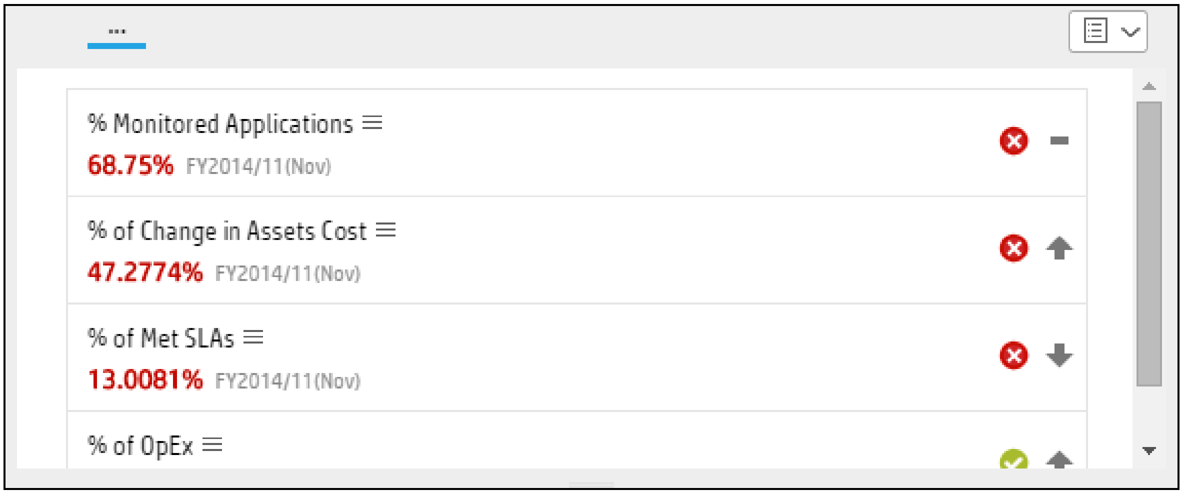
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Bubble chart graph>	The bubble chart graph displays bubbles. Each bubble includes the name of the corresponding KPI or Metric, the value of the item for the time frame selected in the Filter Display Period field of the component. The size of the bubble corresponds to the absolute value of the corresponding KPI or Metric.  ... % Monitored Applications % of Change in Assets Cost % of OpEx % of OpEx 98.0255% % Monitore... 68.75% % of Ch... 47.3%
<Legend>	Lists the selected KPIs or Metrics and the color used for the display of their value over time. Click the relevant KPI or Metric in the legend to display only its bars or line and values.

UI Element	Description
	 ... % of Affected End Users by Application Quality ≡ % of Applications Availability ≡ % of Approved Project Scope Changes ≡ % of Met SLAs ≡ % of Applic... 13.7257% % of Approved Pr... 27.2727% Click the breadcrumbs blue line to automatically reselect all the items in the legend. ≡ Move the cursor above the icon to display the item tooltip that provides detailed information about the item and access to the Explorer in the context of the item. *≡ when a new annotation has been added to the item. Move the cursor above the icon to display the item tooltip that provides detailed information about the item and access to the Explorer in the context of the item. For details, see "First Level Navigation (FLN) for an Objective, a KPI, or a Metric" on page 490. For details, see "First Level Navigation (FLN) for an Objective, a KPI, or a Metric" on page 490.
<Tooltip>	Tooltips display, in the first row, the percentage of the value of the KPI or Metric compared to the rest of the bubbles. The second row displays the value of the item for the time frame selected in the Filter Display Period field of the component.  ... % Monitored Applications ≡ % of Change in Assets Cost ≡ % of OpEx ≡ 45.795% (98.0255%) 98.0255% % Monitore... 68.75% % of Ch... 47.3%
>> or <<	Click to display the legend or to hide the legend.
<Breakdowns>	If one of the selected items has a Breakdown, click on the corresponding bubble to display the item Breakdowns.

UI Element	Description
	 ... % Monitored Applications % of Change in Assets Cost % of Met SLAs % of OpEx % of OpEx 98.0255% Service Name Click the Breakdown to display the relevant KPI or Metric Breakdowns.  ... % of Met SLAs Service Name ERP CRM Mail ILD.com Mail 16.6667% ILD.com 18.1818% CRM 8.82% When you select a Breakdown dimension, the ⇅ icon is displayed. Use the ⇅ icon to display the 15 slices with the highest or lowest values of the selected Breakdown dimension.

List format



% Monitored Applications
68.75% FY2014/11(Nov)

% of Change in Assets Cost
47.2774% FY2014/11(Nov)

% of Met SLAs
13.0081% FY2014/11(Nov)

% of OpEx

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

UI Element	Description
List graph>	The list graph displays each selected KPI or Metric in a list. The row includes: • The name of the KPI or Metric. • The value of the KPI or Metrics for the time period selected in the Display Period of the component filter. • The time stamp for the beginning of the display period. • The status of the KPI (or the No Data icon for a Metric). • The trend of the KPI (or a flat trend for a Metric).

Change, On-demand, the Periodicity Used in a Component Display

In some Dashboard page components, you can change locally the periodicity used in the component display.

To access:

In the relevant component, click ▦ and select the relevant periodicity to modify the display on-the-fly.

Tasks

Tasks

This section includes:

Change, on-demand, the periodicity used in the component display

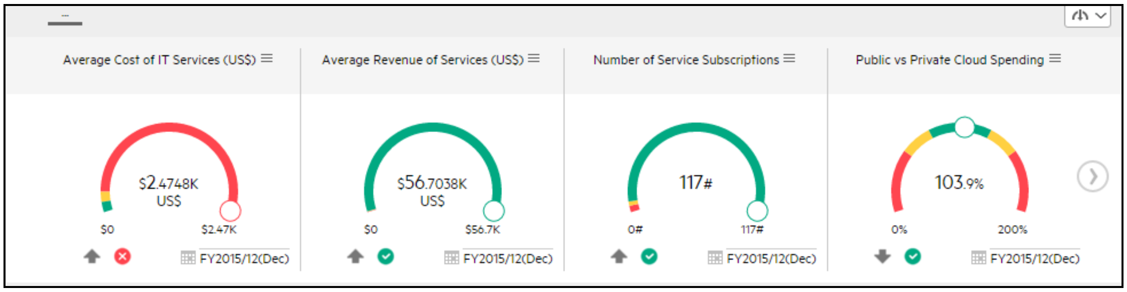
> **Note:** In the following components and only for specific formats , the ▦ icon indicates that you can select a different periodicity to display the data. The components are:
>
> - KPI Rolodex Component
> - The Cluster Bar Chart View Component
> - The Line and Bar Chart View Component
> - The Historical Metric View Component
> - The Historical View Component
> - The KPI List Component

> - The KPI View Component
> - The Stacked Bar Chart View Component

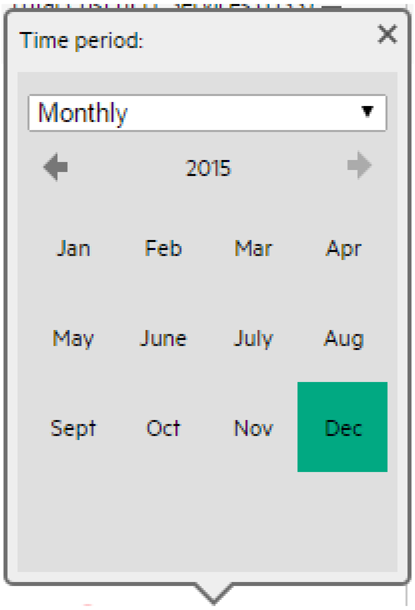
1. Click the ▦ icon in the relevant component.

   > **Note:** After activating the on-demand periodicity:
   >
   > - The component does not show the ✱☰ or ☰ FLN icon because the calculation is temporary, except for KPIs or Metrics for which the selected on-demand periodicity corresponds to their default periodicity.
   > - To restore the original display, click the Breadcrumbs blue line when available or in multi-line format, slide the button to the **Default** position in the on-demand periodicity slider.
   > - When you click a gauge or a line (in a multi-line format) for a KPI or Metric with Breakdowns, their values are displayed for the selected on-demand periodicity. Click the Breadcrumbs blue line to restore the original display.
   > - The calculations are performed on-demand and are temporary. When you leave the page and return to it, the original display is restored.

2. **In the Gauge or Bar format:**


Average Cost of IT Services (US$) ☰
$2.4748K US$
$0
$2.47K
FY2015/12(Dec)
Average Revenue of Services (US$) ☰
$56.7038K US$
$0
$56.7K
FY2015/12(Dec)
Number of Service Subscriptions ☰
117#
0#
117#
FY2015/12(Dec)
Public vs Private Cloud Spending ☰
103.9%
0%
200%
FY2015/12(Dec)

a. Click the icon at the bottom of the graph to display the on-demand periodicity calendar:



b. Select the time period in the dropdown list:

- **Current**

  The KPI or Metric is recalculated (temporarily) for the current period corresponding to the periodicity defined for the KPI or Metric.

  For example, if the KPI periodicity is monthly, the recalculation is performed for the current month up to the current day; if the KPI periodicity is weekly, the recalculation is performed for the current week up to the current day.

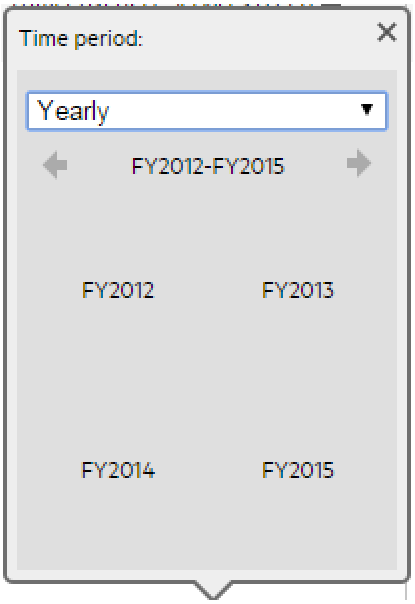
- **Last Closed**

  The KPI or Metric is recalculated (temporarily) for the closed period preceding the current period, corresponding to the periodicity defined for the KPI or Metric.

  For example, if the KPI periodicity is monthly, the recalculation is performed for the previous month; if the KPI periodicity is weekly, the recalculation is performed for the previous week.

- **Yearly**

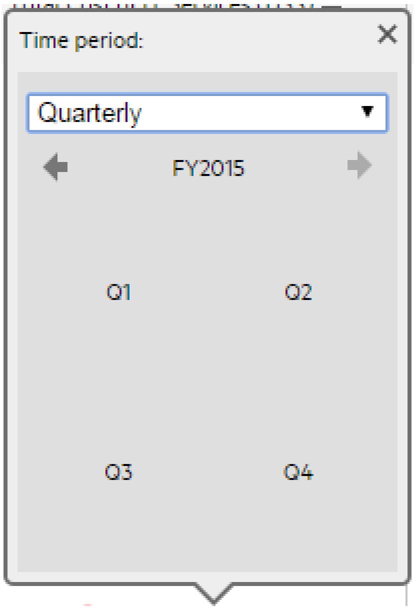
  Select the required year in the KPI or Metric list of years. Future years are disabled. The KPI or Metric is recalculated (temporarily) for that year.



> **Note:** When the KPI or Metric default periodicity is yearly, the yearly calendar is automatically displayed.

- **Quarterly**

  Select the required quarter in the calendar. Future years are disabled. The KPI or Metric is recalculated (temporarily) for the selected quarter.

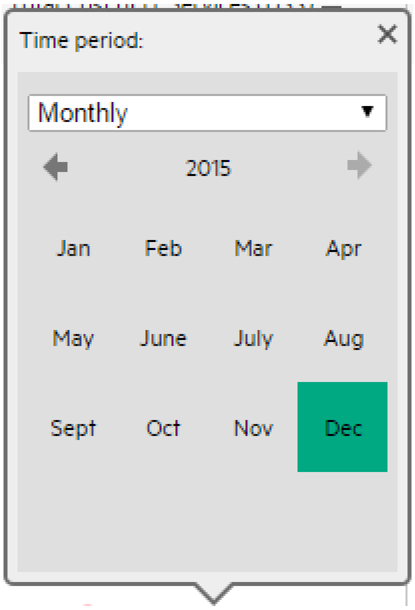


> **Note:** When the KPI or Metric default periodicity is quarterly, the quarterly calendar is

> automatically displayed.

- **Monthly**

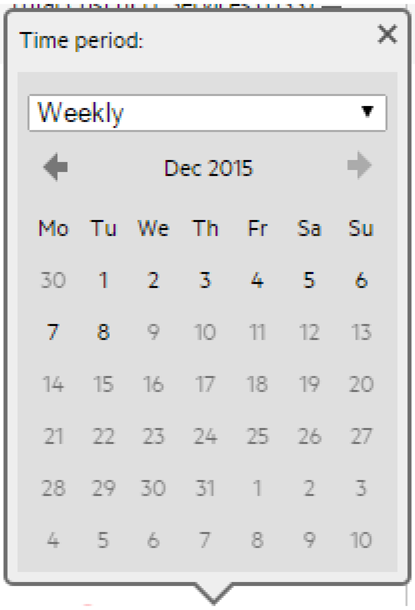
  Select the required month in the calendar. Future months, and years are disabled. The KPI or Metric is recalculated (temporarily) for the selected month.

  > **Note:** When the KPI or Metric default periodicity is monthly, the monthly calendar is automatically displayed.

- **Weekly**

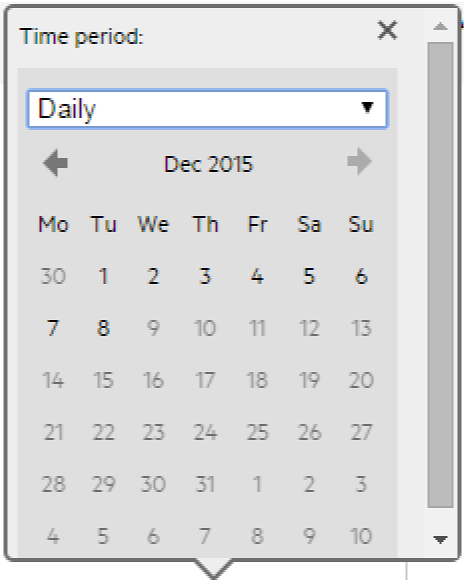
  Select the required week in the calendar. Future weeks, months, and years are disabled. The KPI or Metric is recalculated (temporarily) for the selected week.



> **Note:** When the KPI or Metric default periodicity is weekly, the weekly calendar is automatically displayed.

- **Daily**

  Select the required day in the calendar. Future days, months, and years are disabled. The KPI or Metric is recalculated (temporarily) for the selected day.



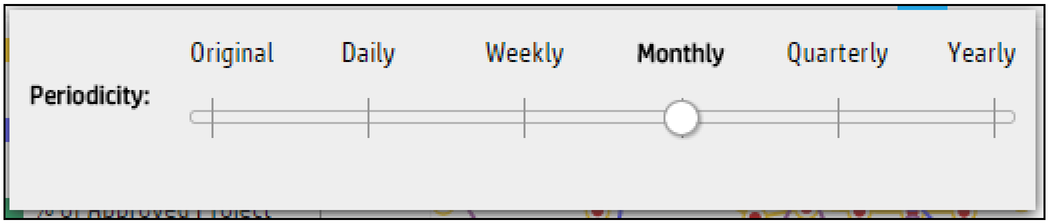
> **Note:** When the KPI or Metric default periodicity is daily, the daily calendar is

> automatically displayed.

   c. The display is automatically and locally modified.

3. **In a multi-line format.**

   a. Click the ▦ icon at the top right-corner of the graph to display the on-demand periodicity slider:



   Slide the button to the relevant periodicity to temporarily recalculate the selected (checked) KPIs or Metrics displayed in the component. When you select the KPIs or Metrics that you had not selected for the on-demand periodicity, their default periodicity is restored and the calculated results are redisplayed.

   To restore the original display, do one of the following:

   - Slide the button back to the **Original** position that represents the default periodicity of the KPIs or Metrics displayed in the graph.
   - Click the blue line in the breadcrumbs.

   b. The display is automatically modified.

Change, On-Demand, the Breakdown Display

In some Dashboard page components, you (the end-user) can change locally the display of the Breakdown KPI.

> - The total number of KPI Breakdowns (STUDIO and on-Demand) is limited to 5000 per dimension.
> - If the calculation of a KPI or Metric ends in error, check the engine.log for a number of Breakdowns being larger than the default value. You can update the default value in **$HPBA_Home\glassfish\glassfish\domains\BTOA\config\settings\engine-settings.xml** to be more or less 5000. 5000 is the recommended breakdown size. Larger numbers may bring performance and stabilization issue.

To access:

In the Dashboard page, in the relevant component, you (the end-user) click the relevant component and select the relevant Breakdown to modify the display on-the-fly.

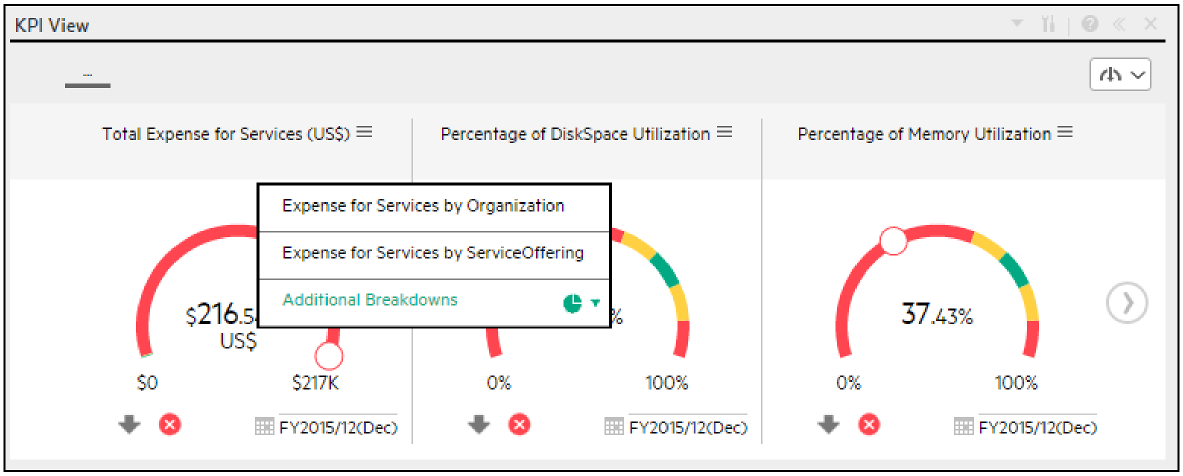
Learn More Tasks

Learn More

Studio Breakdowns and Potential Breakdowns

The on-demand Breakdown feature is available in components where you can select the Gauge format (and), the Column format (and), the Pie format ( ), or the Bubble format ( ).

In a Dashboard page component, when the end-user clicks the relevant component, a list of the available KPI Breakdowns is displayed:


KPI View
Total Expense for Services (US$)
Percentage of DiskSpace Utilization
Percentage of Memory Utilization
Expense for Services by Organization
Expense for Services by ServiceOffering
Additional Breakdowns
$216.5
US$
$0
$217K
0%
100%
37.43%
0%
100%
FY2015/12(Dec)
FY2015/12(Dec)
FY2015/12(Dec)

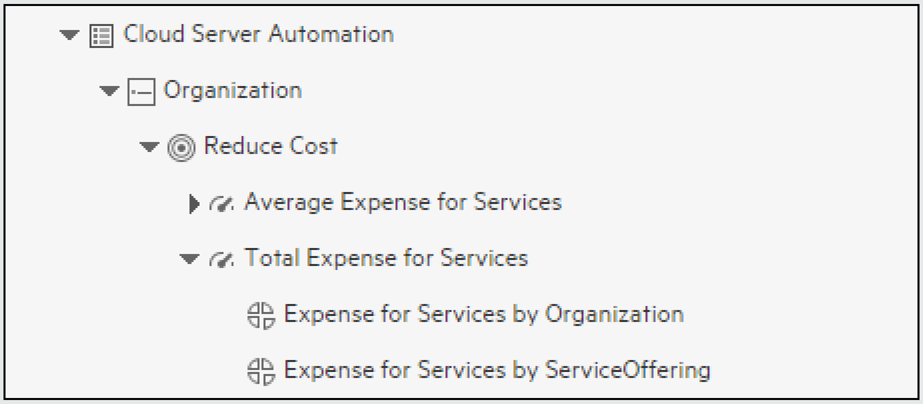
> **Note:** The color of the KPI Breakdowns or On-Demand Breakdowns depend on the end-user permissions:
>
> - black - the end-user has permission to view the Breakdown and the Breakdown has been calculated.
> - grey:
>   - the end-user does not have permission to view the Breakdown. For details, see Dimension

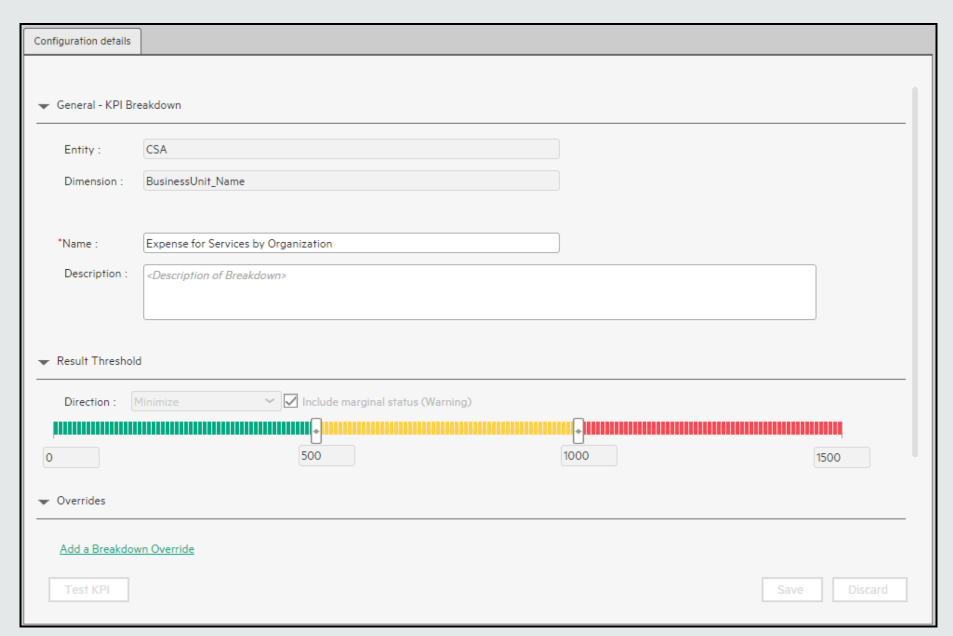
Permissions in the *Administrator Guide*.

- the dimension was already used in the Breakdown drilldown.

The end-user can click the Breakdowns listed above the **Additional Breakdowns** section or the Breakdowns listed below to display the corresponding information. The component display is then automatically modified for the selected Breakdown.

The difference between the Breakdowns above and the Breakdowns in the **Additional Breakdown** section is as follows:

Breakdowns listed above Additional Breakdowns	These Breakdowns were configured in the STUDIO. For details, see "KPI Breakdowns" on page 163. **Example:** The names of the displayed Breakdowns are the names specified in the STUDIO in the **Name** field in the **Configuration details** tab.  Cloud Server Automation Organization Reduce Cost Average Expense for Services Total Expense for Services Expense for Services by Organization Expense for Services by ServiceOffering Knowing that the context of the KPI is **CSA_Demo**, go to the STUDIO, and display the configuration of one for the KPI Breakdowns: **Expense for Services by Organization**, the Entity is **CSA** and the Dimension is **BusinessUnits_Name**.

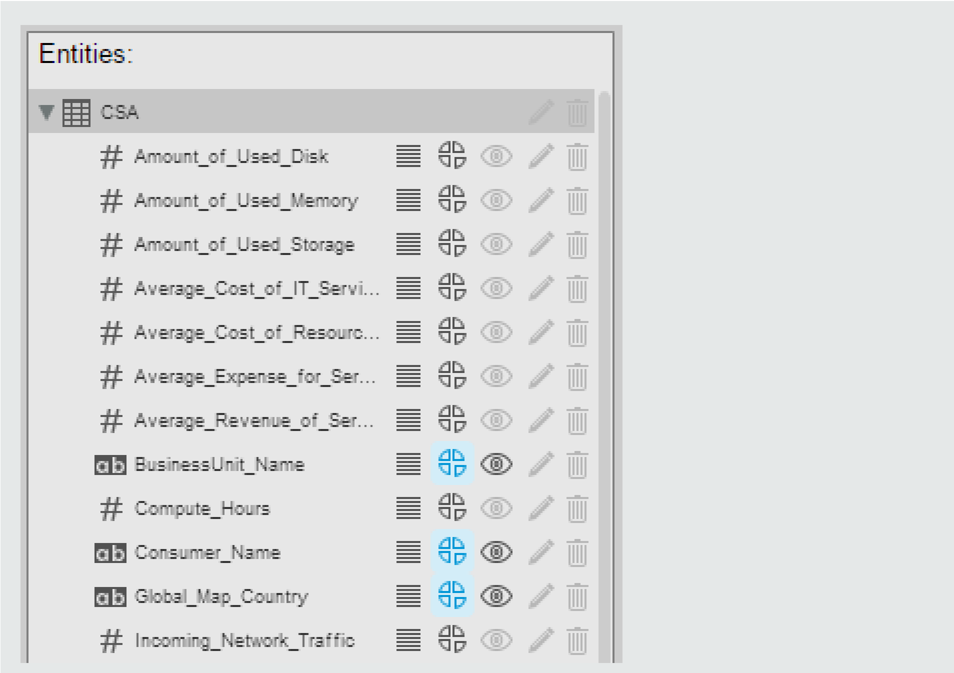
<table>
<tr>
<td></td>
<td>


Entity : CSA
Dimension : BusinessUnit_Name
*Name : Expense for Services by Organization
Description : <Description of Breakdown>
Direction : Minimize ☑ Include marginal status (Warning)
0 500 1000 1500
</td>
</tr>
<tr>
<td>**Breakdowns listed below Additional Breakdowns**</td>
<td>
The on-demand Breakdowns are additional potential Breakdowns that were not created in the Studio but were configured with the Breakdown option in the Context Designer. When the end-user selects them in the Dashboard page component, they are calculated and the results are displayed on-demand in the component.

Example: In the Context Designer for the **CSA_Demo** context, in the Entities area, the Service Management entity has other entities, for example **Agreement Category**. The **Agreement Category** options are:

- ⊞ to enable the creation of the Breakdown.
- 👁 to enable to set permissions for the entity.

For details, see Semantic Layer - Context Designer in the *Content Developer Guide*.
</td>
</tr>
</table>



Entities:

CSA

- Amount_of_Used_Disk
- Amount_of_Used_Memory
- Amount_of_Used_Storage
- Average_Cost_of_IT_Servi...
- Average_Cost_of_Resourc...
- Average_Expense_for_Ser...
- Average_Revenue_of_Ser...
- BusinessUnit_Name
- Compute_Hours
- Consumer_Name
- Global_Map_Country
- Incoming_Network_Traffic

Tasks

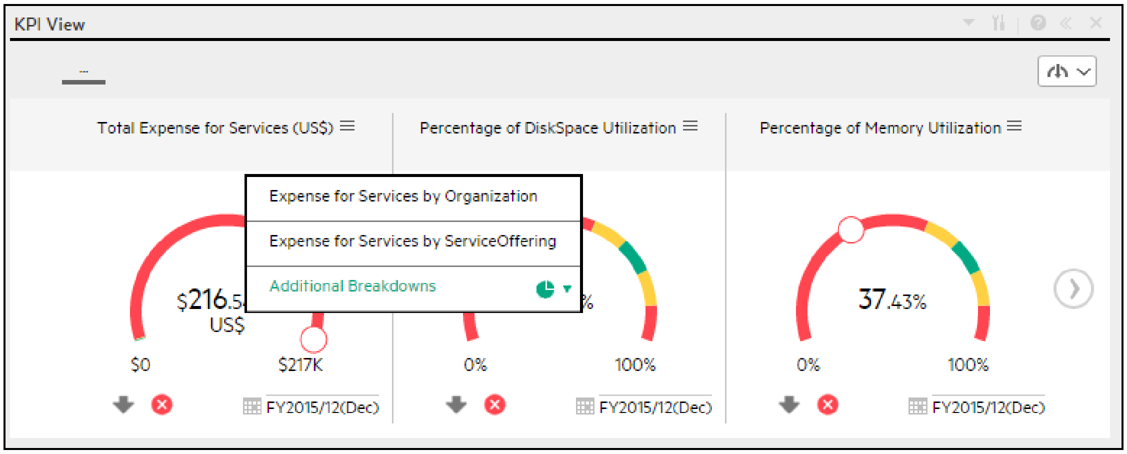
This section includes:

Change, on-demand, the Breakdown KPI displayed in the component

1. As the end-user, in the relevant component in the Dashboard page, select the format that supports the on-demand Breakdown feature.

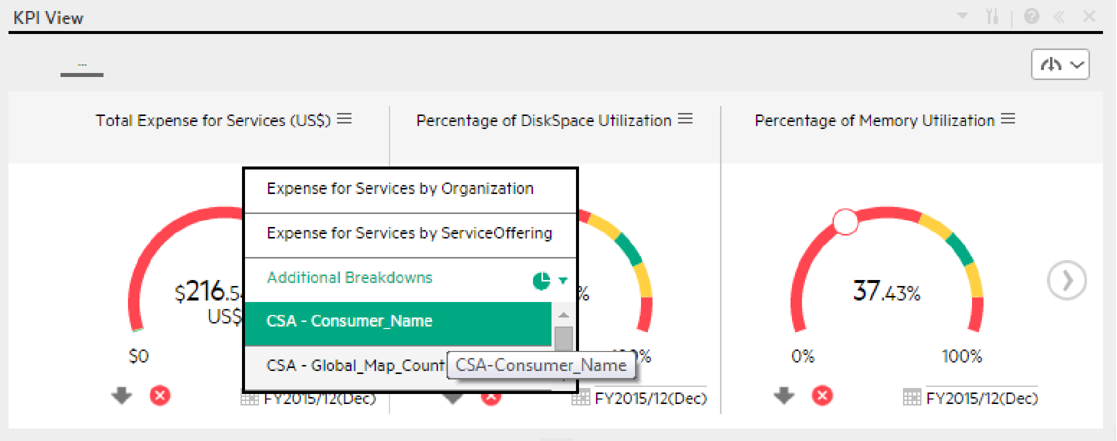
   The on-demand Breakdown feature is available in components where you can select the Gauge format (and), the Column format (and), the Pie format (), or the Bubble format ( ).

2. Click the component. The list of available Breakdowns is displayed.


KPI View
Total Expense for Services (US$)
Percentage of DiskSpace Utilization
Percentage of Memory Utilization
Expense for Services by Organization
Expense for Services by ServiceOffering
Additional Breakdowns
$216.5
US$
$0
$217K
0%
100%
37.43%
0%
100%
FY2015/12(Dec)
FY2015/12(Dec)
FY2015/12(Dec)

3. Click the relevant Breakdown listed above the **Additional Breakdowns** section to display the corresponding information. The component display is automatically modified.

4. Click **Additional Breakdowns** to display the list of additional potential Breakdowns that were not created in the Studio but that are calculated and displayed on-demand when you select them.


KPI View
Total Expense for Services (US$)
Percentage of DiskSpace Utilization
Percentage of Memory Utilization
Expense for Services by Organization
Expense for Services by ServiceOffering
Additional Breakdowns
CSA - Consumer_Name
CSA - Global_Map_Count
CSA-Consumer_Name
$216.5
US$
$0
37.43%
0%
100%
FY2015/12(Dec)
FY2015/12(Dec)
FY2015/12(Dec)

> **Note:** After activating the on-demand Breakdown:
>
> - To restore the original display, click the Breadcrumbs grey line when available.
> - The calculations are performed on-demand and are temporary. When you leave the page and return to it, the original display is restored.

First Level Navigation (FLN) for an Objective, a KPI, or a Metric

From a Scorecard component in a page, move the cursor above the ☰ or ✱ 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 Objective by users.

From any other out-of-the-box component, moving the cursor above the ☰ or ✱ icon near the KPI name to view over time information about the KPI, its value, trend, status, breakdowns details and the annotations added to the KPI.

From the Pie Chart and the Historical Metric View components, moving the cursor above the ☰ or ✱ icon near the Metric name to view over time information about the Metric, its value, trend, breakdowns details and the annotations added to the Metric.

To access:

Move the cursor above the ☰ or ✱ near a KPI or Metric in a Dashboard component to display the KPI First Level Navigation (FLN) area.

Move the cursor above the ☰ or ✱ near an Objective in a Scorecard component to display the Objective First Level Navigation (FLN) area.

Tasks | UI Description

Tasks

This section includes:

Display more information about a specific Objective

From a Scorecard component in a page, move the cursor above the ≡ or *≡ 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 Objective by users.

You can also add annotations, send them by email, reach Additional Info, PDF it, or print it. For details, see "Objective First Level Navigation (FLN) area" on page 497.

Display more information about a specific KPI or Metric

From any other out-of-the-box component, move the cursor above the ≡ or *≡ icon at the end of the KPI name to view over time information about the KPI, its value, trend, and status,details of KPI Breakdowns, and the annotations added to the KPI by other users.

From any other out-of-the-box component, move the cursor above the ≡ or *≡ icon at the end of the Metric name to view its over time information, value, trend, breakdowns details and the annotations added to the Metric.

You can also add annotations, send them by email, PDF it, or print it, and if relevant view additional information for the KPI or Metric. For details, see "First Level Navigation (FLN) area" on the next page.

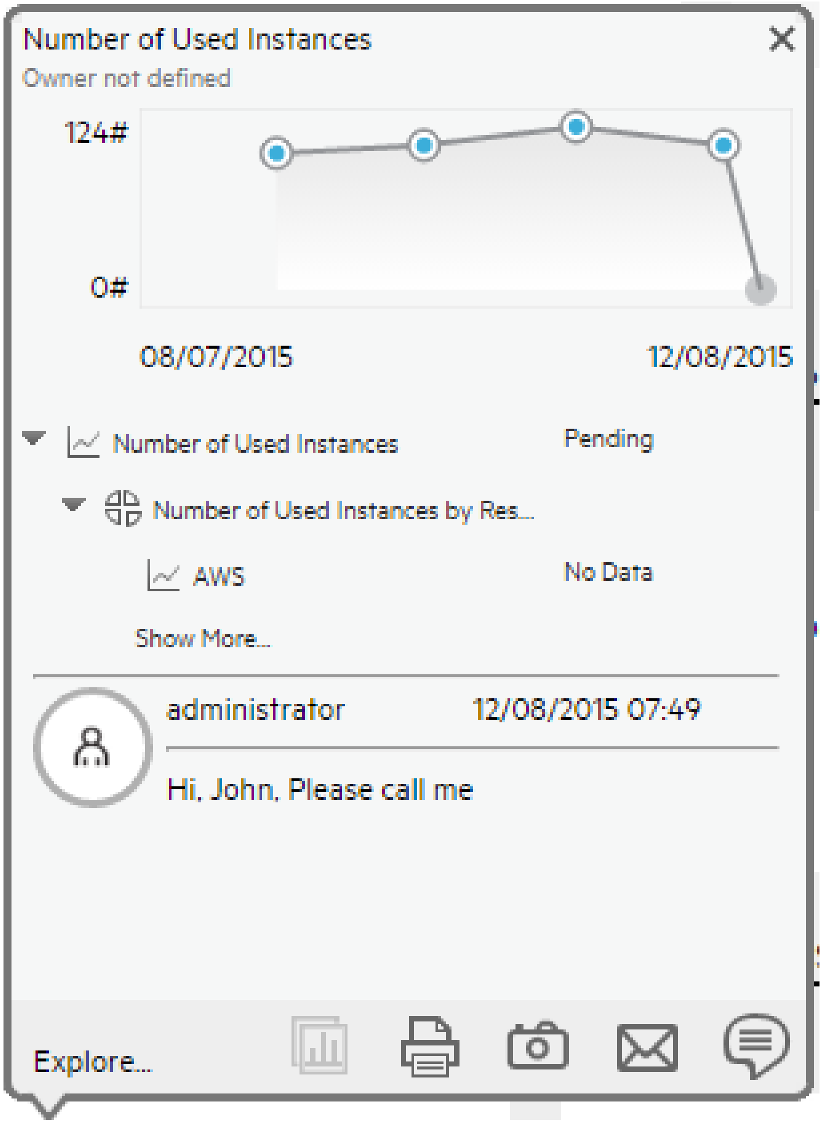
Use Case - Add an Annotation, Send Email, Save as PDF, and Print

For details, see Add an Annotation, Send Email, Save as PDF, and Print in the *Getting Started Guide*.

UI Description

First Level Navigation (FLN) area

For a KPI



Number of Used Instances

Owner not defined

Number of Used Instances — Pending

Number of Used Instances by Res...

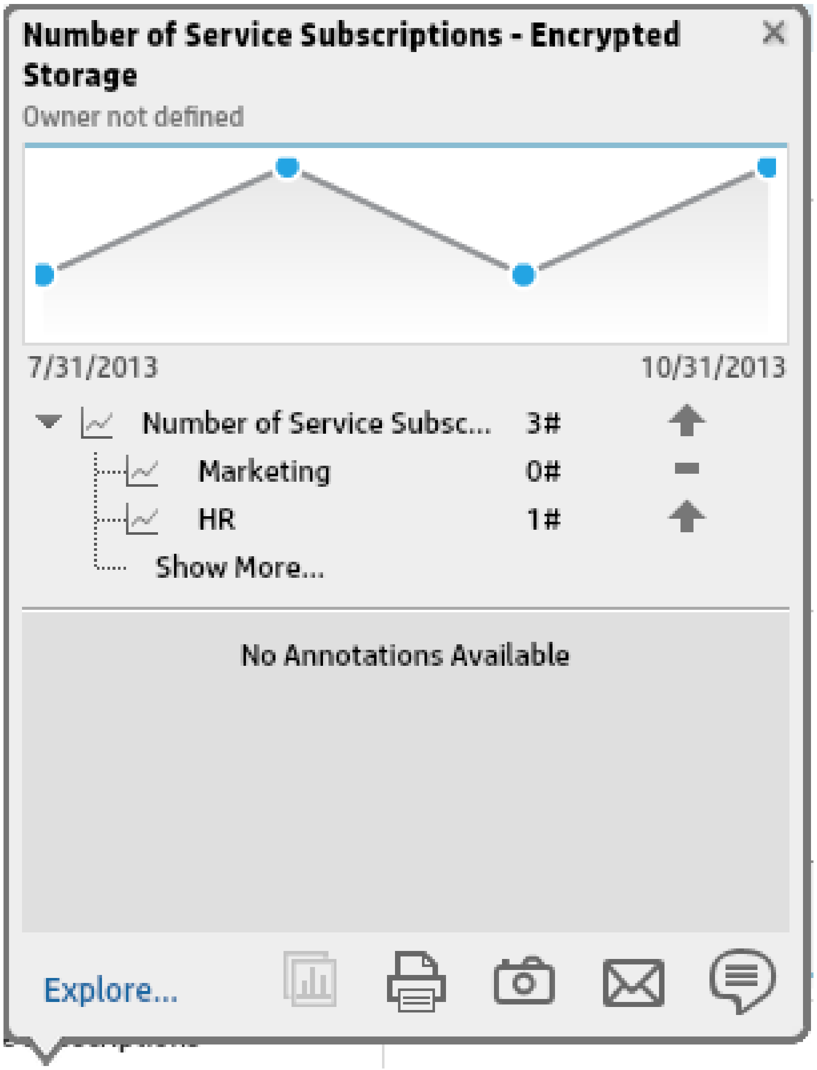
AWS — No Data

Show More...

administrator 12/08/2015 07:49

Hi, John, Please call me

For a Metric:



Number of Service Subscriptions - Encrypted Storage

Owner not defined

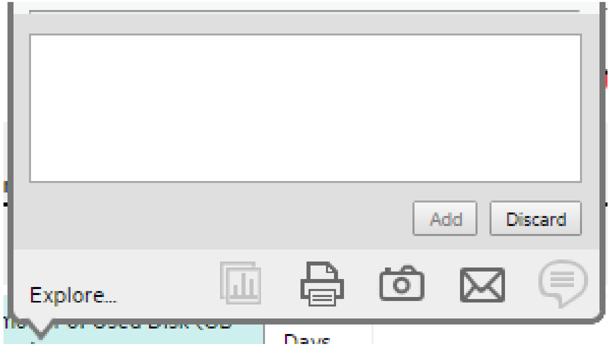
7/31/2013 10/31/2013

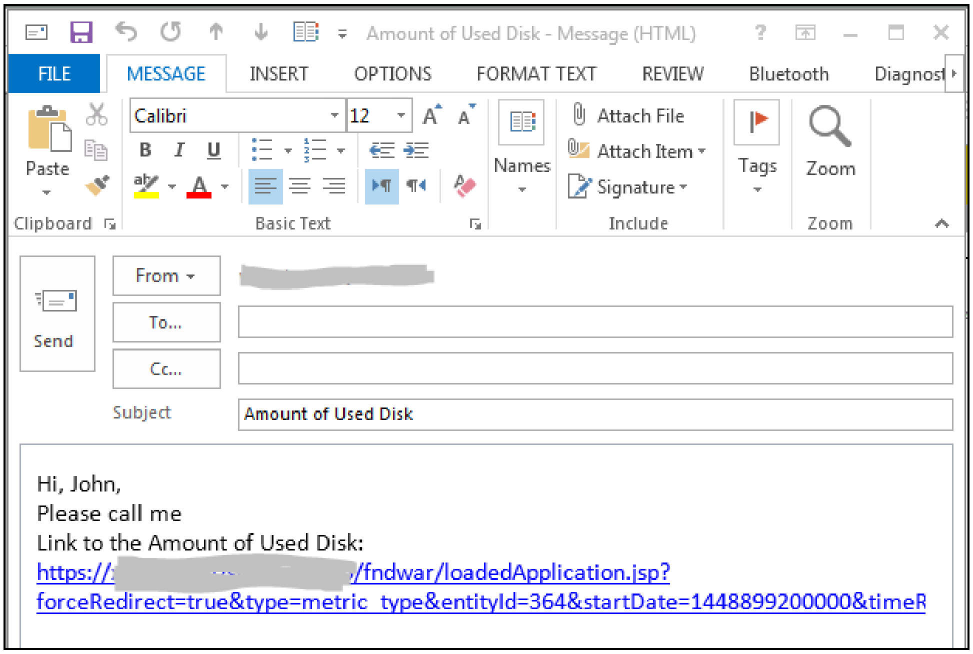
Number of Service Subsc...	3#	↑
Marketing	0#	−
HR	1#	↑

No Annotations Available

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

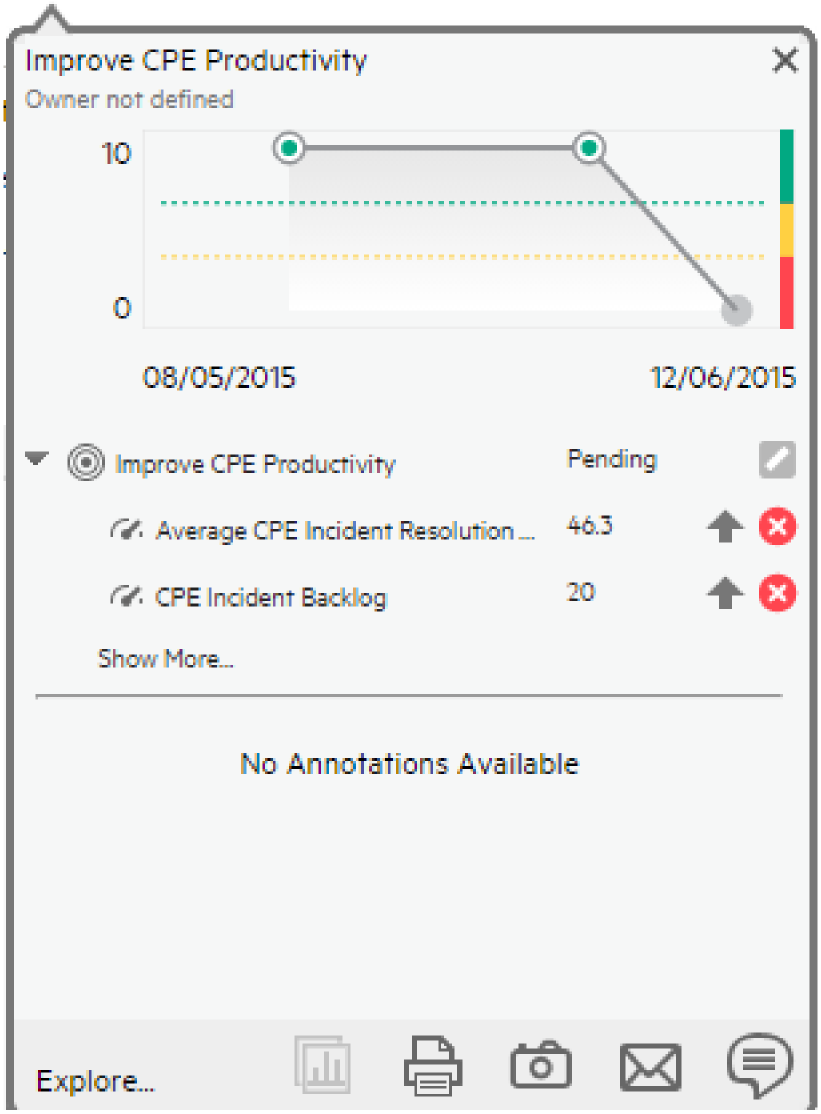
UI Element	Description
Name>	The name of the KPI or Metric.
<Over Time value>	The graph displays the over time value of the KPI or Metric for 5 periods in the past from the period configured in the Display Period for the KPI or Metric. **Example** If the KPI or Metric Display Period is 1 month, the graph displays the value of the KPI or Metric over the past 5 months from the period configured in the Display Period.

UI Element	Description
	To add an annotation to the chart, you can click 💬 to open an annotation box.
<KPI, KPI Breakdown, Metric, or Metric Breakdown>	This section displays: - The name of the KPI or Metric, its value, trend, and status (for a KPI). - If the KPI has more than 3 KPI Breakdowns, only the 2 Breakdowns with the lowest score are displayed in the FLN area with their name, value, trend, and status. - If the Metric has more than 3 Metric Breakdowns, only the 2 Breakdowns are displayed in the FLN area with their name, trend, and value. - If the KPI or Metric has more than 3 KPI or Metric Breakdowns, a **Show more** link appears below the list of KPI or Metric Breakdowns. Click the link to open Explorer page filtered for the selected KPI or Metric , where you can see all the KPI or Metric Breakdowns of the selected KPI or Metric. - When a KPI or Metric does not display data because there is no calculated data (for example, the formula is incorrect, or includes a division by zero), the KPI FLN area is available but displays **No data** and clicking the KPI or Metric in the KPI or Metric FLN area displays the EXPLORER tab with a short explanation of the No data problem. - When a KPI or Metric does not display data because the calculation period corresponds to a time when the KPI or Metric had not yet been configured in the Studio, the KPI or Metric FLN area is not available.
Annotations	Lists the last 2 annotations sent by all users (including the current user). If more than 2 annotations have been sent for the selected KPI or Metric, only 2 are displayed followed by a **Show more** link. Click the link to open Explorer filtered for the selected KPI or Metric, where you can see all the annotations of the selected KPI or Metric.
💬	**Add annotation.** Opens a box where you can add your annotation:  Enter the text of the annotation and click **Add** to add the annotation to the list or **Discard** to discard the annotation.

UI Element	Description
✉	**Send mail.** Opens an Outlook email that includes: - The owner (if it was defined in the Studio) of the selected KPI or Metric, or KPI or Metric Breakdown listed in the **To** box, - The name of the selected KPI or Metric, or KPI or Metric Breakdown in the **Subject** box. - The text of the just written annotation in the body of the email if an annotation was entered. - A link to the KPI or Metric, or KPI or Metric Breakdown entity from the component FLNs (not from the Scorecard component) is added at the end of the email. In the email, click the link to open Explorer in the context of the entity with the selected period.  Amount of Used Disk - Message (HTML) FILE MESSAGE INSERT OPTIONS FORMAT TEXT REVIEW Bluetooth Diagnost Paste Calibri 12 Names Attach File Attach Item Signature Tags Zoom Clipboard Basic Text Include Zoom Send From To... Cc... From: [redacted] Subject: Amount of Used Disk Hi, John, Please call me Link to the Amount of Used Disk: https://[redacted]/fndwar/loadedApplication.jsp?forceRedirect=true&type=metric_type&entityId=364&startDate=1448899200000&timeR **Note:** The link does not request a user/password combination when it is activated during the same session.
📷	**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 FLN area contents to print.
📊	**Additional info.** Opens a pop up that lists all the additional info configured for the KPI or Metric: reports, Dashboard pages, or external URLs. The button is enabled only when the KPI or Metric has additional information.

UI Element	Description
Explore	Click to open Explorer filtered by the selected KPI or Metric. For details, see "About Explorer" on page 501.

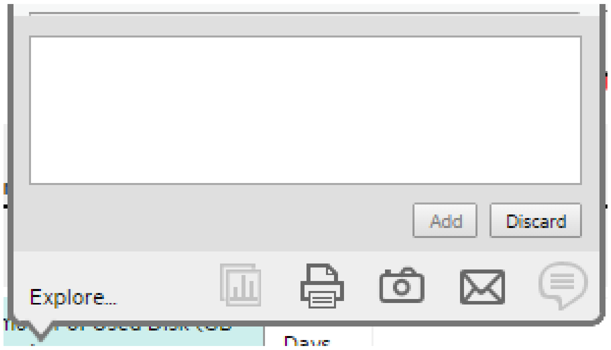
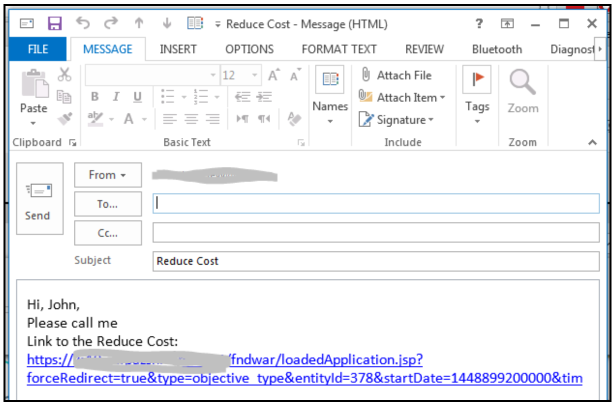
Objective First Level Navigation (FLN) area

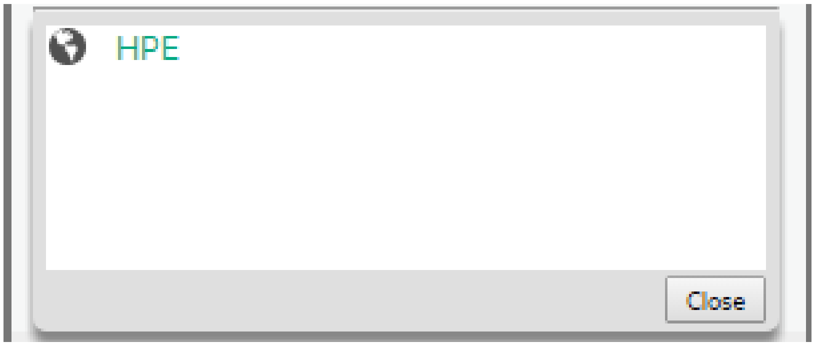


User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Name>	The name of the Objective.
<Over Time value>	The graph displays the over time value of the Objective for 5 periods in the past from the period that was configured for the Objective. The periods displayed are based on

UI Element	Description
	the period configured for the Objective. **Example** If the Objective period is 1 month, the graph displays the value of the Objective over the past 5 months. To add an annotation to the chart, you can click 💬 to open an annotation box.
<Objective>	This section displays: • 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 FLN area 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. **Note:** • When an Objective displays data but some of its KPIs do not have calculated data (for example, KPIs under the same Objective correspond to different Business Contexts and not all Business Context were calculated), the Objective FLN area is available but displays **Objective has been calculated with partial data** and clicking the Objective in the Objective FLN area displays the EXPLORER tab with the same message. • When an Objective does not display data because none of its KPIs has data, the Objective FLN area 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 FLN area is not available.
Annotations	Lists the last 2 annotations sent by all users (including the current user). If more than 2 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.
▤	**Add annotation.** Opens a box where you can add your annotation:

UI Element	Description
	 Enter the text of the annotation and click **Add** to add the annotation to the list or **Discard** to discard the annotation.
✉	**Send mail.** Opens an Outlook email that includes: - The owner (if it was defined in the Studio) of the selected Objective listed in the **To** box, - The name of the selected Objective in the **Subject** box. - The text of the just written annotation in the body of the email if an annotation was entered. - A link to the KPI or Metric, or KPI or Metric Breakdown entity from the component FLNs (not from the Scorecard component) is added at the end of the email. In the email, click the link to open Explorer in the context of the entity with the selected period.  Reduce Cost - Message (HTML) FILE MESSAGE INSERT OPTIONS FORMAT TEXT REVIEW Bluetooth Diagnost Paste Clipboard 12 Basic Text Names Attach File Attach Item Signature Include Tags Zoom Zoom Send From To... Cc... Subject From [redacted] Subject: Reduce Cost Hi, John, Please call me Link to the Reduce Cost: https://[redacted]/fndwar/loadedApplication.jsp?forceRedirect=true&type=objective_type&entityId=378&startDate=1448899200000&tim **Note:** The link does not request a user/password combination when it is activated during the same session.
📷	**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 FLN area contents to print.

UI Element	Description
📊	**Additional info.** Opens a pop up that lists all the additional info configured for the Objective: reports, Dashboard pages, or external URLs. The button is enabled only when the Objective has additional information.  HPE
Explore	Click to open Explorer filtered by the selected Objective. For details, see "About Explorer" on the next page.

About Explorer

This section replaces the Explorer section in the XS 9.50 in the *Business Analyst Guide*..

The Explorer tab includes configuration details and historical information about the selected item and provides additional research, analytical, and data exploration capabilities. It allows a comprehensive understanding of the available data. The analytical capabilities focus around the IT Business Analytics main flow entities such as KPIs and Metrics and provides the ability to drill down into the details of the formula used to calculate the KPI or Metric, to see the building blocks of the calculation results, and to analyze the data used for the calculation. In addition, you can also view a tree of nodes that represents the display of the impact of the selected KPI, or KPI Breakdown on the relevant Objectives, Perspectives, and Scorecards.

To access:

- Click the **Explorer** tab, click the relevant item, and click the **Overview** button to access detailed information about all the Scorecards, Objectives, Perspectives, KPIs, KPI Breakdowns, Metric, Metric Breakdown, or Unassigned KPIs that are active in the STUDIO. To obtain additional information for KPIs, KPI Breakdowns, Metric, Metric Breakdown, or Unassigned KPIs, click the **Data Set**, or **Goal Map** buttons.

  In a Dashboard page, in any Scorecard or KPI component, you can:

  - Mouse over the ≡ or *≡ to display the First Level Navigation (FLN). You can then click **Explore...** in the FLN to access more information about the Scorecard Objective or KPIs in the EXPLORER tab.
  - Click the ≡ or *≡ to display more information in the EXPLORER tab.

- Double-click a point in the Historical View or Historical Metric View component to open the EXPLORER tab for the period of time corresponding to that point and to the KPI or Metric. For details, see The Historical View Component or The Historical Metric View Component in the *Business Analyst Guide*.

Learn More | Tasks | UI Description

Learn More

- When you double-click a point in the KPI or Metric Overtime component or ≡ or *≡ in the other components, the EXPLORER tab displays only the details for the selected KPI or Metric 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 or Metrics 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, Metric, or Objective

You can view more detailed information for a selected KPI, Metric or Objective by moving the cursor over the relevant item in the KPI, Metric, or Scorecard component in the Dashboard page. In the tooltip that opens, click **Explore...**. 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 or Metrics in the tree, display detailed overview information, data, goal map, forecast, and other 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.

The EXPLORER tab includes the following tabs and capabilities:

"Explorer - Overview" on page 506

"Explorer - Data Set" on page 524

"Explorer - Goal Map" on page 542

"Explorer - Forecast" on page 550

"Explorer - What-If" on page 563

"Explorer - Annotations" on page 575

Use Case - Drill down in Explorer to View More Information

In this section you will learn how to drill down into Explorer to view more information related to the Scorecard, Perspective, Objective, KPI, Metric, KPI Breakdown, or Metric Breakdown you selected in Dashboard.

The Explorer tab includes configuration details and historical information about the selected item and provides additional research, analytical, and data exploration capabilities. It allows a comprehensive understanding of the available data. The analytical capabilities focus around the IT Business Analytics main flow entities such as KPIs and Metrics and provides the ability to drill down into the details of the formula used to calculate the KPI or Metric, to see the building blocks of the calculation results, and to analyze the data used for the calculation. In addition, you can also view a tree of nodes that represents the display of the impact of the selected KPI, or KPI Breakdown on the relevant Objectives, Perspectives, and Scorecards.

To access Explorer, do one of the following:

1. Click the **Explorer** tab.
2. Select an item in the Active KPIs tree and click the **Overview** tab.

   The Overview area in Explorer displays information about the selected Scorecard, Objective, Perspective, KPI, KPI Breakdown, Metric, Metric Breakdown, or Unassigned KPI, over time information beginning from the current period. You can also display past information by selecting a past period of time. The area displays different information depending on the type of item you selected.

   For more details, see "Explorer - Overview" on page 506.
3. Select an item in the Active KPIs tree and click the **Data Set** tab.

The Data Set area in the Explorer tab is available only for KPIs, Metrics, KPI Breakdowns, and Metric Breakdowns. It provides the ability to drill down into the details of the formula used to calculate the KPI or Metric, to see the building blocks of the calculation results, and to analyze the data used for the calculation. The page provides the formula, the filter, and the display of the data.

For more details, see "Explorer - Data Set" on page 524.

4. Select an item in the Active KPIs tree and click the **Goal Map** tab.

   The Goal Map provides a tree of nodes that represents the impact of the selected KPI, or KPI Breakdown on the relevant Objectives, Perspectives, and Scorecards for the current period of the selected KPI, or KPI Breakdown. In addition, the display of the Goal Map depends on the user permission.

5. Select an item in the Active tree and click the **Forecast** tab.

   In the **Forecast** tab:

   IT Business Analytics provides information regarding the status and values of Objectives, KPIs, or Metrics on the past and current periods in the Dashboard and Explorer tabs. The Forecast tab in Explorer provides a glimpse into the future by forecasting the entity future behavior, based on historical data, so you will be able more easily understand the underlying trend and to do all you can now to improve or maintain the desired behavior.

   For details, see "Explorer - Forecast" on page 550.

6. Select an Objective in the Active KPIs tree and click the **What-If** tab.

   IT Business Analytics provides information regarding the status and values of Objectives, KPIs, or Metrics on the past and current periods in the Dashboard and Explorer tabs. The What-If tab provides a glimpse into the future by forecasting the entity future behavior of the Objective, based on historical data, so you will be able more easily understand the underlying trend and to do all you can now to improve or maintain the desired behavior. In addition, the tab enables you to view the historical, current, and future behavior of the selected Objective.

   For details, see "Explorer - What-If" on page 563.

Movie: To display the relevant movie, open the ITBA application, click **Help** in the top right corner of the application main page and select the **Movies** option. Select the relevant movie. For details, see in the *Getting Started Guide*.

UI Description

The EXPLORER tab includes the following tabs and capabilities:

"Explorer - Overview" on the next page

"Explorer - Data Set" on page 524

"Explorer - Goal Map" on page 542

"Explorer - Forecast" on page 550

"Explorer - What-If" on page 563

"Explorer - Annotations" on page 575

> **Note:** When in ITBA, you navigate to another tab and then return to the EXPLORER tab, the details of the item that was previously in focus are displayed again. However, its properties might be refreshed.

Explorer - Overview

The Overview area in Explorer displays information about the selected Scorecard, Objective, Perspective, KPI, KPI Breakdown, Metric, Metric Breakdown, or Unassigned KPI, over time information beginning from the current period. You can also display past information by selecting a past period of time. The area displays different information depending on the type of item you selected.

The list of Scorecards that is displayed corresponds to the Scorecards that are permitted for your user. For details about permissions, see User Management in the *Administrator Guide*.

Movie: To display the relevant movie, open the ITBA application, click **Help** in the top right corner of the application main page and select the **Movies** option. Select the relevant movie. For details, see in the *Getting Started Guide*.

To access:

Click the **Explorer** tab to access detailed information about all the Scorecards, Objectives, Perspectives, KPIs, KPI Breakdowns, Metric, Metric Breakdown, or Unassigned KPIs that are active in the STUDIO. In the EXPLORER tab, click the relevant item and click the **Overview** button.

Learn More | Tasks | UI Description

Learn More

More about the Overview tab

- When you double-click a point in the Historical View or Historical Metric View component, or ≡ or *≡ in any component, the Explorer tab displays only the details for the selected item for which you have the correct permissions. Click the X to the right of the search box 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.

Decimal precision

For details, see "KPI and Metric Formulas, Filter, Threshold, Value, Trend, Score, and Decimal Precision" on page 97.

Tasks

This section includes:

Access Explorer - Overview to display detailed information about a selected KPI, Metric, or Objective

To view more detailed information for a selected KPI or Objective:

1. Move the cursor over the relevant item in the KPI or Scorecard component in the Dashboard page. In the First Level Navigation (FLN) that opens, click **Explore...**. The EXPLORER tab opens for the selected item.

   Or click the **Explorer** tab to display the Active KPIs tree, and by clicking the relevant Objective, KPI, KPI Breakdown, Metric, Metric Breakdown, or Unassigned KPI in the tree, display detailed information about the selected item in the EXPLORER tab.

2. Click **Overview** to display 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 tab displays different information depending on the type of item you selected.

Send the contents of the Overview page by email

1. In the EXPLORER tab, click the relevant item in the Active KPIs tree and click **Overview**.
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 - Overview" on the next page.

Save a snapshot of the contents of the Overview area

1. In the EXPLORER tab, click the relevant item in the Active KPIs tree and click **Overview**.
2. To save a snapshot (image) of the contents of the Overview area, click the **Save snapshot** 📷 icon.

For additional details, see " EXPLORER Tab - Overview" on the next page.

Print the contents of the Overview area

1. In the EXPLORER tab, click the relevant item in the Active KPIs tree and click **Overview**.
2. To print contents of the Overview area, click the **Print** 🖨 icon.

For additional details, see " EXPLORER Tab - Overview" on the next page.

Add an Annotation

1. In the EXPLORER tab, click the relevant item in the Active KPIs tree and click **Overview**.
2. To add an annotation, click the **Show annotations** 💬 icon. The Annotation area opens. For details, see "Explorer - Annotations" on page 575.

Change the KPI or Metric Periodicity, On-Demand

1. In the EXPLORER tab, click the relevant KPI or Metric in the Active KPIs tree and click **Overview**.
2. Use the Periodicity slider to locally change the periodicity of the KPI or Metric. The KPI or Metric are immediately recalculated and their values displays in the Overview tab. The KPI or Metric periodicity is not modified in the other tabs of EXPLORER, the STUDIO, or the Dashboard. The selected periodicity is persistent in **Explorer > Overview**.

This feature is also available for KPI Breakdowns and Metric Breakdowns.

UI Description

EXPLORER Tab - Overview

> **Note:** When in IT Business Analytics, you navigate to another tab and then return to the Explorer tab, the details of the item that was previously in focus are displayed again. However, its properties might be refreshed.

The Overview area 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 area displays different information depending on the type of item you selected.

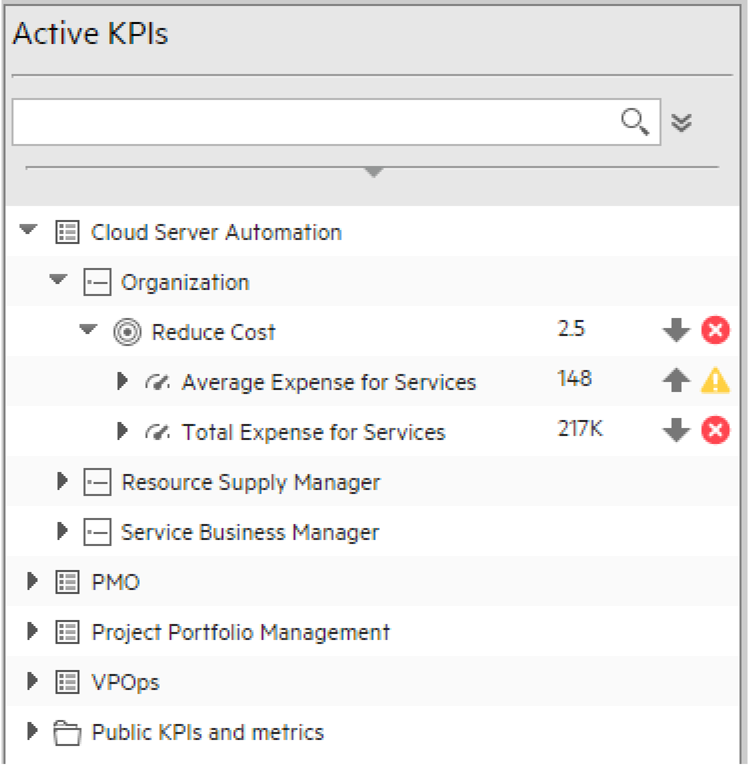
The Overview area includes the following areas:

"Active KPIs area" below

"Overview area" on page 512

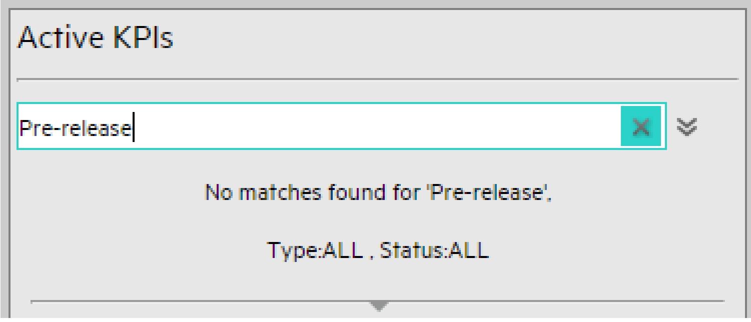
"Toolbar" on page 522

Active KPIs area



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

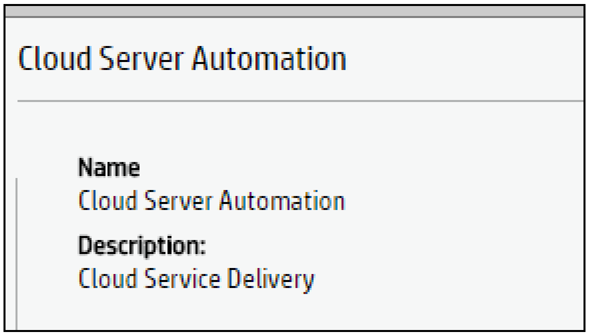
UI Element	Description
🔍 **<Search>**	Enter the relevant string to display, in the tree, the nodes whose name includes the string. In addition, the child nodes of the filtered nodes are also listed even when the child node names do not include the string. If the display is filtered (in case you accessed the Explorer from one of the components in the Dashboard), the <Search> box displays information about the filter. For example:

UI Element	Description
	 Active KPIs Pre-release No matches found for 'Pre-release'. Type:ALL , Status:ALL
︾	**Advanced Search.** Opens additional fields to help you refine the component's filter: - **Status:** Select one of the **All**, **Good**, **Warning**, **Critical**, or **No Data** values to display only the elements with the selected status, in the Active KPIs area. When you select **No Data**, the search returns only the elements with no data. - **Type:** Select: ○ **All.** To display all the elements in the tree with the selected status. ○ **KPI.** To display only the KPIs with the selected status. ○ **Metric.** To display a list of all the Metrics (the Status is changed to **All**). If you had selected a value in Status, and then you select **Metric**, then the Status field displays **All**, and becomes inaccessible. ○ **Objective.**To display only the Objectives with the selected status, and their KPIs.
Active KPIs	Depending on how you accessed the Explorer tab, the pane lists all the Scorecards, Perspectives, Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, and Unassigned KPIs, active in the IT Business Analytics or a subset of these items. The list of Scorecards that is displayed corresponds to the Scorecards that are permitted for your user. For details about permissions, see User Management in the *Administrator Guide*. **Note:** A Scorecard Administrator who wants to see a newly created Scorecard in Explorer (and who has the correct permissions to see the Scorecard), needs to refresh the Explorer using the **Refresh** button to display the Scorecard. Click one of the Scorecards, Perspectives, Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, or Unassigned KPIs to display their detailed information in the other pane. The area also displays on the right side of the Active KPIs pane, a subset of the following items depending on the type of item you selected: - The name of the item. - The value of the item.

UI Element	Description
	- -↓↑ 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: ○ ✓ indicates that the status is **Good**. ○ ⚠ indicates that the status is **Warning**. ○ ✖ indicates that the status is **Critical**. ○ ✎ indicates that the status is **Pending** and that the calculations have not yet been performed or completed.

Overview area

- **<Graph or table area>**
  - **For a Scorecard:**



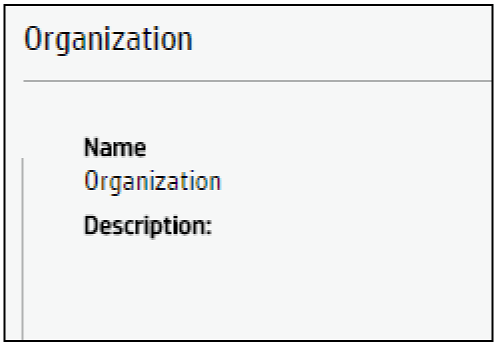
Cloud Server Automation

Name
Cloud Server Automation

Description:
Cloud Service Delivery

UI Element	Description
<Name>	The name of the Scorecard you selected in the Active KPIs pane.
Name	The name of the Scorecard you selected in the Active KPIs pane.
Description	The description of the Scorecard as it appears in the Scorecard Configuration Details pane.
Cascading Scorecards	The list of Cascading Scorecards assigned to the Scorecard. **Note:** This field appears only for Scorecards and when the Scorecard has been assigned Cascading Scorecards.

- **For a Perspective:**



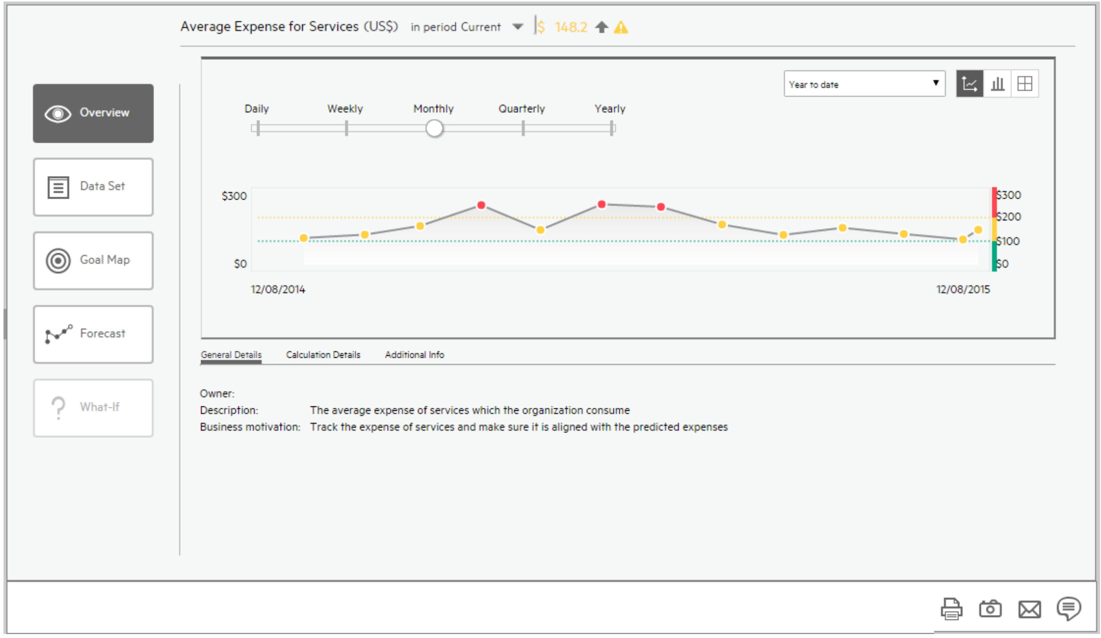
Organization

Name
Organization
Description:

UI Element	Description
<Name>	The name of the Perspective you selected in the Active KPIs pane.
Name	The name of the Perspective you selected in the Active KPIs pane.
Description	The description of the Perspective as it appears in the Perspective Configuration Details pane.

- **For an Objective, KPI, Metric, or Unassigned KPI:**

  The area displays the selected item over time information spanning a time period up to the current time period for the selected Objective, KPI, Metric or Unassigned KPI or for the period you selected in the Overview tab. You can select graph, bars, or table format to display the data.

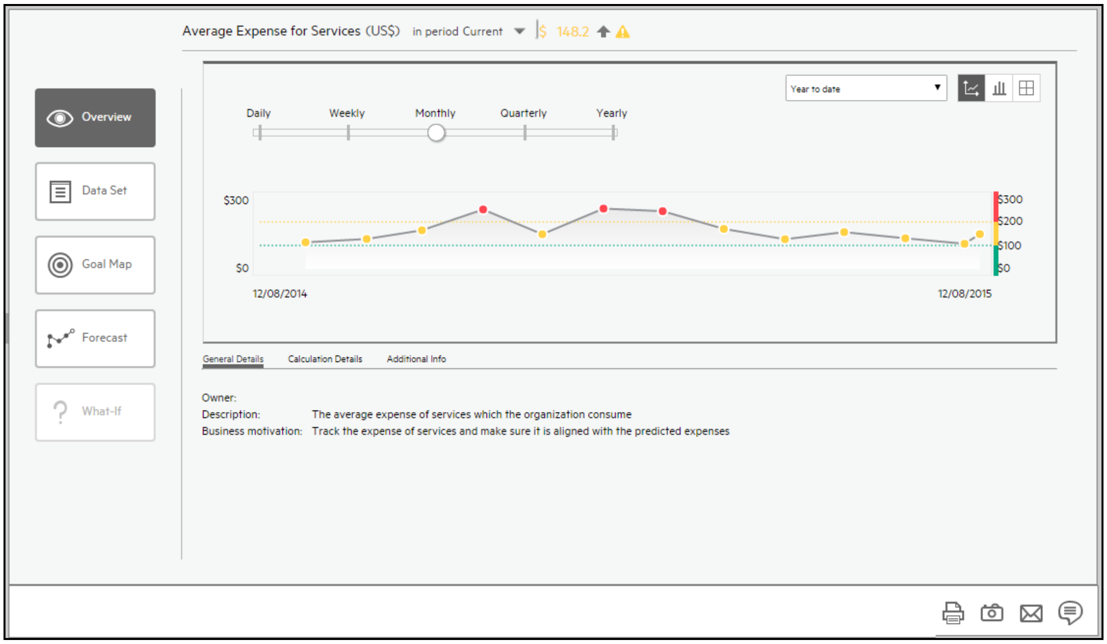


Average Expense for Services (US$) in period Current $ 148.2

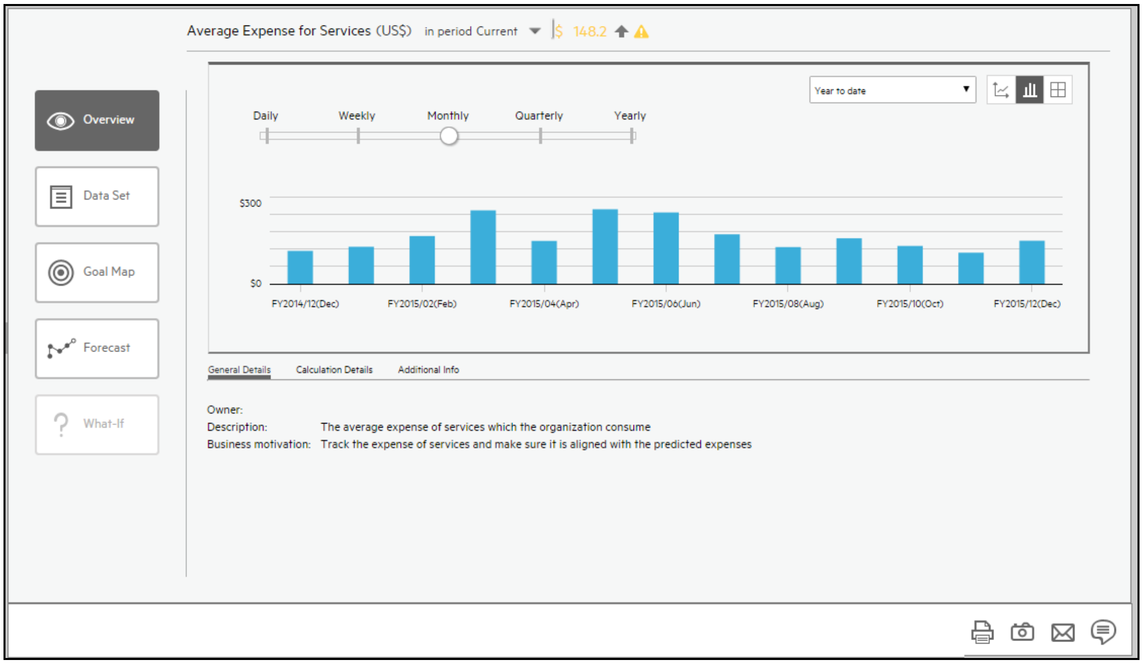
Year to date

Owner:
Description: The average expense of services which the organization consume
Business motivation: Track the expense of services and make sure it is aligned with the predicted expenses

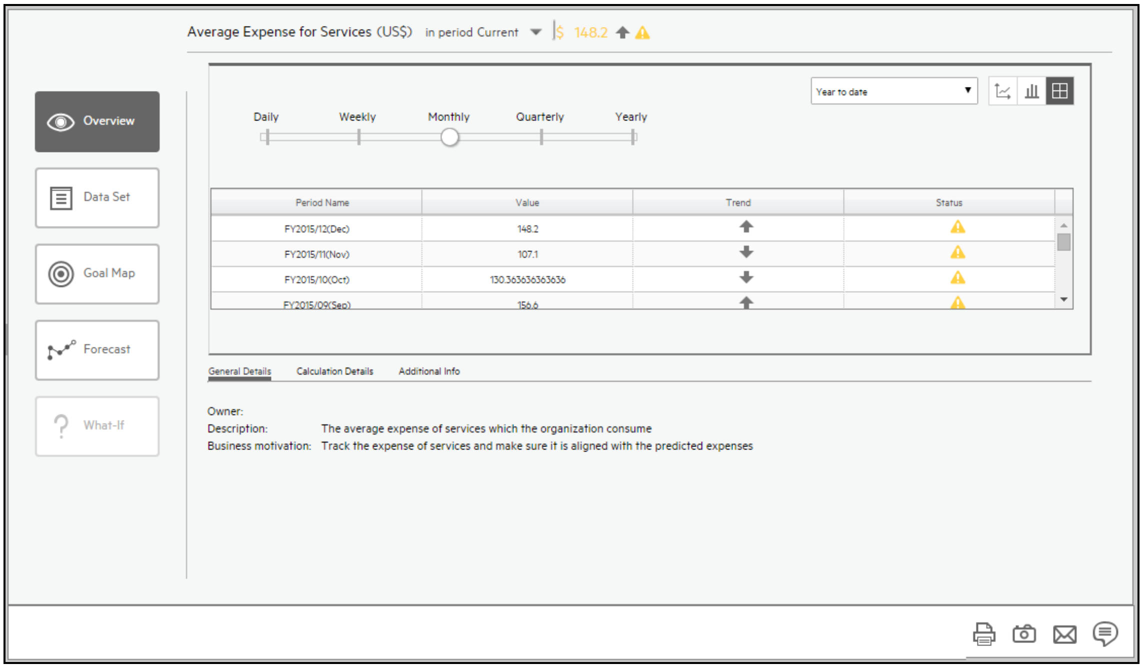
For KPIs or Metrics, you can also use the Periodicity slider to change, on-demand, the periodicity displayed in the tab. You can also change the format of the display.



Owner:
Description: The average expense of services which the organization consume
Business motivation: Track the expense of services and make sure it is aligned with the predicted expenses



Owner:
Description: The average expense of services which the organization consume
Business motivation: Track the expense of services and make sure it is aligned with the predicted expenses



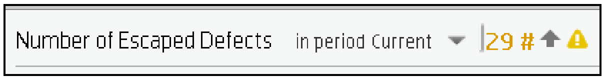
Average Expense for Services (US$) in period Current $ 148.2

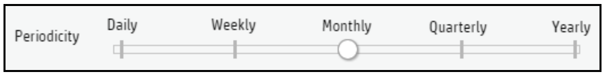
Period Name	Value	Trend	Status
FY2015/12(Dec)	148.2	↑	⚠
FY2015/11(Nov)	107.1	↓	⚠
FY2015/10(Oct)	130.363636363636	↓	⚠
FY2015/09(Sep)	156.6	↑	⚠

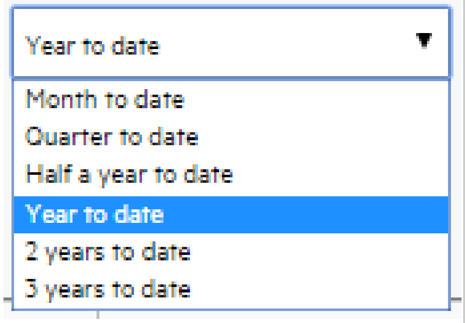
Owner:
Description: The average expense of services which the organization consume
Business motivation: Track the expense of services and make sure it is aligned with the predicted expenses

The area displays the selected item over time information spanning a time period up to the current time period for the selected Metric or for the period you selected in the Overview tab.

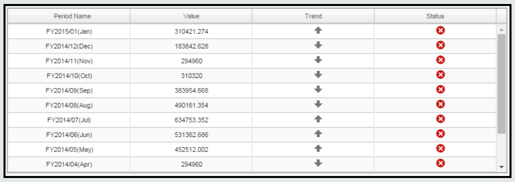
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
<Name> in period <Selection> <Value> <Trend> <Status>	 The title lists: • **<Name>.** The name of the selected item (KPI, KPI Breakdown, Unassigned KPI, or, Metric, or Metric Breakdown). • **in period <Selection>.** Select the period you want to display. You can select: • **Current.** The title of the page displays the current value, trend, and status of the selected item. • **Last Closed.** The title of the page displays the value, trend, and status of the selected item for the last completed calculation period. • A list of periods when the value of the

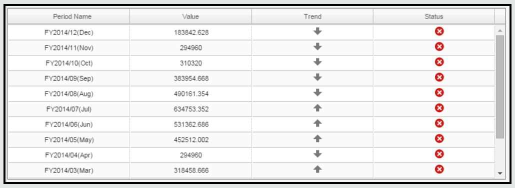
UI Element	Description
	selected item was calculated. - **Value.** The value of the selected item. - **Trend.** -↓↑ The trend icon indicates the trend of the value of the selected item in the selected period compared to its value in the previous period. - **Status.** The status of the KPI, KPI Breakdown (Metrics, and Metric Breakdowns do not have a status), during the current period. It can be: - ✓ indicates that the status is **Good**. - ⚠ indicates that the status is **Warning**. - ✖ indicates that the status is **Critical**. - ▨ indicates that the status is **Pending** or **No data**, meaning that the calculation of the status was not yet completed or the status was not calculated or that there was en error in the calculation.
Periodicity	**Note:** The slider is displayed only for KPIs, Metrics, KPI Breakdowns, and Metric Breakdowns.  Periodicity Daily Weekly Monthly Quarterly Yearly By default, the periodicity slider indicates the periodicity selected during the configuration of the KPI or Metric. Slide the cursor to the left or right, to locally change the periodicity of the KPI, Metric, KPI Breakdown, or Metric Breakdown. The recalculation is performed immediately and the values displayed in the graph, line, or bars in the Overview tab only. The periodicity in the configuration of the KPI or Metric in the STUDIO, in the other tabs of EXPLORER, or in the Dashboard, is not modified when you use the Periodicity slider. The selected periodicity is not persistent in **Explorer > Overview**.

<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr>
<td>


</td>
<td>
<p>To display historical information, select the relevant past periods of time.</p>
<p>The displayed periods corresponding to the period you selected in the <b>in period</b> list in the title of the page.</p>
<p><b>Example</b></p>
<ul>
<li>If you select <b>in period=Current</b> and <b>Year to date</b>, the graph, bars, or table display information that starts a year ago from the current date and ends at the current date.



<table>
<tr><th>Period Name</th><th>Value</th><th>Trend</th><th>Status</th></tr>
<tr><td>FY2015/01(Jan)</td><td>310421.274</td><td>↑</td><td>⊗</td></tr>
<tr><td>FY2014/12(Dec)</td><td>183842.628</td><td>↓</td><td>⊗</td></tr>
<tr><td>FY2014/11(Nov)</td><td>294960</td><td>↓</td><td>⊗</td></tr>
<tr><td>FY2014/10(Oct)</td><td>310320</td><td>↓</td><td>⊗</td></tr>
<tr><td>FY2014/09(Sep)</td><td>383954.668</td><td>↓</td><td>⊗</td></tr>
<tr><td>FY2014/08(Aug)</td><td>490161.354</td><td>↓</td><td>⊗</td></tr>
<tr><td>FY2014/07(Jul)</td><td>634753.352</td><td>↑</td><td>⊗</td></tr>
<tr><td>FY2014/06(Jun)</td><td>531362.686</td><td>↑</td><td>⊗</td></tr>
<tr><td>FY2014/05(May)</td><td>452512.002</td><td>↑</td><td>⊗</td></tr>
<tr><td>FY2014/04(Apr)</td><td>294960</td><td>↓</td><td>⊗</td></tr>
</table>
</li>
<li>If you select <b>in period=Last Closed</b> and <b>Year to date</b>, the graph, bars, or table displays the information for the periods that are closed starting a year ago from the last closed period and ending at the Last Closed date. The current month, for example, October 2014 is not included because it is not completed at the time when the picture was created.



<table>
<tr><th>Period Name</th><th>Value</th><th>Trend</th><th>Status</th></tr>
<tr><td>FY2014/12(Dec)</td><td>183842.628</td><td>↓</td><td>⊗</td></tr>
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<tr><td>FY2014/08(Aug)</td><td>490161.354</td><td>↓</td><td>⊗</td></tr>
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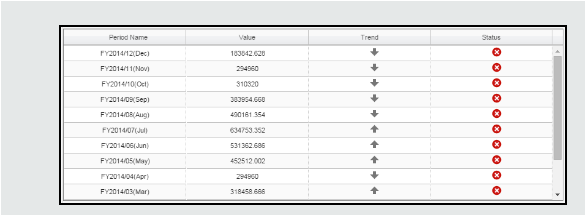
<tr><td>FY2014/06(Jun)</td><td>531362.686</td><td>↑</td><td>⊗</td></tr>
<tr><td>FY2014/05(May)</td><td>452512.002</td><td>↑</td><td>⊗</td></tr>
<tr><td>FY2014/04(Apr)</td><td>294960</td><td>↓</td><td>⊗</td></tr>
<tr><td>FY2014/03(Mar)</td><td>318458.666</td><td>↑</td><td>⊗</td></tr>
</table>
</li>
<li>If you select <b>in period=FY2014/12(Dec) (12/1/14 - 12/31/14)</b> and <b>Year to date</b>, the graph, bars, or table displays the information for the periods when the value of the item was calculated. The period displayed starts a year ago from the selected time period and ends at the selected time period.</li>
</ul>
</td>
</tr>
</table>

<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr><td></td><td>

<table>
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<tr><td>FY2014/12(Dec)</td><td>183842.628</td><td>↓</td><td>⊗</td></tr>
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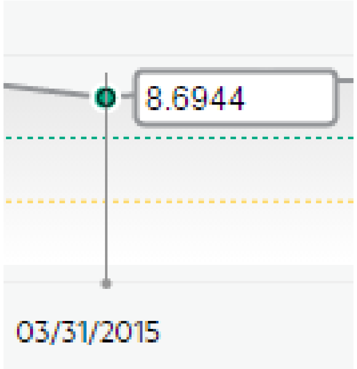
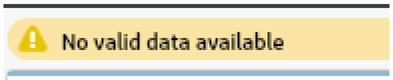
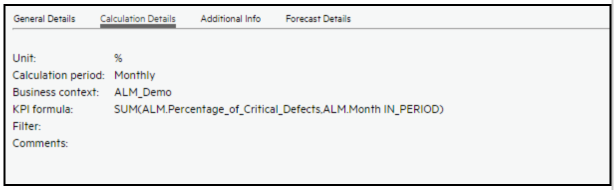
<tr><td>FY2014/03(Mar)</td><td>318458.666</td><td>↑</td><td>⊗</td></tr>
</table>
</td></tr>
<tr><td>📈 📊 ⊞</td><td>Select to display the information in line chart format (left icon), bar chart format (center icon), or table format (right icon)</td></tr>
<tr><td><b><Bar format></b></td><td>
<ul>
<li><b><X-axis>.</b> The X-axis displays the time frame you selected, split into equal segments corresponding to the configured period of the item.</li>
<li><b><Y-axis>.</b> The Y-axis displays the values of the selected item in the relevant unit.
<b><Tooltip>.</b> Displays the value of the item for the relevant time frame.</li>
</ul>
</td></tr>
<tr><td><b><Line chart format></b></td><td>
<ul>
<li>● Indicates a regular "point" corresponding to a division of the time period.
You can move the cursor above the graph to display a line that shows the exact date of a specific point.


</li>
<li>

No valid data available
is shown at the top of the display when 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</li>
</ul>
</td></tr>
</table>

UI Element	Description
	due to missing data, or other reasons. - **<Threshold>.** The chart automatically displays the thresholds if you have selected an Objective or KPI. - **<X-axis>.** The X-axis displays the time frame of the selected item, split into equal segments. - **<Y-axis>.** The Y-axis displays the values of the selected item in the relevant unit.
<Table format>	- **Period Name.** The list of relevant periods. For details see the explanation for Year to date and other historical periods higher in the table. - **Value.** The value of the selected item for that period. - **Trend.** –↓↑ The trend icon indicates the trend of the value calculated over the period configured for the item. - **Status.** The status of the item during the period. It can be: - ✔ indicates that the status is **Good**. - ⚠ indicates that the status is **Warning**. - ✖ indicates that the status is **Critical**.
General Details tab	**Owner.** The owner of the item (Objective, KPI, KPI Breakdown, Metric, Metric Breakdowns or Unassigned KPI) selected in the Active KPIs pane. **Description.** The description of the item selected in the Active KPIs pane. **Business Motivation.** The business motivation of the KPI or KPI Breakdown selected in the Active KPIs pane.
Calculation Details tab	The tab displays the configuration of the Objective, KPI, or Metric as it appears in the Studio.  General Details Calculation Details Additional Info Forecast Details Unit: % Calculation period: Monthly Business context: ALM_Demo KPI formula: SUM(ALM.Percentage_of_Critical_Defects,ALM.Month IN_PERIOD) Filter: Comments:

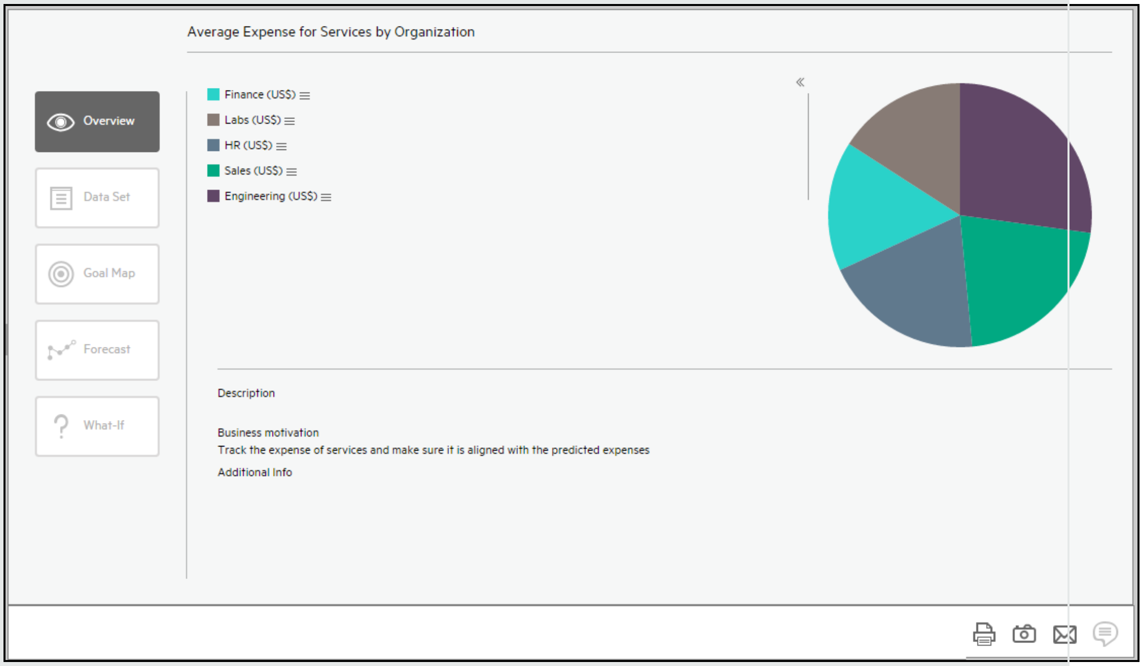
UI Element	Description
	Unit. The unit of the Metric, KPI, or KPI Breakdown or Metric Breakdown. **Calculation Period.** The period of the Objective, Metric, KPI, or KPI Breakdown. **Business Context.** The context assigned to the Metric, KPI, or KPI Breakdown or Metric Breakdown. **KPI/Metric Formula.** The formula used to calculate the KPI/Metric value. **Filter.** The filter assigned to the KPI/Metric. **Comments.**The comments added to the KPI/Metric definition. **Calculated By.** The type of rule used to calculate the Objective's score according to the score of its children. It can be: • **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 multiplied by the relevant weights, or if the Objective has child Objectives, the average of the scores of the child Objectives multiplied by the relevant weights. When you select this rule in the Studio, 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.**
Additional Info	Links to external pages, Dashboard pages that were

UI Element	Description
	configured in the Studio for the Objective, KPI, or Metric, BO, or Xcelsius reports as configured in the item configuration. When an Objective, KPI, Metric, KPI Breakdown, or Metric Breakdown has been assigned a Dashboard page in Additional Info, and if you change the name of the page in the Dashboard, the change is not reflected in Explorer. Explorer is updated only after the cache is refreshed for example by editing in the Studio or by performing a calculation. **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 Unassigned KPI configuration when the **parameter bo.in.use** is configured as **true** in the SETTINGS_MANAGEMENT table in the Management database.

- **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 page, the pie chart below is displayed.

  The figure below shows the Overview for a KPI Breakdown.



Description

Business motivation

Track the expense of services and make sure it is aligned with the predicted expenses

Additional Info

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

UI Element	Description
<Name>	The name of the selected item (KPI, KPI Breakdown, Unassigned KPI, or, Metric, or Metric Breakdown).
<Legend>	The legend displays the representative color and the value of the KPI Breakdown or Metric dimension.
<Pie>	The pie includes up to 10 slices. 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 the 3 other highest values.
Description	The description of the KPI Breakdown or Metric Breakdowns selected in the Active KPIs pane.
Business Motivation	The business motivation of the KPI Breakdown or Metric Breakdowns selected in the Active KPIs pane.
Additional Info	Links to external pages, Dashboard pages that were configured in the Studio for the KPI Breakdown or Metric Breakdown, BO, or Xcelsius reports as configured in the KPI Breakdown or Metric Breakdown configuration. When an Objective, KPI, Metric, KPI Breakdown, or Metric Breakdown has been assigned a Dashboard page in Additional Info, and if you change the name of the page in the Dashboard, the change is not reflected in Explorer. Explorer is updated only after the cache is refreshed for example by editing in the Studio or by performing a calculation.

Toolbar

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

UI Element	Description
✉	**Send mail.** Opens an Outlook email, with the name of the selected entity in the **Subject** box.
📷	**Save snapshot.** Captures the current view in Explorer (all of it) in a new window. A dialog box opens to ask you where you want to save the image.

UI Element	Description
🖨	**Print.** Displays the Print dialog box where you can select the printer and how to print the content of the corresponding Explorer tab. The printout includes: • The contents of the area that was selected while you clicked the button. • The Annotations Area.
💬	**Show/Hide Annotations.** The button is enabled only for Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, or Unassigned KPI. It opens a box where you can add your annotation or hide them after viewing. For details, see "Annotations" on page 578. Click the button again to close the Annotation area. **Note:** The **Show/Hide Annotations** icon with a little + sign 💬 in the bottom toolbar indicates that a new annotation was added to the selected item during the past week. The number of days during which the annotations are considered to be new is a setting that is configurable by your administrator in **Admin > Scorecard > Dashboard Settings > Number of days annotations are considered new**. For example, if the administrator gives the setting the value **14**, then the + sign will indicate that the annotation was added in the last 2 weeks. The default is a week.

Explorer - Data Set

The Data Set area in the Explorer tab is available only for KPIs, Metrics, KPI Breakdowns, and Metric Breakdowns. It provides the ability to drill down into the details of the formula used to calculate the KPI or Metric, to see the building blocks of the calculation results, and to analyze the data used for the calculation. The page provides the formula, the filter, and the display of the data.

To access:

Click the **Explorer** tab to access detailed information about all the Scorecards, Objectives, Perspectives, KPIs, KPI Breakdowns, Metric, Metric Breakdown, or Unassigned KPIs that are active in the Studio. In the EXPLORER tab, click the relevant item and click the **Data Set** button.

Tasks | UI Description

Tasks

This section includes:

Access Explorer to display detailed information about a selected KPI or Objective

To view more detailed information for a selected KPI or Objective:

1. Move the cursor over the relevant item in the KPI or Scorecard component in the Dashboard page. In the tooltip that opens, click **Explore...**. The EXPLORER tab opens for the selected item.

   Or click the **Explorer** tab to display the Active KPIs tree, and by clicking the relevant KPI, KPI Breakdown, Metric, Metric Breakdown, or Unassigned KPI in the tree, display detailed information about the selected item in the EXPLORER tab.

2. Click the **Data Set** button to display the details of the formula used to calculate the KPI or Metric, to see the building blocks of the calculation results, and to analyze the data used for the calculation. The page provides the formula, the filter, and the display of the data.

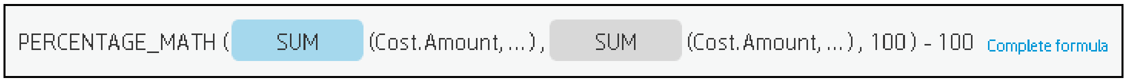
View the numeric result of each aggregation function used in the formula

To view numeric result of each aggregation function used in the formula of a selected KPI or Metric:

1. Click the **Explorer** tab to display the Active KPIs tree, and by clicking the relevant KPI, KPI Breakdown, Metric, Metric Breakdown, or Unassigned KPI in the tree, display detailed information about the selected item in the EXPLORER tab.

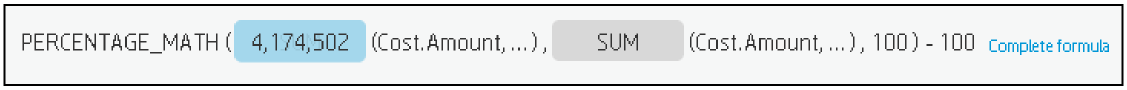
2. Click the **Data Set** button.

   The formula used to calculate the KPI or Metric is displayed at the top of the page. You can click each aggregation part of the formula to activate it. It then has a colored background.



PERCENTAGE_MATH (SUM (Cost.Amount, ...), SUM (Cost.Amount, ...), 100) - 100

   Move the cursor above that area to display the value of that function.



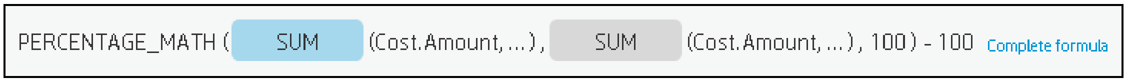
PERCENTAGE_MATH (4,174,502 (Cost.Amount, ...), SUM (Cost.Amount, ...), 100) - 100

View the table of raw data used for each aggregation function used in the formula

To view table of raw data used for each aggregation function used in the formula of a selected KPI or Metric:

1. Click the **Explorer** tab to display the Active KPIs tree, and by clicking the relevant KPI, KPI Breakdown, Metric, Metric Breakdown, or Unassigned KPI in the tree, display detailed information about the selected item in the EXPLORER tab.
2. Click the **Data Set** button.

   The formula used to calculate the KPI or Metric is displayed at the top of the page. The activated aggregation function has a colored background.

   PERCENTAGE_MATH (SUM (Cost.Amount, ...) , SUM (Cost.Amount, ...) , 100) - 100 Complete formula

3. Click the aggregation function for which you want to display the raw data in a table below the formula.

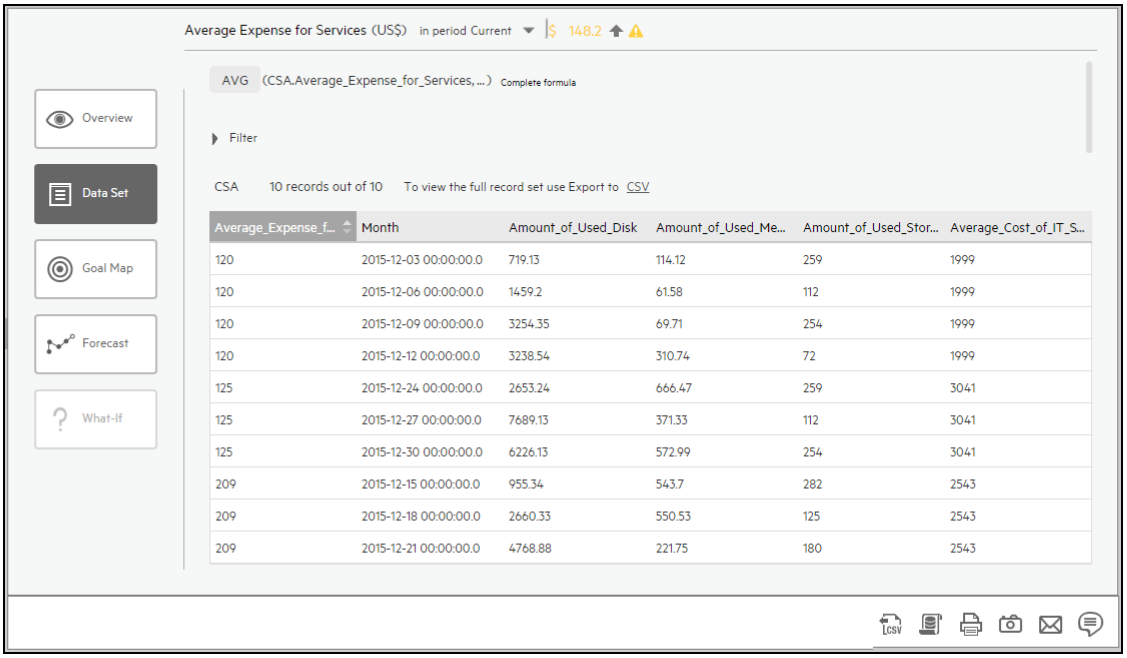
   The table displays a maximum of 10 rows and by default not more than 6 columns (you can customize the number of displayed columns) of raw data from the Target database. The columns correspond to the fields of the entity on which the function is built. For example: sum (defects, defect.severity = "High") gives a result set showing the field of the defects entity.

   The initial sorting of the table is by the first column.

   You can customize the number of displayed columns. You can sort the table columns to view additional information from the database.

   When you select another KPI or Metric in EXPLORER or when you leave EXPLORER and come back to the initial KPI or Metric, the configuration of the column selections and sorting order in the Data Set table is restored.

   You can also save the column settings so that if you log off and log on again, the settings you had saved are retained.



AVG (CSA.Average_Expense_for_Services, ...) Complete formula

CSA 10 records out of 10 To view the full record set use Export to CSV

Average_Expense_f...	Month	Amount_of_Used_Disk	Amount_of_Used_Me...	Amount_of_Used_Stor...	Average_Cost_of_IT_S...
120	2015-12-03 00:00:00.0	719.13	114.12	259	1999
120	2015-12-06 00:00:00.0	1459.2	61.58	112	1999
120	2015-12-09 00:00:00.0	3254.35	69.71	254	1999
120	2015-12-12 00:00:00.0	3238.54	310.74	72	1999
125	2015-12-24 00:00:00.0	2653.24	666.47	259	3041
125	2015-12-27 00:00:00.0	7689.13	371.33	112	3041
125	2015-12-30 00:00:00.0	6226.13	572.99	254	3041
209	2015-12-15 00:00:00.0	955.34	543.7	282	2543
209	2015-12-18 00:00:00.0	2660.33	550.53	125	2543
209	2015-12-21 00:00:00.0	4768.88	221.75	180	2543

To view the complete list of raw data, click .

View the SQL query details

To view the SQL phrase that is executed in the database and the relevant database connection details (DB server and DB schema):

1. Move the cursor over the relevant item in the KPI, Metric, or Scorecard component in the Dashboard page. In the tooltip that opens, click **Explore...**. The EXPLORER tab opens for the selected item.

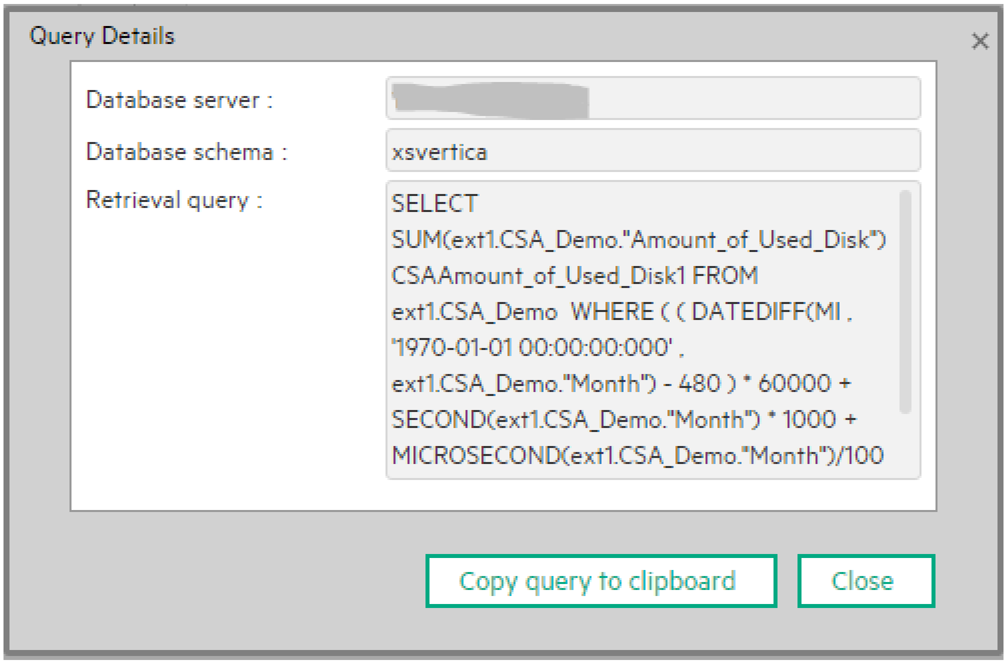
   Or click the **Explorer** tab to display the Active KPIs tree, and by clicking the relevant KPI, KPI Breakdown, Metric, Metric Breakdown, or Unassigned KPI in the tree, display detailed information about the selected item in the EXPLORER tab.

2. Click the **Data Set** button.

   The formula used to calculate the KPI or Metric is displayed at the top of the page. The aggregation functions that appear in the formula have a colored background.

3. Click the relevant aggregation function and then click . A dialog box opens and displays the name of the machine on which the database is installed followed by the port used, the name of the

Target schema, and the SQL query that is run to perform the calculation corresponding to the function currently highlighted in the formula.



Database server : [redacted]

Database schema : xsvertica

Retrieval query :

```
SELECT
SUM(ext1.CSA_Demo."Amount_of_Used_Disk")
CSAAmount_of_Used_Disk1 FROM
ext1.CSA_Demo  WHERE ( ( DATEDIFF(MI ,
'1970-01-01 00:00:00:000' ,
ext1.CSA_Demo."Month") - 480 ) * 60000 +
SECOND(ext1.CSA_Demo."Month") * 1000 +
MICROSECOND(ext1.CSA_Demo."Month")/100
```

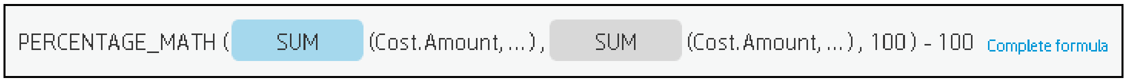
Export raw data to a .csv file

To export the raw data to a .csv file:

1. Click the **Explorer** tab to display the Active KPIs tree, and by clicking the relevant Objective, KPI, KPI Breakdown, Metric, Metric Breakdown, or Unassigned KPI in the tree, display detailed information about the selected item in the EXPLORER tab.

2. Click the **Data Set** button.

   The formula used to calculate the KPI or Metric is displayed at the top of the page. The aggregation functions that appear in the formula have a colored background.



PERCENTAGE_MATH (SUM (Cost.Amount, ...), SUM (Cost.Amount, ...), 100) - 100

3. Click (or link) to export all the data included in the Target database table (not just the data displayed in the GUI table) that is used to calculate the function that is currently highlighted in the formula to a file in .csv format. It opens your list of directories where you can select where to save the .csv file you are creating.

Depending on the settings of your browser, the file may be automatically saved to a predetermined download directory.

View the key elements of the percentage formula

To view a detailed description of the percentage formula:

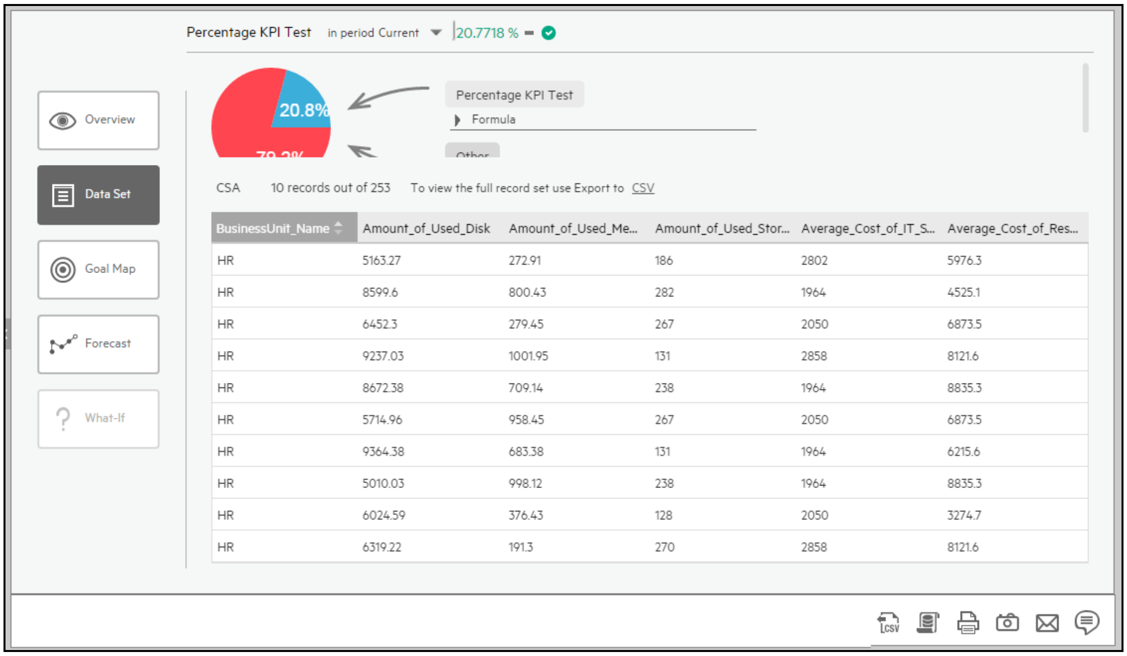
1. Move the cursor over the relevant item in the KPI, Metric, or Scorecard component in the Dashboard page. In the tooltip that opens, click **Explore...**. The EXPLORER tab opens for the selected item.

   Or click the **Explorer** tab to display the Active KPIs tree, and by clicking the relevant Objective, KPI, KPI Breakdown, Metric, Metric Breakdown, or Unassigned KPI in the tree, display detailed information about the selected item in the EXPLORER tab.

2. Click the **Data Set** button.

   The formula used to calculate the KPI or Metric is displayed at the top of the page. The aggregation functions that appear in the formula have a colored background. The pie shows the information corresponding to the general section of the percentage formula and to all other data.

   The filter describes the filter formula. For details, see "Data Set" on page 534.



CSA 10 records out of 253 To view the full record set use Export to CSV

BusinessUnit_Name	Amount_of_Used_Disk	Amount_of_Used_Me...	Amount_of_Used_Stor...	Average_Cost_of_IT_S...	Average_Cost_of_Res...
HR	5163.27	272.91	186	2802	5976.3
HR	8599.6	800.43	282	1964	4525.1
HR	6452.3	279.45	267	2050	6873.5
HR	9237.03	1001.95	131	2858	8121.6
HR	8672.38	709.14	238	1964	8835.3
HR	5714.96	958.45	267	2050	6873.5
HR	9364.38	683.38	131	1964	6215.6
HR	5010.03	998.12	238	1964	8835.3
HR	6024.59	376.43	128	2050	3274.7
HR	6319.22	191.3	270	2858	8121.6

Send the contents of the Data Set page by Email

1. In the EXPLORER tab, click the relevant item in the Active KPIs tree and click **Data Set**.
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 - Data Set" on the next page.

Movie: To display the relevant movie, open the ITBA application, click **Help** in the top right corner of the application main page and select the **Movies** option. Select the relevant movie. For details, see in the *Getting Started Guide*.

Export the contents of the Data Set page to a PDF file

1. In the EXPLORER tab, click the relevant item in the Active KPIs tree and click **Data Set**.
2. To export the contents of the Data Set page to a PDF file, click the **Save snapshot** 📷 icon.

For additional details, see "Explorer Tab - Data Set" on the next page.

Movie: To display the relevant movie, open the ITBA application, click **Help** in the top right corner of the application main page and select the **Movies** option. Select the relevant movie. For details, see in the *Getting Started Guide*.

Print the contents of the Data Set page

1. In the EXPLORER tab, click the relevant item in the Active KPIs tree and click **Data Set**.
2. To print the contents of the Data Set page, click the **Print** 🖨 icon.

For additional details, see "Explorer Tab - Data Set" below.

Movie: To display the relevant movie, open the ITBA application, click **Help** in the top right corner of the application main page and select the **Movies** option. Select the relevant movie. For details, see in the *Getting Started Guide*.

UI Description

EXPLORER Tab - Data Set

> **Note:** When in IT Business Analytics, you navigate to another tab and then return to the Explorer tab, the details of the item that was previously in focus are displayed again. However, its properties might be refreshed.

The EXPLORER tab includes the following areas:

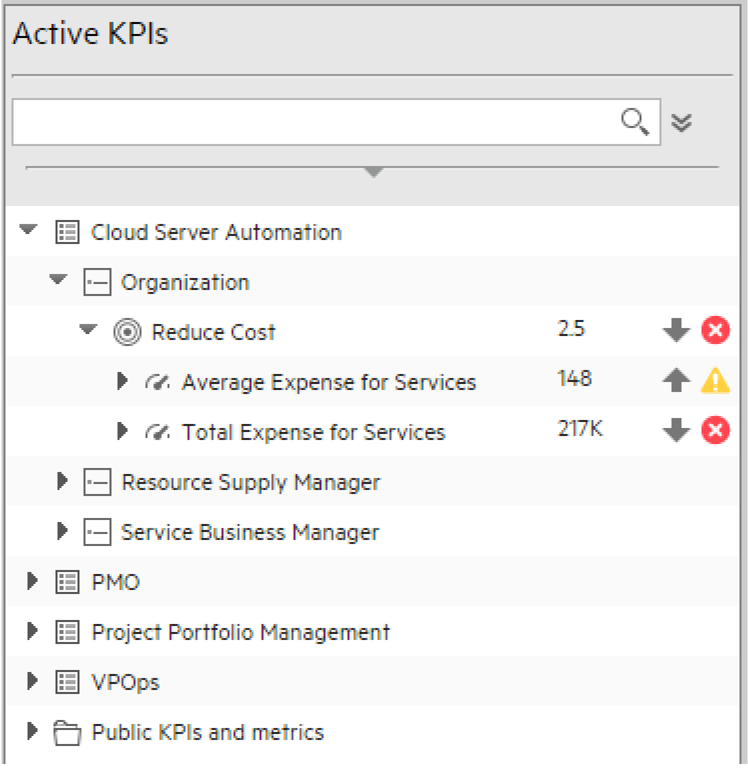
"Active KPIs" on the next page

"Data Set" on page 534

"Toolbar" on page 539

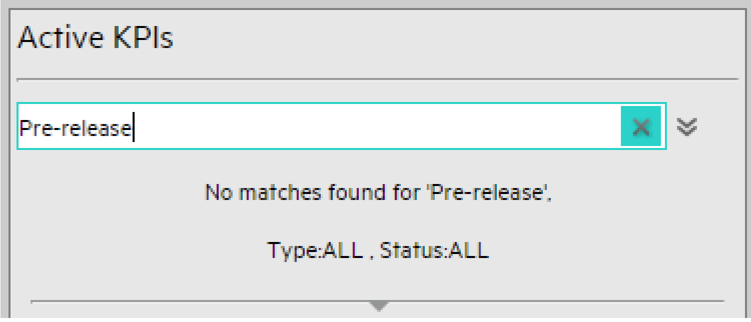
"Additional Buttons in Toolbar" on page 540

Active KPIs



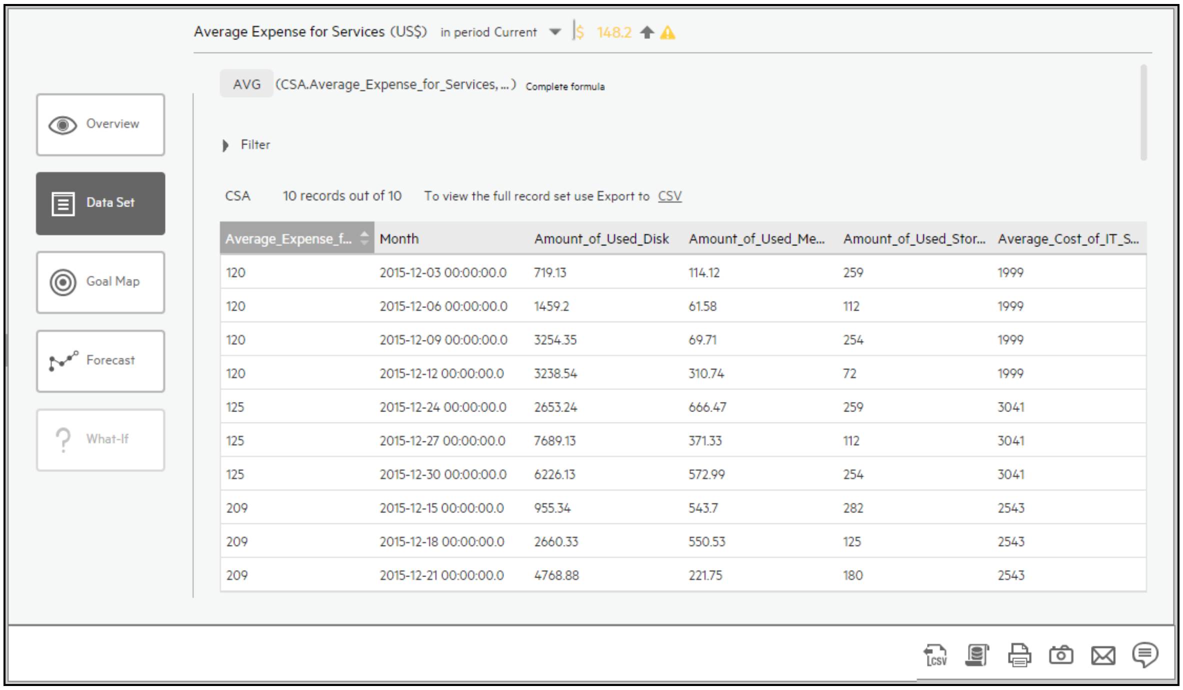
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
<Search>	Enter the relevant string to display, in the tree, the nodes whose name includes the string. In addition, the child nodes of the filtered nodes are also listed even when the child node names do not include the string. 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:

UI Element	Description
	 Active KPIs Pre-release No matches found for 'Pre-release'. Type:ALL , Status:ALL
︾	**Advanced Search.** Opens additional fields to help you refine the component's filter: - **Status:** Select one of the **All**, **Good**, **Warning**, **Critical**, or **No Data** values to display only the elements with the selected status, in the Active KPIs area. When you select **No Data**, the search returns only the elements with no data. - **Type:** Select: ◦ **All.** To display all the elements in the tree with the selected status. ◦ **KPI.** To display only the KPIs with the selected status. ◦ **Metric.** To display a list of all the Metrics (the Status is changed to **All**). If you had selected a value in Status, and then you select **Metric**, then the Status field displays **All**, and becomes inaccessible. ◦ **Objective.** To display only the Objectives with the selected status, and their KPIs.
Active KPIs	Depending on how you accessed the Explorer tab, the pane lists all the Scorecards, Perspectives, Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, and Unassigned KPIs, active in the IT Business Analytics or a subset of these items. The list of Scorecards that is displayed corresponds to the Scorecards that are permitted for your user. For details about permissions, see User Management in the *Administrator Guide*. > **Note:** A Scorecard Administrator who wants to see a newly created Scorecard in Explorer (and who has the correct permissions to see the Scorecard), needs to refresh the Explorer using the **Refresh** button to display the Scorecard. Click one of the Scorecards, Perspectives, Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, or Unassigned KPIs to display their detailed information in the other pane. The area also displays on the right side of the Active KPIs pane, a subset of the following items depending on the type of item you selected: - The name of the item. - The value of the item.

UI Element	Description
	- -↓↑ 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: - ✔ indicates that the status is **Good**. - ⚠ indicates that the status is **Warning**. - ✖ indicates that the status is **Critical**. - ✎ indicates that the status is **Pending** and that the calculations have not yet been performed or completed.

Data Set



Average Expense for Services (US$) in period Current ▼ $ 148.2 ↑ ⚠

AVG (CSA.Average_Expense_for_Services, ...) Complete formula

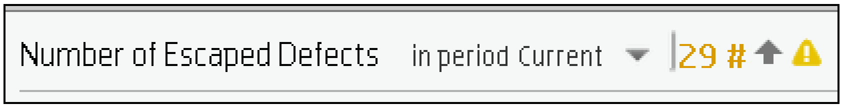
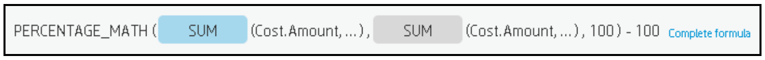
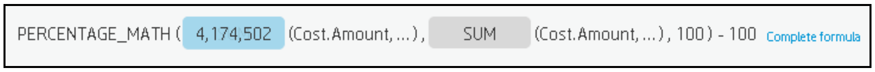
Filter

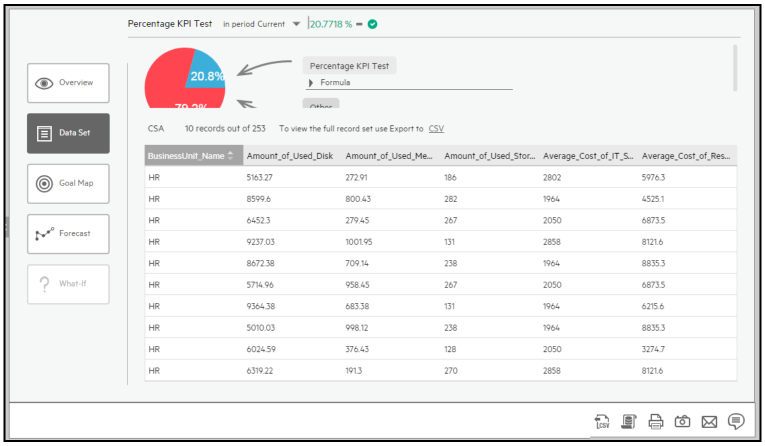
CSA 10 records out of 10 To view the full record set use Export to CSV

Average_Expense_f...	Month	Amount_of_Used_Disk	Amount_of_Used_Me...	Amount_of_Used_Stor...	Average_Cost_of_IT_S...
120	2015-12-03 00:00:00.0	719.13	114.12	259	1999
120	2015-12-06 00:00:00.0	1459.2	61.58	112	1999
120	2015-12-09 00:00:00.0	3254.35	69.71	254	1999
120	2015-12-12 00:00:00.0	3238.54	310.74	72	1999
125	2015-12-24 00:00:00.0	2653.24	666.47	259	3041
125	2015-12-27 00:00:00.0	7689.13	371.33	112	3041
125	2015-12-30 00:00:00.0	6226.13	572.99	254	3041
209	2015-12-15 00:00:00.0	955.34	543.7	282	2543
209	2015-12-18 00:00:00.0	2660.33	550.53	125	2543
209	2015-12-21 00:00:00.0	4768.88	221.75	180	2543

- **<Analysis area>**

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

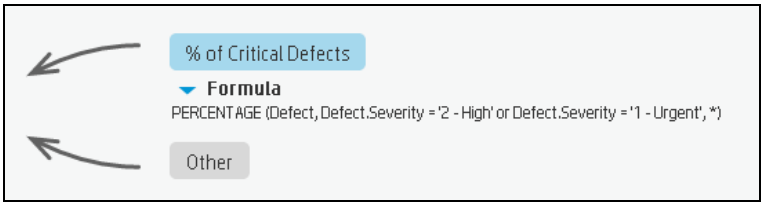
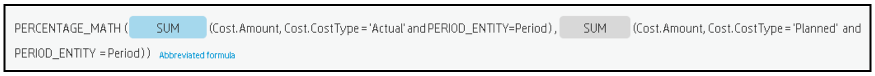
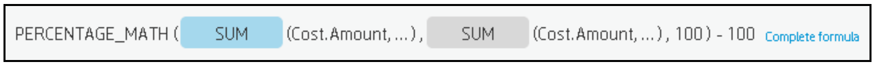
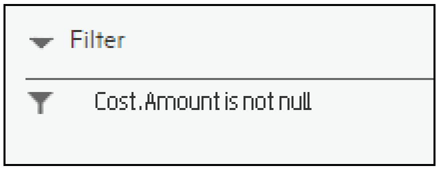
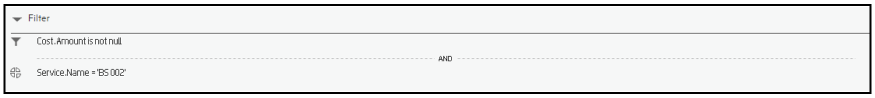
UI Element	Description
<Name> in period <Selection> <Value> <Trend> <Status>	 Number of Escaped Defects in period Current ▾ 29 # ⬆ ⚠ The title lists: ○ **<Name>.** The name of the selected item (KPI, KPI Breakdown, Unassigned KPI, or, Metric, or Metric Breakdown). ○ **in period <Selection>.** Select the period you want to display. You can select: • **Current.** The title of the page displays the current value, trend, and status of the selected item. • **Last Closed.** The title of the page displays the value, trend, and status of the selected item for the last completed calculation period. • A list of periods when the value of the selected item was calculated. ○ **Value.** The value of the selected item. ○ **Trend.** ➡⬇⬆ The trend icon indicates the trend of the value of the selected item in the selected period compared to its value in the previous period. ○ **Status.** The status of the KPI, KPI Breakdown (Metrics, and Metric Breakdowns do not have a status), during the current period. It can be: • ✓ indicates that the status is **Good**. • ⚠ indicates that the status is **Warning**. • ✗ indicates that the status is **Critical**. • ▨ indicates that the status is **Pending** or **No data**, meaning that the calculation of the status was not yet completed or the status was not calculated or that there was en error in the calculation.
<Formula>	The formula used to calculate the KPI or Metric is displayed at the top of the page. The aggregation functions that appear in the formula have a colored background.  PERCENTAGE_MATH (SUM (Cost.Amount, ...), SUM (Cost.Amount, ...), 100) - 100 Complete formula Move the cursor above that area to display the value of that function.  PERCENTAGE_MATH (4,174,502 (Cost.Amount, ...), SUM (Cost.Amount, ...), 100) - 100 Complete formula When the formula uses a PERCENTAGE aggregative function, the display shows a pie char:

<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr><td></td><td>

Overview
Data Set
Goal Map
Forecast
What-If
20.8%
79.2%
Other
Formula
Percentage KPI Test in period Current 20.7718 %
Percentage KPI Test
CSA 10 records out of 253 To view the full record set use Export to CSV
<table>
<tr><th>BusinessUnit_Name</th><th>Amount_of_Used_Disk</th><th>Amount_of_Used_Me...</th><th>Amount_of_Used_Stor...</th><th>Average_Cost_of_IT_S...</th><th>Average_Cost_of_Res...</th></tr>
<tr><td>HR</td><td>5163.27</td><td>272.91</td><td>186</td><td>2802</td><td>5976.3</td></tr>
<tr><td>HR</td><td>8599.6</td><td>800.43</td><td>282</td><td>1964</td><td>4525.1</td></tr>
<tr><td>HR</td><td>6452.3</td><td>279.45</td><td>267</td><td>2050</td><td>6873.5</td></tr>
<tr><td>HR</td><td>9237.03</td><td>1001.95</td><td>131</td><td>2858</td><td>8121.6</td></tr>
<tr><td>HR</td><td>8672.38</td><td>709.14</td><td>238</td><td>1964</td><td>8835.3</td></tr>
<tr><td>HR</td><td>5714.96</td><td>958.45</td><td>267</td><td>2050</td><td>6873.5</td></tr>
<tr><td>HR</td><td>9364.38</td><td>683.38</td><td>131</td><td>1964</td><td>6215.6</td></tr>
<tr><td>HR</td><td>5010.03</td><td>998.12</td><td>238</td><td>1964</td><td>8835.3</td></tr>
<tr><td>HR</td><td>6024.59</td><td>376.43</td><td>128</td><td>2050</td><td>3274.7</td></tr>
<tr><td>HR</td><td>6319.22</td><td>191.3</td><td>270</td><td>2858</td><td>8121.6</td></tr>
</table>

Limitations:
◦ KPI or Metric formulas that use the **PERCENTAGE_MATH** mathematical function have a display similar to the other mathematical functions (see above for a picture of the typical display) and do not display a pie.
◦ Percentages where the dividend is a subset of the divisor can be represented as a pie.
PERCENTAGE(Defect, Defect.Severity='Urgent', Defect.Severity='Urgent' or Defect.Severity='Warning', 0)
If the dividend is not a subset of the divisor it cannot be represented as a pie.
PERCENTAGE(Defect, Defect.Severity='Urgent', Defect.Severity='Warning', 0)
◦ It is also recommended to change the PERCENTAGE function into a RATIO function. For example, the following PERCENTAGE formula cannot be represented by a pie.

The formula used to calculate the KPI or Metric is displayed at the top of the page. The aggregation functions that appear in the formula have a colored background.The pie has two sections: the top section (**<KPI_or_Metric_name>**) represents the value of the KPI or Metric; the bottom section (**other**) represents: **100% - <KPI_or_Metric_value>**.

The section that represents the value of the KPI is:
◦ Red for a KPI when the KPI threshold definition has a **minimize** configuration (meaning that the status is good when the KPI value is low).
◦ Colored for a KPI when the KPI threshold definition has a **maximize** configuration (meaning that the status is good wen the KPI value is high),
</td></tr>
</table>

UI Element	Description
	or for a Metric. Expand **Formula** to display the formula.  % of Critical Defects Formula PERCENTAGE (Defect, Defect.Severity = '2 - High' or Defect.Severity = '1 - Urgent', *) Other
Complete formula/ Abbreviated formula	Click **Complete formula** to display the whole formula.  PERCENTAGE_MATH (SUM (Cost.Amount, Cost.CostType = 'Actual' and PERIOD_ENTITY=Period) , SUM (Cost.Amount, Cost.CostType = 'Planned' and PERIOD_ENTITY = Period)) Abbreviated formula Click **Abbreviated formula** to display the truncated formula.  PERCENTAGE_MATH (SUM (Cost.Amount, ...) , SUM (Cost.Amount, ...) , 100) - 100 Complete formula
<Filter formula>	The filter configured for the KPI or Metric. The contents of the filter are not shown by default. Click **Filter** to expand and display the filter contents.  Filter Cost.Amount is not null This icon ▼ displayed in the filter indicates that the filter is for a KPI or a Metric. This icon ⊞ displayed in the filter indicates that the filter is for a KPI Breakdown or a Metric Breakdown.  Filter Cost.Amount is not null AND Service.Name = 'BS 002' When the filter includes both global and partial filter structures, you can filter a KPI or Metric both globally and partially by clicking on each section of the filter: **<global_filter> and <partial_filter>**.
<Analysis area>	Click the relevant function in the formula. The analysis area displays: ○ The formula with the function you have selected.

<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr><td></td><td>

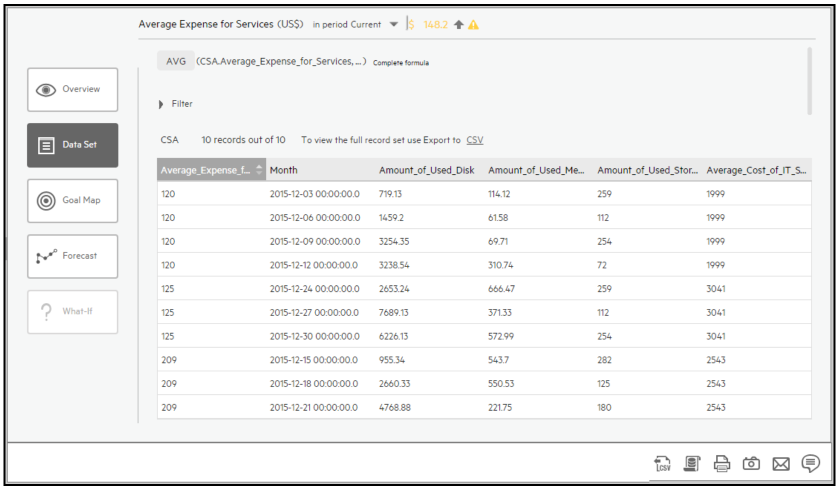
- The table displays a maximum of 10 rows and by default not more than 6 columns (you can customize the number of displayed columns) of raw data from the Target database. The columns correspond to the fields of the entity on which the function is built. For example: sum (defects, defect.severity = "High") gives a result set showing the field of the defects entity.

  The initial sorting of the table is by the first column.

  You can customize the number of displayed columns. You can sort the table columns to view additional information from the database.

  When you select another KPI or Metric in EXPLORER or when you leave EXPLORER and come back to the initial KPI or Metric, the configuration of the column selections and sorting order in the Data Set table is restored.

  You can also save the column settings so that if you log off and log on again, the settings you had saved are retained.



Average Expense for Services (US$) in period Current | $ 148.2

AVG (CSA.Average_Expense_for_Services, ...) Complete formula

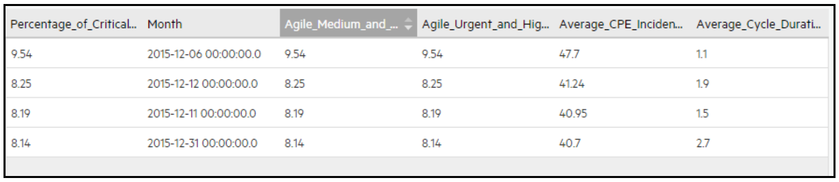
Filter

CSA 10 records out of 10 To view the full record set use Export to CSV

<table>
<tr><th>Average_Expense_f...</th><th>Month</th><th>Amount_of_Used_Disk</th><th>Amount_of_Used_Me...</th><th>Amount_of_Used_Stor...</th><th>Average_Cost_of_IT_S...</th></tr>
<tr><td>120</td><td>2015-12-03 00:00:00.0</td><td>719.13</td><td>114.12</td><td>259</td><td>1999</td></tr>
<tr><td>120</td><td>2015-12-06 00:00:00.0</td><td>1459.2</td><td>61.58</td><td>112</td><td>1999</td></tr>
<tr><td>120</td><td>2015-12-09 00:00:00.0</td><td>3254.35</td><td>69.71</td><td>254</td><td>1999</td></tr>
<tr><td>120</td><td>2015-12-12 00:00:00.0</td><td>3238.54</td><td>310.74</td><td>72</td><td>1999</td></tr>
<tr><td>125</td><td>2015-12-24 00:00:00.0</td><td>2653.24</td><td>666.47</td><td>259</td><td>3041</td></tr>
<tr><td>125</td><td>2015-12-27 00:00:00.0</td><td>7689.13</td><td>371.33</td><td>112</td><td>3041</td></tr>
<tr><td>125</td><td>2015-12-30 00:00:00.0</td><td>6226.13</td><td>572.99</td><td>254</td><td>3041</td></tr>
<tr><td>209</td><td>2015-12-15 00:00:00.0</td><td>955.34</td><td>543.7</td><td>282</td><td>2543</td></tr>
<tr><td>209</td><td>2015-12-18 00:00:00.0</td><td>2660.33</td><td>550.53</td><td>125</td><td>2543</td></tr>
<tr><td>209</td><td>2015-12-21 00:00:00.0</td><td>4768.88</td><td>221.75</td><td>180</td><td>2543</td></tr>
</table>

The table of raw data has the following capabilities:

- **Sort the table.** To sort the table by column to view additional information, click the relevant column title.



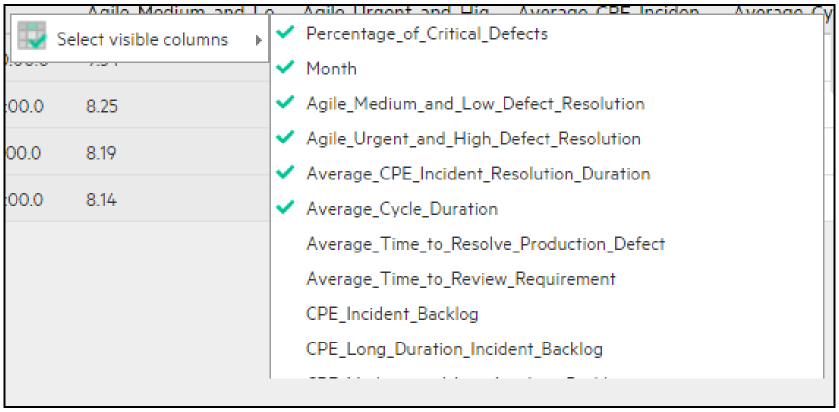
<table>
<tr><th>Percentage_of_Critical...</th><th>Month</th><th>Agile_Medium_and_...</th><th>Agile_Urgent_and_Hig...</th><th>Average_CPE_Inciden...</th><th>Average_Cycle_Durati...</th></tr>
<tr><td>9.54</td><td>2015-12-06 00:00:00.0</td><td>9.54</td><td>9.54</td><td>47.7</td><td>1.1</td></tr>
<tr><td>8.25</td><td>2015-12-12 00:00:00.0</td><td>8.25</td><td>8.25</td><td>41.24</td><td>1.9</td></tr>
<tr><td>8.19</td><td>2015-12-11 00:00:00.0</td><td>8.19</td><td>8.19</td><td>40.95</td><td>1.5</td></tr>
<tr><td>8.14</td><td>2015-12-31 00:00:00.0</td><td>8.14</td><td>8.14</td><td>40.7</td><td>2.7</td></tr>
</table>

- **Display or hide columns.** Right-click one of the column headers to display a list of all the available columns. Click the relevant column

</td></tr>
</table>

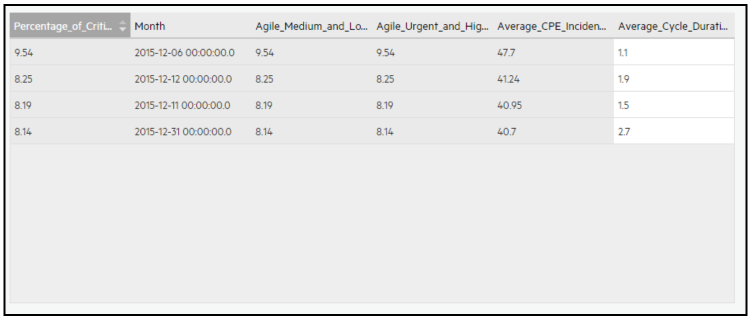
<table>
<tr><th>UI Element</th><th>Description</th></tr>
<tr><td></td><td>

name in the list to display it or remove it from the display:


Select visible columns
✓ Percentage_of_Critical_Defects
✓ Month
✓ Agile_Medium_and_Low_Defect_Resolution
✓ Agile_Urgent_and_High_Defect_Resolution
✓ Average_CPE_Incident_Resolution_Duration
✓ Average_Cycle_Duration
Average_Time_to_Resolve_Production_Defect
Average_Time_to_Review_Requirement
CPE_Incident_Backlog
CPE_Long_Duration_Incident_Backlog
8.25
8.19
8.14

- **Copy and paste part of the table.**

  A. Click and drag the cursor over the relevant cells of the table. The cells are highlighted.

  <table>
  <tr><th>Percentage_of_Criti...</th><th>Month</th><th>Agile_Medium_and_Lo...</th><th>Agile_Urgent_and_Hig...</th><th>Average_CPE_Inciden...</th><th>Average_Cycle_Durati...</th></tr>
  <tr><td>9.54</td><td>2015-12-06 00:00:00.0</td><td>9.54</td><td>9.54</td><td>47.7</td><td>1.1</td></tr>
  <tr><td>8.25</td><td>2015-12-12 00:00:00.0</td><td>8.25</td><td>8.25</td><td>41.24</td><td>1.9</td></tr>
  <tr><td>8.19</td><td>2015-12-11 00:00:00.0</td><td>8.19</td><td>8.19</td><td>40.95</td><td>1.5</td></tr>
  <tr><td>8.14</td><td>2015-12-31 00:00:00.0</td><td>8.14</td><td>8.14</td><td>40.7</td><td>2.7</td></tr>
  </table>

  B. Click `Ctrl + C`.

  C. Go to the location where you want to paste the data and click `Ctrl + V`.

- **Reorder columns.** You can change the location of columns, by clicking the relevant column header and dragging it to the relevant location.

</td></tr>
</table>

- **Toolbar**

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

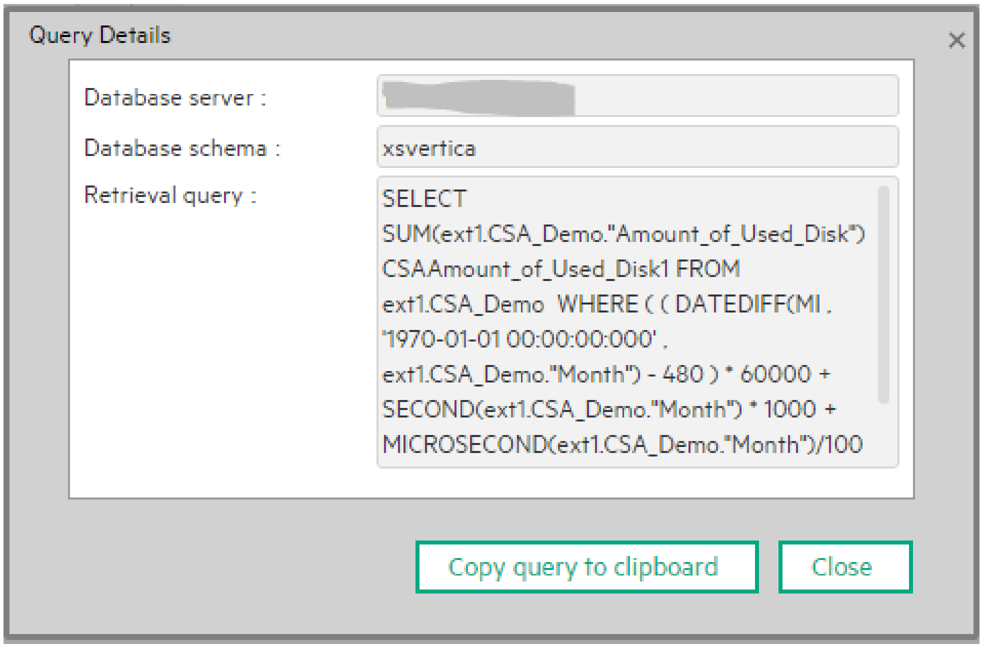
UI Element	Description
✉	**Send mail.** Opens an Outlook email, with the name of the selected entity in the **Subject** box.

UI Element	Description
📷	**Save snapshot.** Captures the current view in Explorer (all of it) in a new window. A dialog box opens to ask you where you want to save the image.
🖨	**Print.** Displays the Print dialog box where you can select the printer and how to print the content of the corresponding Explorer tab. The printout includes: ◦ The contents of the area that was selected while you clicked the button. ◦ The Annotations Area.
💬	**Show/Hide Annotations.** The button is enabled only for Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, or Unassigned KPI. It opens a box where you can add your annotation or hide them after viewing. For details, see "Annotations" on page 578. Click the button again to close the Annotation area. **Note:** The **Show/Hide Annotations** icon with a little + sign 💬 in the bottom toolbar indicates that a new annotation was added to the selected item during the past week. The number of days during which the annotations are considered to be new is a setting that is configurable by your administrator in **Admin > Scorecard > Dashboard Settings > Number of days annotations are considered new**. For example, if the administrator gives the setting the value **14**, then the + sign will indicate that the annotation was added in the last 2 weeks. The default is a week.

- Additional Buttons in Toolbar

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

UI Element	Description
CSV	**Export to .csv.** Click to export all the data included in the Target database table (not just the data displayed in the GUI table) that is used to calculate the function that is currently highlighted in the formula to a file in .csv format. It opens your list of directories where you can select the location of the .CSV file you are creating. Depending on the settings of your browser, the file may be automatically saved to a predetermined download directory.
🗄	**Display SQL.** Click to show the SQL query that runs to calculate the function that is currently highlighted in the formula. It also displays the name of the database server

UI Element	Description
	and the name of the schema used by the SQL query.  Database server : [redacted] Database schema : xsvertica Retrieval query : SELECT SUM(ext1.CSA_Demo."Amount_of_Used_Disk") CSAAmount_of_Used_Disk1 FROM ext1.CSA_Demo WHERE ((DATEDIFF(MI , '1970-01-01 00:00:00:000' , ext1.CSA_Demo."Month") - 480) * 60000 + SECOND(ext1.CSA_Demo."Month") * 1000 + MICROSECOND(ext1.CSA_Demo."Month")/100 **Copy query to Clipboard.** Click to copy the contents of Retrieval query to the clipboard.

Explorer - Goal Map

The Goal Map in the EXPLORER tab provides a tree of nodes that represents the display of the impact of the selected KPI, or KPI Breakdown on the relevant Objectives, Perspectives, and Scorecards.

The elements that are displayed corresponds to the elements that are permitted for your user. For details about permissions, see User Management in the *Administrator Guide*.

To access:

Click the **Explorer** tab to access detailed information about all the Scorecards, Objectives, Perspectives, KPIs, KPI Breakdowns, Metric, or Metric Breakdown that are active in the STUDIO. In the EXPLORER tab, click the relevant item and click the **Goal Map**button.

Learn More | Tasks | UI Description

Learn More

Decimal precision

For details, see "KPI and Metric Formulas, Filter, Threshold, Value, Trend, Score, and Decimal Precision" on page 97

Tasks

This section includes:

Access the Goal Map to display detailed information

To view more detailed information for a selected KPI:

1. Move the cursor over the relevant item in the KPI or Scorecard component in the Dashboard page. In the tooltip that opens, click **Analyze**. The EXPLORER tab opens for the selected item.

   Or click the **Explorer** tab to display the Active KPIs tree, and by clicking the relevant KPI, KPI Breakdown, or Unassigned KPI in the tree, display detailed information about the selected item in the EXPLORER tab.

2. Click the Goal Map button to display the tree of nodes that represents the display of the impact of the selected KPI, KPI Breakdown, or Unassigned KPI on the relevant Objectives, Perspectives, and Scorecards

Send the contents of the Goal Map page by email

1. In the EXPLORER tab, click the relevant item in the Active KPIs tree and click **Goal Map**.

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.

Movie: To display the relevant movie, open the ITBA application, click **Help** in the top right corner of the application main page and select the **Movies** option. Select the relevant movie. For details, see in the *Getting Started Guide*.

Export the contents of the Goal Map page to a PDF file

1. In the EXPLORER tab, click the relevant item in the Active KPIs tree and click **Goal Map**.

2. To export the contents of the Goal Map page to a PDF file, click the **Save snapshot** 📷 icon.

For additional details, see "EXPLORER Tab - Goal Map" below.

Movie: To display the relevant movie, open the ITBA application, click **Help** in the top right corner of the application main page and select the **Movies** option. Select the relevant movie. For details, see in the *Getting Started Guide*.

Print the contents of the Goal Map page

1. In the EXPLORER tab, click the relevant item in the Active KPIs tree and click **Goal Map**.
2. To print the contents of the Goal Map page, click the **Print** 🖶 icon.

For additional details, see "EXPLORER Tab - Goal Map" below.

Movie: To display the relevant movie, open the ITBA application, click **Help** in the top right corner of the application main page and select the **Movies** option. Select the relevant movie. For details, see in the *Getting Started Guide*.

UI Description

EXPLORER Tab - Goal Map

> **Note:** When in IT Business Analytics, you navigate to another tab and then return to the Explorer tab, the details of the item that was previously in focus are displayed again. However, its properties might be refreshed.

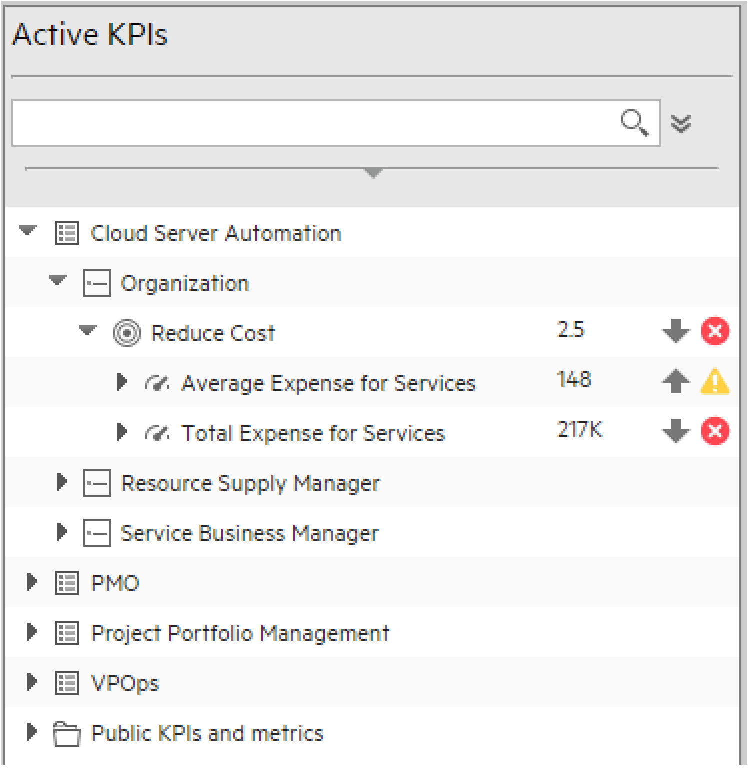
The Explorer - Goal Map page includes the following areas:

"Active KPIs" on the next page

"Goal Map" on page 547

"Toolbar" on page 549

Active KPIs

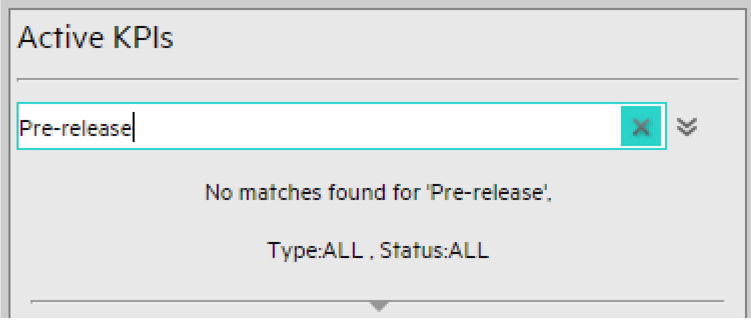


Active KPIs

- Cloud Server Automation
  - Organization
    - Reduce Cost 2.5
      - Average Expense for Services 148
      - Total Expense for Services 217K
  - Resource Supply Manager
  - Service Business Manager
- PMO
- Project Portfolio Management
- VPOps
- Public KPIs and metrics

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

UI Element	Description
🔍 **<Search>**	Enter the relevant string to display, in the tree, the nodes whose name includes the string. In addition, the child nodes of the filtered nodes are also listed even when the child node names do not include the string. 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:

UI Element	Description
	 Active KPIs Pre-release No matches found for 'Pre-release'. Type:ALL , Status:ALL
︾	**Advanced Search.** Opens additional fields to help you refine the component's filter: - **Status:** Select one of the **All**, **Good**, **Warning**, **Critical**, or **No Data** values to display only the elements with the selected status, in the Active KPIs area. When you select **No Data**, the search returns only the elements with no data. - **Type:** Select: ◦ **All.** To display all the elements in the tree with the selected status. ◦ **KPI.** To display only the KPIs with the selected status. ◦ **Metric.** To display a list of all the Metrics (the Status is changed to **All**). If you had selected a value in Status, and then you select **Metric**, then the Status field displays **All**, and becomes inaccessible. ◦ **Objective.**To display only the Objectives with the selected status, and their KPIs.
Active KPIs	Depending on how you accessed the Explorer tab, the pane lists all the Scorecards, Perspectives, Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, and Unassigned KPIs, active in the IT Business Analytics or a subset of these items. The list of Scorecards that is displayed corresponds to the Scorecards that are permitted for your user. For details about permissions, see User Management in the *Administrator Guide*. **Note:** A Scorecard Administrator who wants to see a newly created Scorecard in Explorer (and who has the correct permissions to see the Scorecard), needs to refresh the Explorer using the **Refresh** button to display the Scorecard. Click one of the Scorecards, Perspectives, Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, or Unassigned KPIs to display their detailed information in the other pane. The area also displays on the right side of the Active KPIs pane, a subset of the following items depending on the type of item you selected: - The name of the item. - The value of the item.

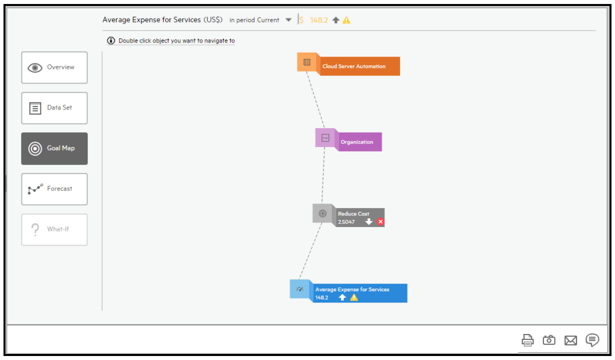
UI Element	Description
	• −↓↑ The trend icon indicates the trend of the value calculated over the current period. • The status of the item, during the current period. It can be: ○ ✓ indicates that the status is **Good**. ○ ⚠ indicates that the status is **Warning**. ○ ✗ indicates that the status is **Critical**. ○ ✎ indicates that the status is **Pending** and that the calculations have not yet been performed or completed.

Goal Map

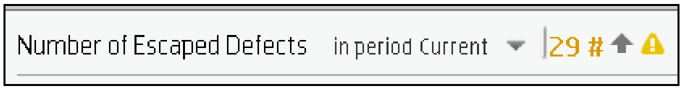
The Goal Map displays the impact configuration only for the current period of the selected KPI, or KPI Breakdown.

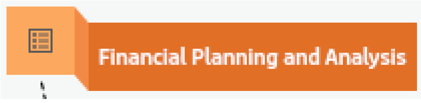
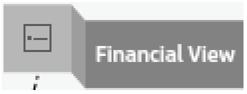
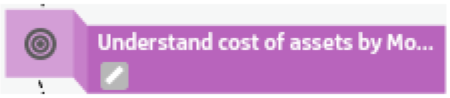
In addition, the display of the Goal Map depends on the user permission.

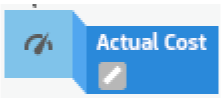
In the Goal Map, you can double-click an Objective, KPI, or KPI Breakdown to select it in the Active Tree and to display the Overview for the selected item and the current period.


Average Expense for Services (US$) in period Current
$ 148.2
Double click object you want to navigate to
Overview
Data Set
Goal Map
Forecast
What-If
Cloud Server Automation
Organization
Reduce Cost
2.5047
Average Expense for Services
148.2

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

UI Element	Description
<Name> in period <Selection> <Value> <Trend> <Status>	 Number of Escaped Defects in period Current ▾ 29 # ↑ ⚠ The title lists: • **<Name>.** The name of the selected item (KPI, KPI Breakdown, Unassigned KPI, or, Metric, or Metric

UI Element	Description
	Breakdown). • **in period <Selection>.** Select the period you want to display. You can select: ◦ **Current.** The title of the page displays the current value, trend, and status of the selected item. ◦ **Last Closed.** The title of the page displays the value, trend, and status of the selected item for the last completed calculation period. ◦ A list of periods when the value of the selected item was calculated. • **Value.** The value of the selected item. • **Trend.** -↓↑ The trend icon indicates the trend of the value of the selected item in the selected period compared to its value in the previous period. • **Status.** The status of the KPI, KPI Breakdown (Metrics, and Metric Breakdowns do not have a status), during the current period. It can be: ◦ ✓ indicates that the status is **Good**. ◦ ⚠ indicates that the status is **Warning**. ◦ ✖ indicates that the status is **Critical**. ◦ ▨ indicates that the status is **Pending** or **No data**, meaning that the calculation of the status was not yet completed or the status was not calculated or that there was en error in the calculation.
 Financial Planning and Analysis	Represents the parent Scorecard of the selected KPI, KPI Breakdown, or Unassigned KPI. The name of the Scorecard is displayed near the icon.
 Financial View	Represents the parent Perspective of the selected KPI, KPI Breakdown, or Unassigned KPI. The name of the Perspective is displayed near the icon.
 Understand cost of assets by Mo...	Represents one of the following: • 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 Unassigned KPI.

UI Element	Description
	Represents the selected KPI, KPI Breakdown, or Unassigned KPI. The name, value, trend, and status of the KPI, KPI Breakdown, or Unassigned KPI is displayed near the icon.

Toolbar

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

UI Element	Description
✉	**Send mail.** Opens an Outlook email, with the name of the selected entity in the **Subject** box.
📷	**Save snapshot.** Captures the current view in Explorer (all of it) in a new window. A dialog box opens to ask you where you want to save the image.
🖶	**Print.** Displays the Print dialog box where you can select the printer and how to print the content of the corresponding Explorer tab. The printout includes: • The contents of the area that was selected while you clicked the button. • The Annotations Area.
💬	**Show/Hide Annotations.** The button is enabled only for Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, or Unassigned KPI. It opens a box where you can add your annotation or hide them after viewing. For details, see "Annotations" on page 578. Click the button again to close the Annotation area. **Note:** The **Show/Hide Annotations** icon with a little + sign 💬 in the bottom toolbar indicates that a new annotation was added to the selected item during the past week. The number of days during which the annotations are considered to be new is a setting that is configurable by your administrator in **Admin > Scorecard > Dashboard Settings > Number of days annotations are considered new**. For example, if the administrator gives the setting the value **14**, then the + sign will indicate that the annotation was added in the last 2 weeks. The default is a week.

Explorer - Forecast

IT Business Analytics provides information regarding the status and values of Objectives, KPIs, or Metrics on the past and current periods in the Dashboard and Explorer tabs. The Forecast tab in Explorer provides a glimpse into the future by forecasting the entity future behavior, based on historical data, so you will be able more easily understand the underlying trend and to do all you can now to improve or maintain the desired behavior.

You can view the forecast of the upcoming future of the selected Objectives, KPIs, or Metrics (for which you have permission), in a period of up to 1 year from the current period.

> **Note:** The Forecast button is enabled only when you have the **Forecast** permission. For details about permissions, see User Management in the *Administrator Guide*.
>
> If the selected item (KPI, Objective, or Metric) has historical data but it has not been calculated for the current period, the item is considered invalid, and the **Forecast** button is disabled.

To access:

Click the **Explorer** tab to access detailed information about all the Scorecards, Objectives, Perspectives, KPIs, KPI Breakdowns, Metric, or Metric Breakdown that are active in the STUDIO. In the EXPLORER tab, click the relevant Objective, KPI, or Metric, and click the **Forecast**button.

Learn More | Tasks | UI Description

Learn More

Calculation method for forecast

The correctness of the forecast calculation is based on the historical data of the entity and is calculated using the DoubleExponentialSmoothingModel algorithm. The more data there is the more precise the forecast is.

- $f_t = \alpha.Y_t+(1-\alpha)(f_{t-1}+b_{t-1})$
- $b_t = \gamma.(f_t-f_{t-1})+(1-\gamma).b_{t-1}$

where:

- Y_t is the observed value at time t.
- f_t is the forecast at time t.
- b_t is the estimated slope at time t.
- α - (alpha) - is the first smoothing constant, used to smooth the observations. Its value is: 0.6.
- γ - (gamma) - is the second smoothing constant, used to smooth the trend. Its value is: 0.6.

To forecast:

$f_{t+m} = f_t + mb_{t-m}$

where m=1 (The time interval).

The initial point is: $f_1=y_1$; $b_1=y_2-y_1$

Minimum historical data

The best forecasts are based on a large amount of historical data.

To provide the best forecast using the above algorithm, the calculation relies on as much historical data as is available. The following table indicates what are the minimum historical periods needed to calculate a certain future period.

Future Period	Minimum historical data to calculate single future period	Maximum period possible for this periodicity	Maximum historical data to calculate maximum future period
1 day	30 days	14 days	420 days
1 week	12 weeks	4 weeks	48 weeks
1 month	12 months	3 months	36 months
1 quarter	6 quarters	3 quarters	18 quarters
1 year	3 years	3 years	9 years

Limitations

If you select a forecast period that cannot be calculated due to the lack of data, the error message **You**

do not have enough valid historical data to calculate the forecast or you do not have the correct viewing permissions. Contact your administrator is issued, and the forecast calculation is not performed. When the historical data is less than the value of the **Minimum historical data to calculate single future period**, the Forecast is not calculated.

So for a yearly KPI, only when the historical data is less than 3 years, there will be insufficient data to calculate a 3 years, 2 years, and 1 years forecast.

Tasks

This section includes:

View the forecast of a entity

To view the forecast of an entity:

1. Click **Explorer**.
2. Select the relevant entity in the Active KPIs pane, and click **Forecast**.

   The tab is enabled only when you have the **Forecast** permission.
3. Select **Current Mode** in the in period <period> in the title of the page.
4. In the Forecast page, select the Forecast period:
   a. For Day Periodicity – the list should present the dates of the upcoming 14 days in days granularity.
   b. For Week Periodicity – the list should present the dates of the upcoming 4 weeks in weeks granularity.
   c. For Month Periodicity – the list should present the dates of the upcoming 3 Months forecast in months granularity.
   d. For Quarter Periodicity – the list should present the dates of the upcoming 3 quarters forecast in quarter granularity.
   e. For Year Periodicity - the list should present the dates of the upcoming 3 Years forecast in

years granularity.

The forecast calculation is then performed.

Use cases

Use Case #1 – View a 3 months forecast for a KPI:
While checking the current status of a KPI, you noticed that there is a trend that indicates that the KPI threshold is about to be breached. Since it is very important to make sure that the KPI state stays as stable as possible during the upcoming 3 months, open Explorer, select the KPI and click the **Forecast** tab to see how the KPI is supposed to behave in the upcoming 3 months. You note that it is possible that during the next month, the KPI will be breached. You cannot wait any longer and make a drastic change so the KPI results improve immediately.

Use Case #2 – View 14 days forecast for an Objective with insufficient historical data:
You want to check the forecast of an Objective in the upcoming 14 days (all the KPIs under the objective are daily). Open Explorer, select the Objective, click **Forecast**, and set the Forecast period to 14 days ahead. Once the selection is done, the system notifies you that there is insufficient historical data to calculate the desired future period. You then decide to recalculate the Objective to ensure there are more than 30 days history data for this Objective.

UI Description

EXPLORER Tab - Forecast

> **Note:** When in IT Business Analytics, you navigate to another tab and then return to the Explorer tab, the details of the item that was previously in focus are displayed again. However, its properties might be refreshed.

> **Note:** The **Forecast** button is displayed only if you have the correct permission.

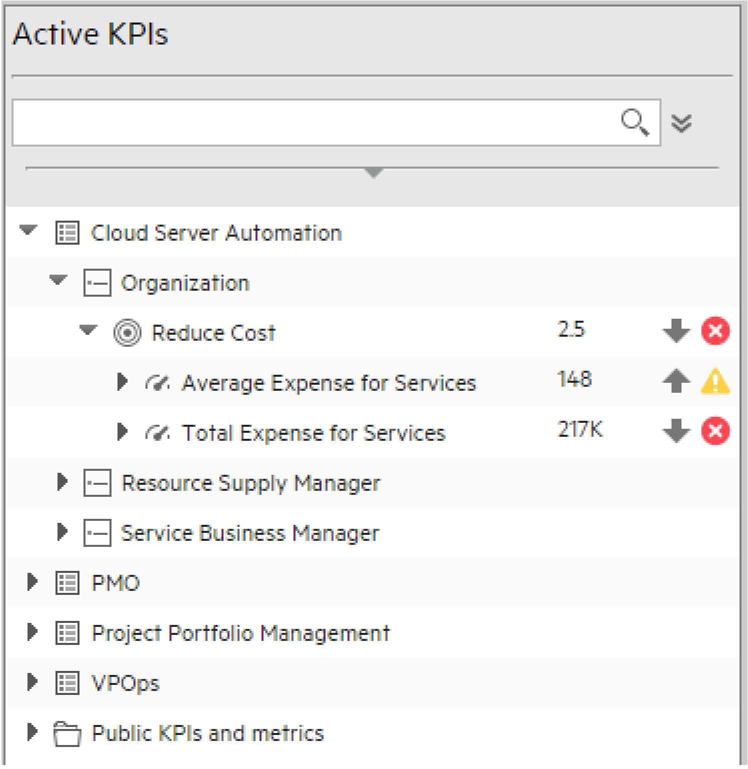
The Explorer - Forecast page includes the following areas:

"Active KPIs" on the next page

"Forecast" on page 556

"Toolbar" on page 561

Active KPIs

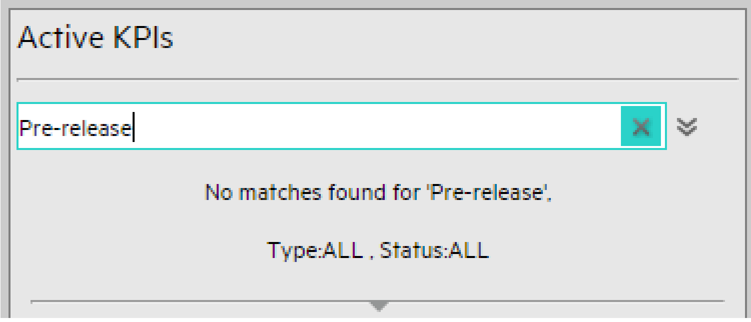


Active KPIs

Cloud Server Automation
Organization
Reduce Cost 2.5
Average Expense for Services 148
Total Expense for Services 217K
Resource Supply Manager
Service Business Manager
PMO
Project Portfolio Management
VPOps
Public KPIs and metrics

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

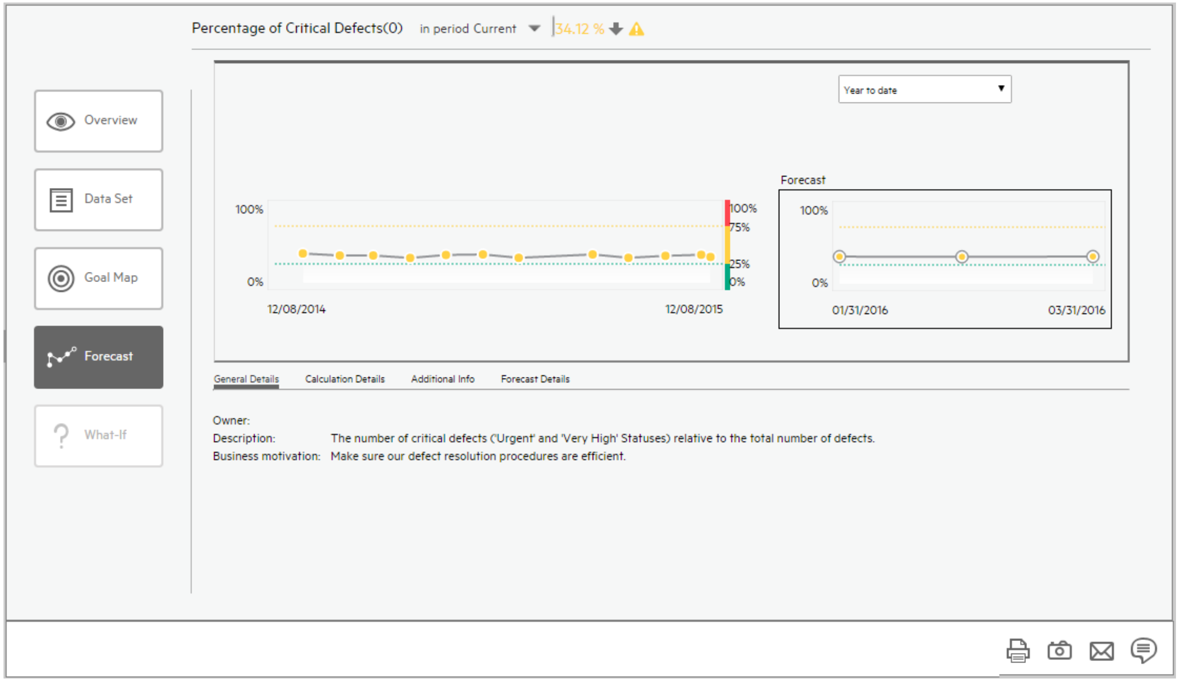
UI Element	Description
🔍 **<Search>**	Enter the relevant string to display, in the tree, the nodes whose name includes the string. In addition, the child nodes of the filtered nodes are also listed even when the child node names do not include the string. If the display is filtered (in case you accessed the Explorer from one of the components in the Dashboard), the <Search> box displays information about the filter. For example:

UI Element	Description
	 Active KPIs Pre-release No matches found for 'Pre-release'. Type:ALL , Status:ALL
︾	**Advanced Search.** Opens additional fields to help you refine the component's filter: • **Status:** Select one of the **All**, **Good**, **Warning**, **Critical**, or **No Data** values to display only the elements with the selected status, in the Active KPIs area. When you select **No Data**, the search returns only the elements with no data. • **Type:** Select: ◦ **All.** To display all the elements in the tree with the selected status. ◦ **KPI.** To display only the KPIs with the selected status. ◦ **Metric.** To display a list of all the Metrics (the Status is changed to **All**). If you had selected a value in Status, and then you select **Metric**, then the Status field displays **All**, and becomes inaccessible. ◦ **Objective.**To display only the Objectives with the selected status, and their KPIs.
Active KPIs	Depending on how you accessed the Explorer tab, the pane lists all the Scorecards, Perspectives, Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, and Unassigned KPIs, active in the IT Business Analytics or a subset of these items. The list of Scorecards that is displayed corresponds to the Scorecards that are permitted for your user. For details about permissions, see User Management in the *Administrator Guide*. **Note:** A Scorecard Administrator who wants to see a newly created Scorecard in Explorer (and who has the correct permissions to see the Scorecard), needs to refresh the Explorer using the **Refresh** button to display the Scorecard. Click one of the Scorecards, Perspectives, Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, or Unassigned KPIs to display their detailed information in the other pane. The area also displays on the right side of the Active KPIs pane, a subset of the following items depending on the type of item you selected: • The name of the item. • The value of the item.

UI Element	Description
	- -↓↑ 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: ○ ✓ indicates that the status is **Good**. ○ ⚠ indicates that the status is **Warning**. ○ ✖ indicates that the status is **Critical**. ○ ✎ indicates that the status is **Pending** and that the calculations have not yet been performed or completed.

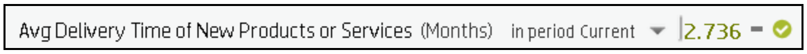
Forecast

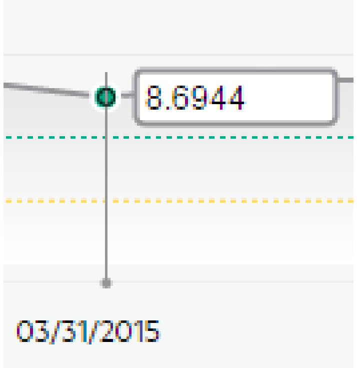
The display of the Forecast for a specific entity depends on the user permission for the entity.

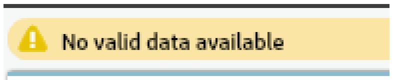
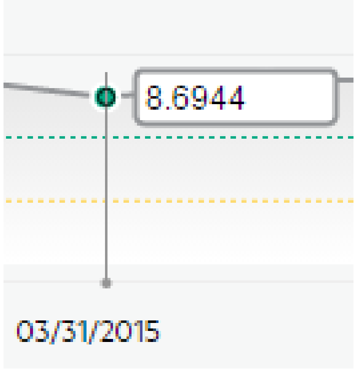
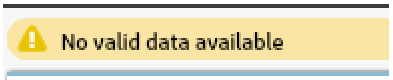


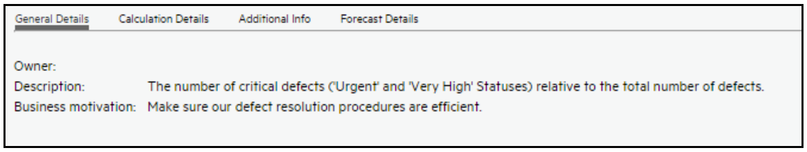
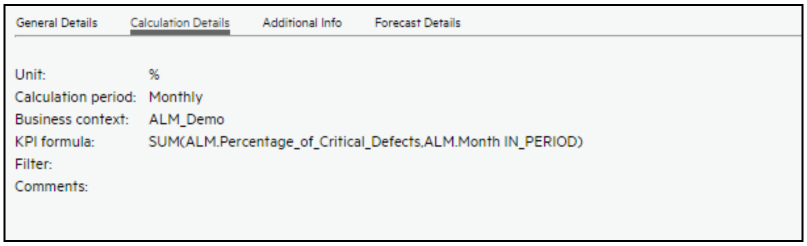
Owner:
Description: The number of critical defects ('Urgent' and 'Very High' Statuses) relative to the total number of defects.
Business motivation: Make sure our defect resolution procedures are efficient.

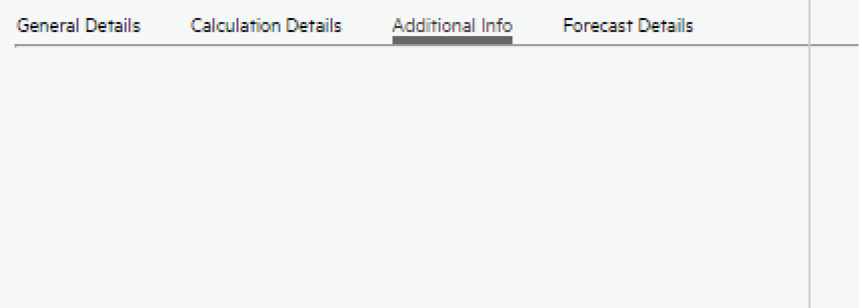
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

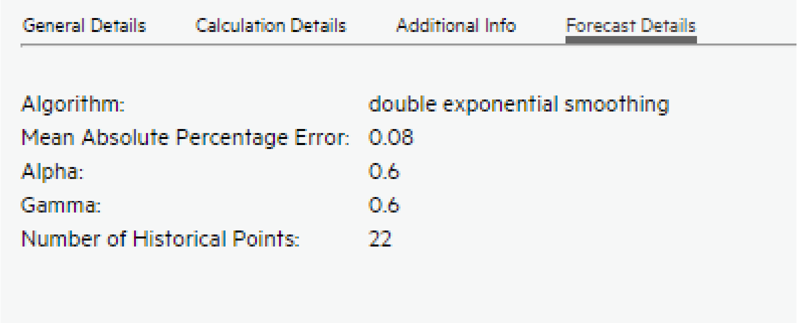
UI Element	Description
<Name> in period <Selection> <Value> <Trend> <Status>	 Avg Delivery Time of New Products or Services (Months) in period Current 2.736 - ✓ The title lists:

UI Element	Description
	- **<Name>.** The name of the selected entity (Objective, KPI, or Metric). - **Value.** The value of the selected item. - **Trend.** The trend icon indicates the trend of the value of the selected item in the selected period compared to its value in the previous period. - **Status.** The status of the KPI, KPI Breakdown (Metrics, and Metric Breakdowns do not have a status), during the current period. It can be: ○ ✓ indicates that the status is **Good**. ○ ⚠ indicates that the status is **Warning**. ○ ✖ indicates that the status is **Critical**. ○ ▨ indicates that the status is **Pending** or **No data**, meaning that the calculation of the status was not yet completed or the status was not calculated or that there was en error in the calculation.
<Date list>	**Note:** Make sure that **Current Mode** is selected in the **in period <period>** in the title of the Overview page. The list of periods that is displayed corresponds to the periods for which the forecast can be calculated based on the available historical data.
<Graph format>	- Historical data (left-hand area): ○ ● Indicates a regular "point" corresponding to a division of the time period. You can move the cursor above the graph to display a line that shows the exact date of a specific point. 

UI Element	Description
	◦  No valid data available is shown at the top of the display when 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. ◦ **<Threshold>.** The chart automatically displays the thresholds of the selected Objective, KPI, or Metric. ◦ **<X-axis>.** The X-axis displays the time frame of the selected item, split into equal segments. ◦ **<Y-axis>.** The Y-axis displays the values of the selected item in the relevant unit. • Forecast area ◦ ● Indicates a regular "point" corresponding to a division of the time period. You can move the cursor above the graph to display a line that shows the exact date of a specific point.  ◦  No valid data available is shown at the top of the display when 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. ◦ **<Threshold>.** The chart automatically displays the thresholds of the selected Objective, KPI, or Metric. ◦ **<X-axis>.** The X-axis displays the forecast time frame of the selected item, split into equal segments. ◦ **<Y-axis>.** The Y-axis displays the forecasted values of the

UI Element	Description
	selected item in the relevant unit.
Thresholds	The threshold definition of the Objective, or KPI. Thresholds are not relevant for a Metric.
General Details tab	 General Details Calculation Details Additional Info Forecast Details Owner: Description: The number of critical defects ('Urgent' and 'Very High' Statuses) relative to the total number of defects. Business motivation: Make sure our defect resolution procedures are efficient. **Owner.** The owner of the entity (Objective, KPI, or Metric) selected in the Active KPIs pane. **Description.** The description of the entity selected in the Active KPIs pane. **Business Motivation.** The business motivation of the KPI selected in the Active KPIs pane. **Additional Info.** 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 item configuration. When an Objective, KPI, or Metric has been assigned a Dashboard page in Additional Info, and if you change the name of the page in the Dashboard, the change is not reflected in Explorer. Explorer is updated only after the cache is refreshed for example by editing in the Studio or by performing a calculation. **Note for the System Administrator:** Xcelsius and BO Reports can be added as Additional Info in the Objective, KPI, or Metric when the **parameter bo.in.use** is configured as **true** in the SETTINGS_ MANAGEMENT table in the Management database.
Calculation Details tab	The tab displays the configuration of the Objective, KPI, or Metric as it appears in the Studio.  General Details Calculation Details Additional Info Forecast Details Unit: % Calculation period: Monthly Business context: ALM_Demo KPI formula: SUM(ALM.Percentage_of_Critical_Defects,ALM.Month IN_PERIOD) Filter: Comments: **Unit.** The unit of the Metric, KPI, or KPI Breakdown or Metric Breakdown. **Calculation Period.** The period of the Objective, Metric, KPI, or KPI Breakdown.

UI Element	Description
	Business Context. The context assigned to the Metric, KPI, or KPI Breakdown or Metric Breakdown. **KPI/Metric Formula.** The formula used to calculate the KPI/Metric value. **Filter.** The filter assigned to the KPI/Metric. **Comments.** The comments added to the KPI/Metric definition. **Calculated Using.** The type of rule used to calculate the Objective's score according to the score of its children. It can be: • **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 multiplied by the relevant weights, or if the Objective has child Objectives, the average of the scores of the child Objectives multiplied by the relevant weights. When you select this rule in the Studio, 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.
Additional Details tab	 General Details Calculation Details Additional Info Forecast Details Displays the additional information specified for the Objective, KPI, or Metric as it appears in the STUDIO. Depending on the item, it can be links to BO or Xcelsius reports, external links, or links to Dashboard pages. • **Name.**The name of the link or the reports. • **URL.** The hyperlink to access additional external information.
Forecast Details tab	The tab displays the configuration of the Objective, KPI, or Metric as it appears in the Studio.

UI Element	Description
	 General Details Calculation Details Additional Info Forecast Details Algorithm: double exponential smoothing Mean Absolute Percentage Error: 0.08 Alpha: 0.6 Gamma: 0.6 Number of Historical Points: 22 **Algorithm.** The name of the algorithm. For details, see "Explorer - Forecast" on page 550. **Mean Absolute Percentage Error.** The percentage of accuracy of the forecast results. The closer to 0% the more accurate the forecast. **Alpha.** The value used for the Alpha parameter in the algorithm. **Gamma.** The value used for the Gamma parameter in the algorithm. **Number of Historical Points.** The number of historical points used in the calculation.

Toolbar

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

UI Element	Description
✉	**Send mail.** Opens an Outlook email, with the name of the selected entity in the **Subject** box.
📷	**Save snapshot.** Captures the current view in Explorer (all of it) in a new window. A dialog box opens to ask you where you want to save the image.
🖶	**Print.** Displays the Print dialog box where you can select the printer and how to print the content of the corresponding Explorer tab. The printout includes: • The contents of the area that was selected while you clicked the button. • The Annotations Area.
💬	**Show/Hide Annotations.** The button is enabled only for Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, or Unassigned KPI. It opens a box where you can add your annotation or hide them after viewing. For details, see "Annotations" on page 578.

UI Element	Description
	Click the button again to close the Annotation area. **Note:** The **Show/Hide Annotations** icon with a little + sign in the bottom toolbar indicates that a new annotation was added to the selected item during the past week. The number of days during which the annotations are considered to be new is a setting that is configurable by your administrator in **Admin > Scorecard > Dashboard Settings > Number of days annotations are considered new**. For example, if the administrator gives the setting the value **14**, then the + sign will indicate that the annotation was added in the last 2 weeks. The default is a week.

Explorer - What-If

IT Business Analytics provides information regarding the status and values of Objectives, KPIs, or Metrics on the past and current periods in the Dashboard and Explorer tabs. The What-If tab provides a glimpse into the future by forecasting the entity future behavior of the Objective, based on historical data, so you will be able more easily understand the underlying trend and to do all you can now to improve or maintain the desired behavior. In addition, the tab enables you to view the historical, current, and future behavior of the selected Objective.

The capability is available only to Power users (users with the Power Named User License). For details, see Licenses in the *Administrator Guide*.

If the Objective is not set to the current period, the What-If button is disabled.

To access:

Click the **Explorer** tab to access, click the relevant Objective, and click the **What-If**button.

Learn More Tasks UI Description

Learn More

Calculation method for the Score

The score that is displayed in the title of the tab is calculated using the default values of the Objective child KPIs. The calculated score, displayed inside the tab on the left-hand side, uses an algorithm that basically takes the “new” values of the KPI and calculates the updated score of the objective and presents that information, on-the-fly.

Calculation method for forecast

The correctness of the forecast calculation is based on the historical data of the entity and is calculated using the DoubleExponentialSmoothingModel algorithm. The more data there is the more precise the forecast is.

- $f_t = \alpha.Y_t+(1-\alpha)(f_{t-1}+b_{t-1})$
- $b_t = \gamma.(f_t-f_{t-1})+(1-\gamma).b_{t-1}$

where:

- Y_t is the observed value at time t.
- f_t is the forecast at time t.
- b_t is the estimated slope at time t.
- α - (alpha) - is the first smoothing constant, used to smooth the observations. Its value is: 0.6.
- γ - (gamma) - is the second smoothing constant, used to smooth the trend. Its value is: 0.6.

To forecast:

$f_{t+m}= f_t+ mb_{t-m}$

where m=1 (The time interval).

The initial point is: $f_1=y_1$; $b_1=y_2-y_1$

Minimum historical data

The best forecasts are based on a large amount of historical data.

To provide the best forecast using the above algorithm, the calculation relies on as much historical data as is available. The following table indicates what are the minimum historical periods needed to calculate a certain future period.

Future Period	Minimum historical data to calculate single future period	Maximum period possible for this periodicity	Maximum historical data to calculate maximum future period
1 day	30 days	14 days	420 days

Future Period	Minimum historical data to calculate single future period	Maximum period possible for this periodicity	Maximum historical data to calculate maximum future period
1 week	12 weeks	4 weeks	48 weeks
1 month	12 months	3 months	36 months
1 quarter	6 quarters	3 quarters	18 quarters
1 year	3 years	3 years	9 years

Limitations

If you select a forecast period that cannot be calculated due to the lack of data, the error message **You do not have enough valid historical data to calculate the forecast or you do not have the correct viewing permissions. Contact your administrator** is issued, and the forecast calculation is not performed. When the historical data is less than the value of the **Minimum historical data to calculate single future period**, the Forecast is not calculated.

So for a yearly KPI, only when the historical data is less than 3 years, there will be insufficient data to calculate a 3 years, 2 years, and 1 years forecast.

Tasks

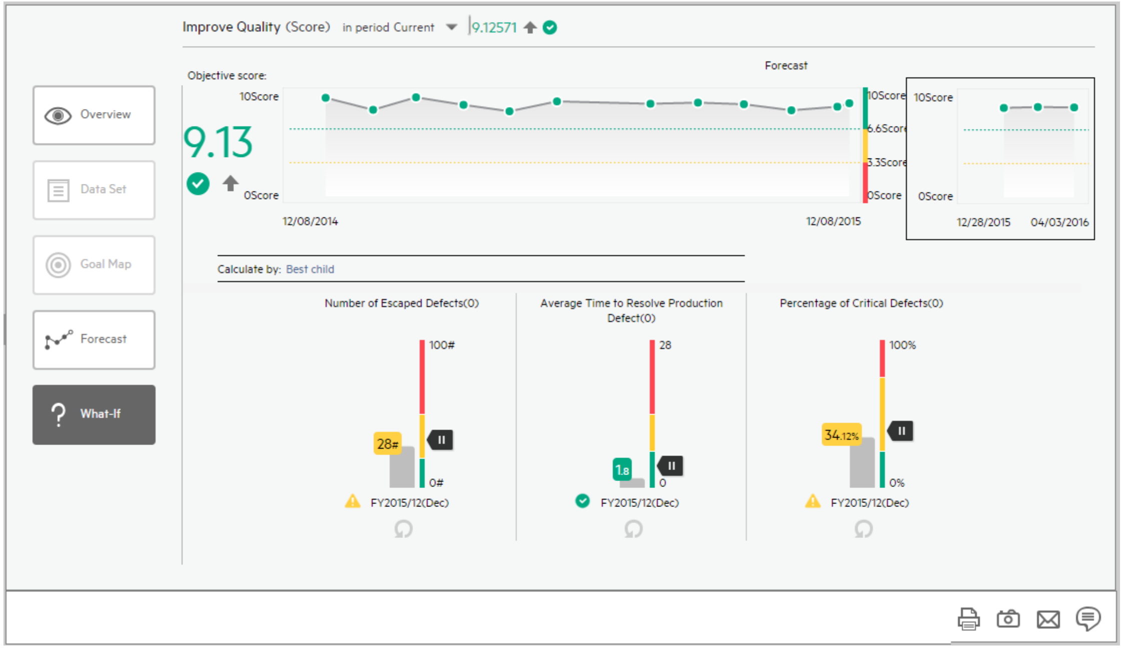
This section includes:

View the What-If of an Objective

To view the What-If of an Objective:

1. As a Power user with the Forecast permission, click **Explorer**.
2. Select the relevant Objective in the Active KPIs pane, and click **What-If**.
3. The historical view of the Objective appears alongside the forecast. (The forecast is calculated

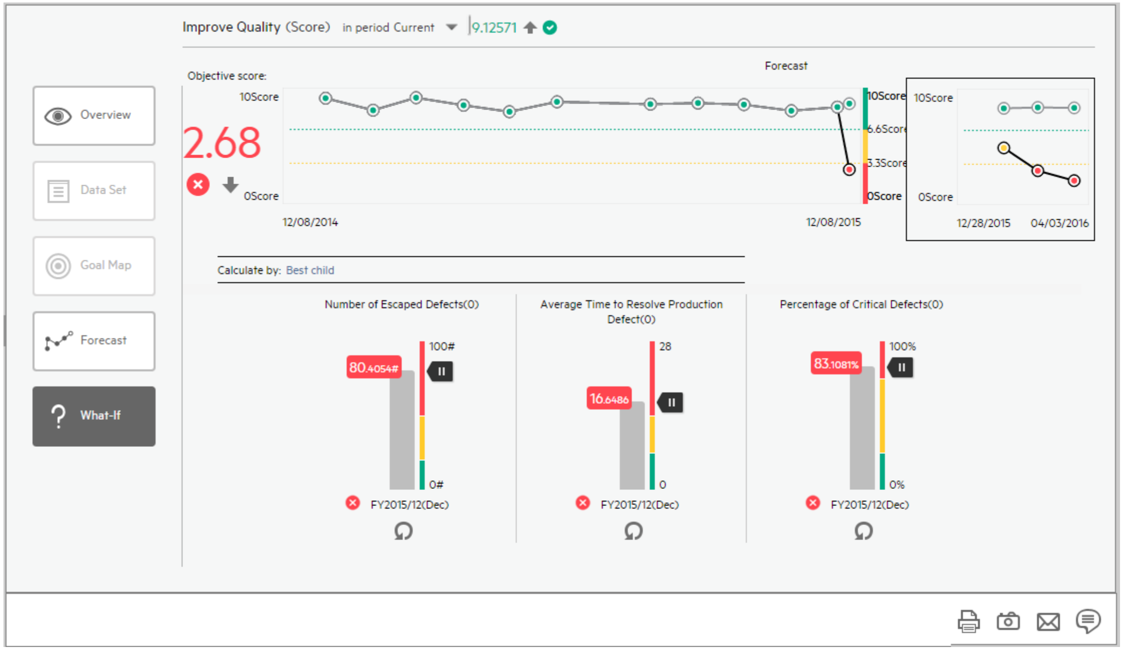
using the DoubleExponentialSmoothingModel algorithm described above).



4. Beneath the historical view, you can view details about the Objective child KPIs, their thresholds, and values.

5. You can drag the ⏸ pointer of a KPI up or down to adjust it to the value you want to check and to view the change in score and forecast on-the-fly.

   Once you finish dragging the pointer, the score and the **Forecast** graph are updated.



6. The display maintains the current forecast graph (pale green line) with the new forecast graph (black line) based on the changed values to enable you to compare between the current forecast and the What-If forecast.

7. You can change the values of other child KPIs and watch how that changes the score and graph.

8. To go back to the original values, click the ⟲ **Reset to default** button for each child KPI.

> **Note:**
>
> - The changes to the values of the KPIs in the What-If tab are reset any time you leave the page.
> - The What-If page displays data only when **Current** is selected in the **in period <period>** in the title of the page.

UI Description

The Explorer - What-If page includes the following areas:

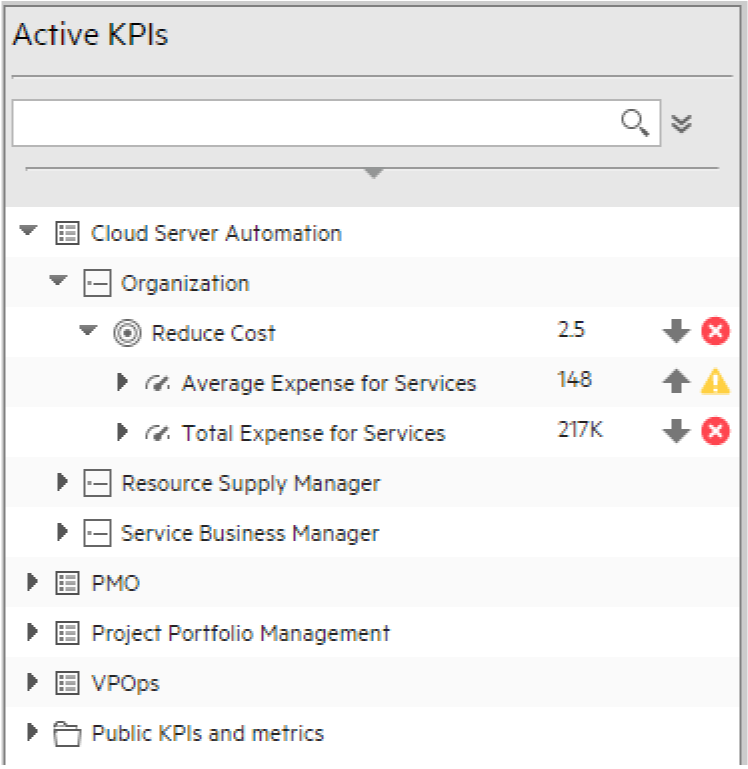
"Active KPIs" on the next page

"What-If area" on page 570

"Toolbar" on page 574

What-If page

Active KPIs

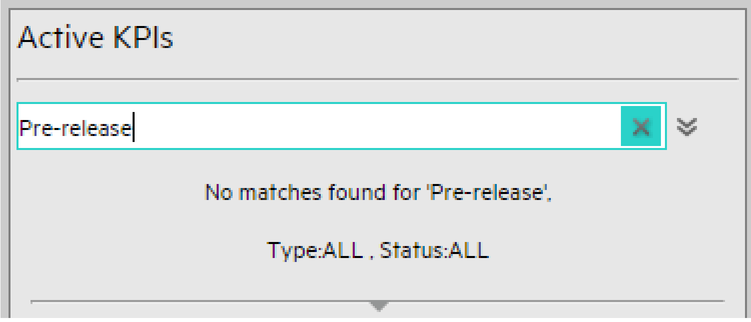


Active KPIs

- Cloud Server Automation
  - Organization
    - Reduce Cost 2.5
      - Average Expense for Services 148
      - Total Expense for Services 217K
  - Resource Supply Manager
  - Service Business Manager
- PMO
- Project Portfolio Management
- VPOps
- Public KPIs and metrics

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

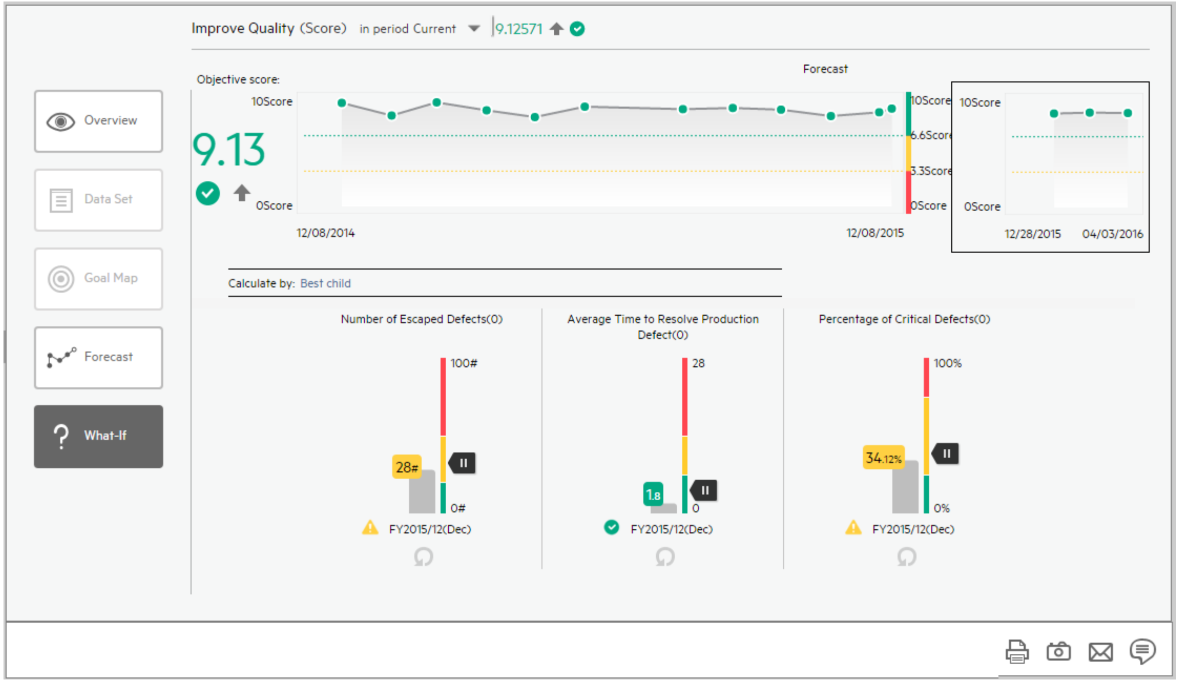
UI Element	Description
<Search>	Enter the relevant string to display, in the tree, the nodes whose name includes the string. In addition, the child nodes of the filtered nodes are also listed even when the child node names do not include the string. If the display is filtered (in case you accessed the Explorer from one of the components in the Dashboard), the <Search> box displays information about the filter. For example:

UI Element	Description
	 Active KPIs Pre-release No matches found for 'Pre-release'. Type:ALL , Status:ALL
︾	**Advanced Search.** Opens additional fields to help you refine the component's filter: - **Status:** Select one of the **All**, **Good**, **Warning**, **Critical**, or **No Data** values to display only the elements with the selected status, in the Active KPIs area. When you select **No Data**, the search returns only the elements with no data. - **Type:** Select: ○ **All.** To display all the elements in the tree with the selected status. ○ **KPI.** To display only the KPIs with the selected status. ○ **Metric.** To display a list of all the Metrics (the Status is changed to **All**). If you had selected a value in Status, and then you select **Metric**, then the Status field displays **All**, and becomes inaccessible. ○ **Objective.**To display only the Objectives with the selected status, and their KPIs.
Active KPIs	Depending on how you accessed the Explorer tab, the pane lists all the Scorecards, Perspectives, Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, and Unassigned KPIs, active in the IT Business Analytics or a subset of these items. The list of Scorecards that is displayed corresponds to the Scorecards that are permitted for your user. For details about permissions, see User Management in the *Administrator Guide*. > **Note:** A Scorecard Administrator who wants to see a newly created Scorecard in Explorer (and who has the correct permissions to see the Scorecard), needs to refresh the Explorer using the **Refresh** button to display the Scorecard. Click one of the Scorecards, Perspectives, Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, or Unassigned KPIs to display their detailed information in the other pane. The area also displays on the right side of the Active KPIs pane, a subset of the following items depending on the type of item you selected: - The name of the item. - The value of the item.

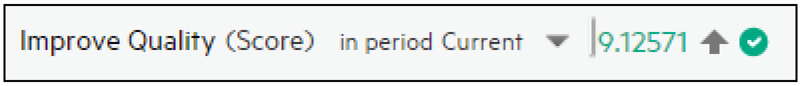
UI Element	Description
	- -↓↑ The trend icon indicates the trend of the value calculated over the current period. - The status of the item, during the current period. It can be: ○ ✓ indicates that the status is **Good**. ○ ⚠ indicates that the status is **Warning**. ○ ✗ indicates that the status is **Critical**. ○ ✎ indicates that the status is **Pending** and that the calculations have not yet been performed or completed.

What-If area

The display of the What-If for a specific Objective depends on the user permission for the Objective.

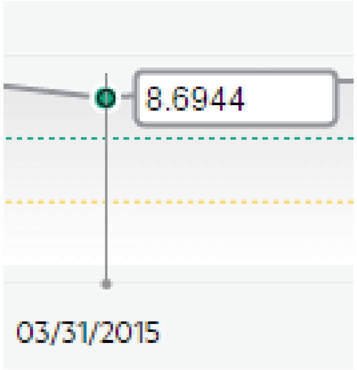


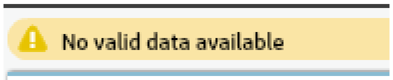
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
<Name> in period <Selection> <Score> <Trend>	 Improve Quality (Score) in period Current 9.12571

<Status>	The title lists: - **<Name>.** The name of the selected Objective. - **<Selection>.** The list of periods that is displayed corresponds to the periods for which the forecast can be calculated based on the available historical data. > **Note:** Make sure that **Current Mode** is selected in the **in period <period>** in the title of the Overview page. - **Score.** The score of the selected Objective. The score displayed here is the result of the score calculations performed on the values of the child KPIs for the current period. - **Trend.** ↓↑ The trend icon indicates the trend of the value of the selected item in the selected period compared to its value in the previous period. - **Status.** The status of the KPI, KPI Breakdown (Metrics, and Metric Breakdowns do not have a status), during the current period. It can be: ○ ✓ indicates that the status is **Good**. ○ ⚠ indicates that the status is **Warning**. ○ ✗ indicates that the status is **Critical**. ○ ▨ indicates that the status is **Pending** or **No data**, meaning that the calculation of the status was not yet completed or the status was not calculated or that there was en error in the calculation.
Objective Score	- **Score.** The score of the selected Objective. The score displayed here is the result of the score calculated, on-the-fly, for the values of the child KPIs indicated by the ⏸ pointer. - **Trend.** ↓↑ The trend icon indicates the trend of the value of the selected item in the selected period compared to its value in the previous period. - **Status.** The status of the KPI, KPI Breakdown (Metrics, and Metric Breakdowns do not have a status), during the current period. It can be: ○ ✓ indicates that the status is **Good**. ○ ⚠ indicates that the status is **Warning**. ○ ✗ indicates that the status is **Critical**. ○ ▨ indicates that the status is **Pending** or **No data**, meaning that the calculation of the status was not yet completed or the status was not calculated or that there was en error in the calculation.
<Graph format>	- Real data graph ○ ● Indicates a regular "point" corresponding to a division of the time period.

You can move the cursor above the graph to display a line that shows the exact date of a specific point.



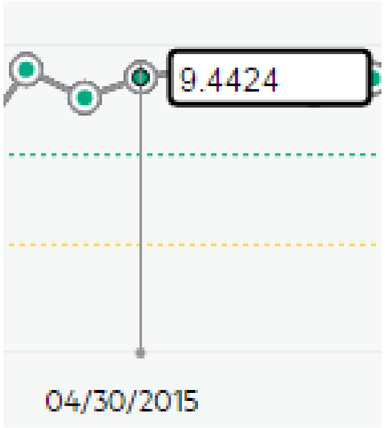
- 

  No valid data available

  is shown at the top of the display when 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.
- **<Threshold>.** The chart automatically displays the thresholds of the selected Objective.
- **<X-axis>.** The X-axis displays the time frame of the selected item, split into equal segments.
- **<Y-axis>.** The Y-axis displays the values of the selected item in the relevant unit.

- What if graph - displayed when you use the what-if feature
  - Indicates a regular "point" corresponding to a division of the time period.

    You can move the cursor above the graph to display a line that shows the exact date of a specific point.

	 - No valid data available is shown at the top of the display when 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. - **<Threshold>.** The chart automatically displays the thresholds of the selected Objective, KPI, or Metric. - **<X-axis>.** The X-axis displays the forecast time frame of the selected item, split into equal segments. - **<Y-axis>.** The Y-axis displays the forecast values of the selected item in the relevant unit.
Calculate by	The type of calculation used to calculate the score of the Objective. For details, see "About Active Objectives" on page 83.
<Child KPIs>	Graphs that present the Objective child KPIs details: ⏸ Drag the pointer of a KPI up or down to adjust it to the value you want to check. Once you finish dragging the pointer, both the historical line and the **Forecast** graph above are updated. The display maintains the current graph in the background with the new graph based on the changed values displayed in the foreground to enable you to compare between the current graph and the What-If graph. **Note:** The changes to the values of the KPIs in the What-If tab are reset any time you leave the page. ↻ Click to go back to the original values of the child KPI.

Toolbar

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

UI Element	Description
✉	**Send mail.** Opens an Outlook email, with the name of the selected entity in the **Subject** box.
📷	**Save snapshot.** Captures the current view in Explorer (all of it) in a new window. A dialog box opens to ask you where you want to save the image.
🖨	**Print.** Displays the Print dialog box where you can select the printer and how to print the content of the corresponding Explorer tab. The printout includes: • The contents of the area that was selected while you clicked the button. • The Annotations Area.
💬	**Show/Hide Annotations.** The button is enabled only for Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, or Unassigned KPI. It opens a box where you can add your annotation or hide them after viewing. For details, see "Annotations" on page 578. Click the button again to close the Annotation area. **Note:** The **Show/Hide Annotations** icon with a little + sign 💬 in the bottom toolbar indicates that a new annotation was added to the selected item during the past week. The number of days during which the annotations are considered to be new is a setting that is configurable by your administrator in **Admin > Scorecard > Dashboard Settings > Number of days annotations are considered new**. For example, if the administrator gives the setting the value **14**, then the + sign will indicate that the annotation was added in the last 2 weeks. The default is a week.

Explorer - Annotations

The Annotation area enables you to add annotations to the selected item (Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, or Unassigned KPIs).

To access:

In the **Explorer** tab, click **Show annotations** 💬 to open the Annotation area.

Learn More | Tasks | UI Description

Learn More

More about annotations

- If you do not have permission to display the EXPLORER tab, then you cannot access it, even to look at the details for the Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, or Unassigned KPIs.
- Click X in the top right corner of the EXPLORER tab to access or return to the Dashboard.
- Click **Show annotations** 💬 to open or close the Annotation area.

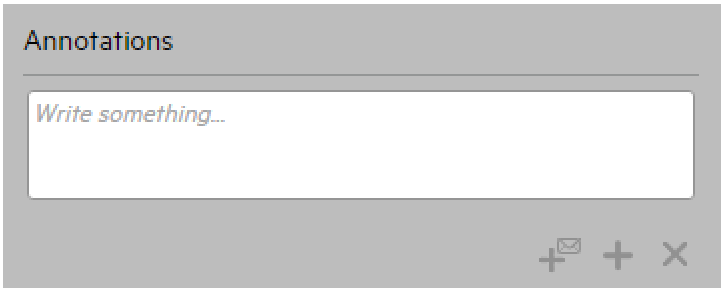
Tasks

This section includes:

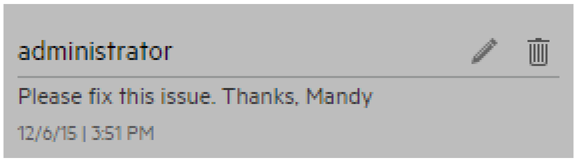
Add annotations to a specific Objective, KPI, KPI Breakdown, Metric, Metric Breakdown, or Unassigned KPI

1. In the EXPLORER tab, click the relevant item in the Active KPIs tree.
2. Examine the information displayed in the Explorer Overview, Data Set and Goal Map areas.
3. If you have comments, click the **Show annotations** 💬 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. You can also click +✉ to add the annotation to the list of annotations in the Annotations area and to open an email.

   If you want to add the details of the item in the Overview, Data Set, or Goal Map to the email, click 📷, click +✉, and then click `Control + V` in the body of the opened email.

5. The annotation is added to the list.

   
   administrator

   Please fix this issue. Thanks, Mandy

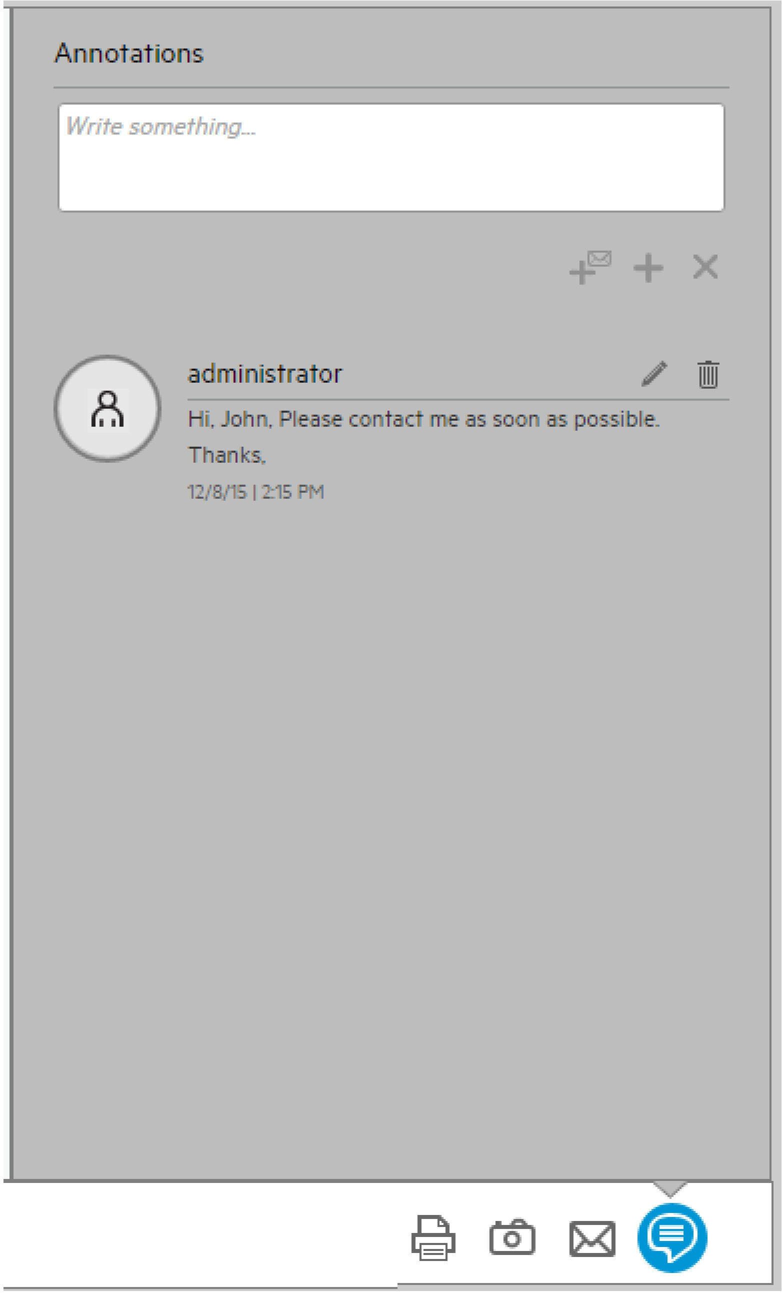
   12/6/15 | 3:51 PM

Send annotations by email

1. In the EXPLORER tab, click the relevant item in the Active KPIs tree.
2. Write the annotation and click +✉.

UI Description

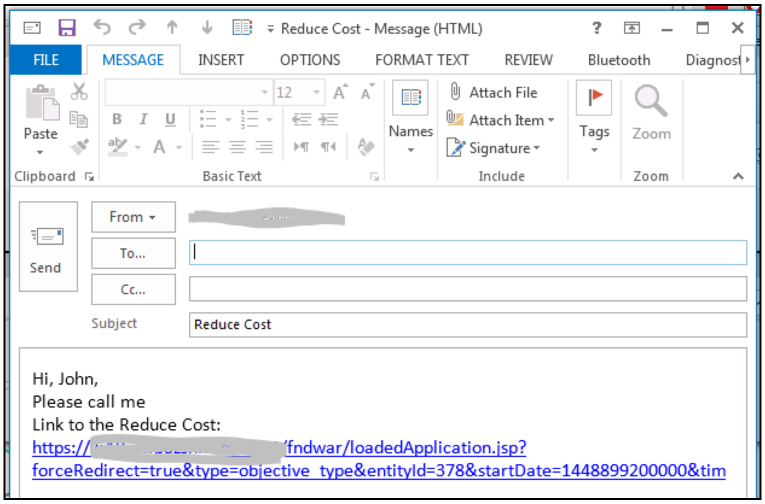
Annotations

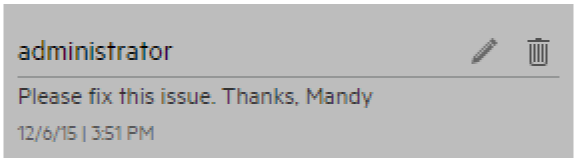
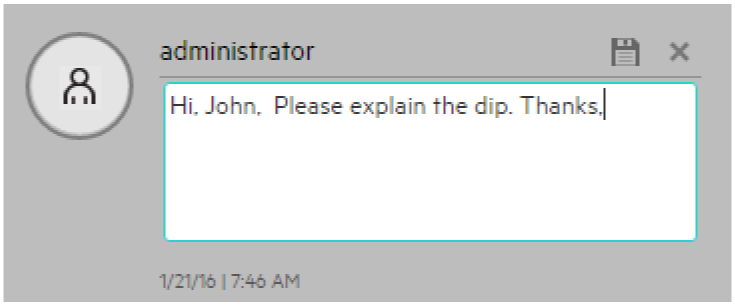


Hi, John, Please contact me as soon as possible.
Thanks,
12/8/15 | 2:15 PM

> **Note:** This area is displayed only for Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, or Unassigned KPIs.

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

UI Element	Description
<Annotation box>	Enter your annotation, and click **Add Annotation** to add the annotation to the list of annotations in the Annotation area.
+✉	**Add and email annotation.** Adds the annotation to the list of annotations in the Annotations area and to open an email with : • The owner of the selected Objective, KPI, Metric, KPI Breakdown, or Metric Breakdown (if an owner was configured in the Studio) listed in the **To** box. • The name of the selected Objective, KPI, Metric, KPI Breakdown, or Metric Breakdown in the **Subject** box. • The text of the just written annotation in the body of the email. • A link to the Objective, KPI, Metric, KPI Breakdown, or Metric Breakdown (from the Scorecard FLN). In the email, click the link, to open Explorer in the context of the entity with the selected period.  Reduce Cost - Message (HTML) FILE MESSAGE INSERT OPTIONS FORMAT TEXT REVIEW Bluetooth Diagnost Paste Clipboard Basic Text Names Attach File Attach Item Signature Include Tags Zoom Send From To... Cc... From [redacted] Subject Reduce Cost Hi, John, Please call me Link to the Reduce Cost: https://[redacted]fndwar/loadedApplication.jsp?forceRedirect=true&type=objective_type&entityId=378&startDate=1448899200000&tim **Note:** The link does not request a user/password combination when it is activated during the same session.
+	Adds the annotation to the list of annotations in the Annotations area.

UI Element	Description
✕	Discards the annotation you are currently writing.
<Annotation Area>	Lists the annotations sent for the selected Objectives, KPIs, KPI Breakdowns, Metrics, Metric Breakdowns, or Unassigned KPIs. The annotation includes the sender's name and image (if available), the date and time when the annotation was sent, and the contents of the annotation.  administrator Please fix this issue. Thanks, Mandy 12/6/15 | 3:51 PM The sender can also: • Click ✎ to edit an annotation. An edit box opens around the text of the annotation.  administrator Hi, John, Please explain the dip. Thanks, 1/21/16 | 7:46 AM ◦ Click 💾 to save. ◦ Click ✕ to cancel the change. • Click ✕ to discard an annotation. A confirmation message is issued. Click **OK** to discard.

Toolbar

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

UI Element	Description
✉	**Send mail.** Opens an Outlook email, with the name of the selected Objective, KPI, Metric, KPI Breakdown, or Metric Breakdown in the **Subject** box.

UI Element	Description
📷	**Save snapshot.** Captures the current view in Explorer (all of it) in a new window. A dialog box opens to ask you where you want to save the image.
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Just add your feedback to the email and click send.

If no email client is available, copy the information above to a new message in a web mail client, and send your feedback to SW-Doc@hpe.com.

We appreciate your feedback!

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