



IBM Software Group

## WebSphere® Business Monitor V6

### *Dashboards – Configuring KPI Views*



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This presentation covers the three views that can display information about Key Performance Indicators (KPI) in WebSphere Business Monitor V6.

## Goals

- Fully describe the views provided with WebSphere Business Monitor V6 that display Key Performance Indicator (KPI) measures
  - ▶ Gauges View
  - ▶ Key Performance Indicators View
  - ▶ Scorecards View



The goal of this presentation is to explain the three views that can be used to display KPI values and how to configure them to show data for specific process models. Other dashboard views are covered in separate presentations.

## Agenda

- Gauges
  - ▶ Overview, Configuration, Edit, Examples
- Key Performance Indicators (KPIs)
  - ▶ Overview, Configuration, Edit
- Scorecards
  - ▶ Overview, Configuration, Edit



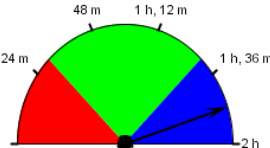
The agenda is to cover each view beginning with an overview of the capability and how to use the view and then a discussion on how to configure or edit the view to show data for a specific process model. Examples are shown throughout where necessary.

## Section

# ***Gauges View Overview***

This section provides an overview of the gauges view.

## Gauge View

- Shows the status and value of numeric Key Performance Indicators (KPIs) using a Gauge
- 
- Gauge minimum and maximum are defined in the view configuration
    - ▶ 0 and 2 hours in the example
  - Upper and lower limits for the KPI were previously defined in the Business Measures Editor in Modeler
    - ▶ 30 mins and 1 hours 30 mins in the example)



The Gauges view is dedicated to displaying Key Performance Indicators (KPI). You must define a measure as a KPI in the Business Measures Editor (BME) before you can see that measure with this view.

KPI are defined in two ways:

- With a target value and then percentage upper and lower allowed deviation margins
- With absolute values for lower and upper limits

When configuring the Gauges dashboard view you can view either type of KPI, but you cannot combine both types in one portlet. You must create another Gauges view copy for the second type of KPI. The gauges view allows you to specify the minimum and maximum points on the gauge, but the color boundaries are determined by the definitions for targets and limits that you made in the Modeler.

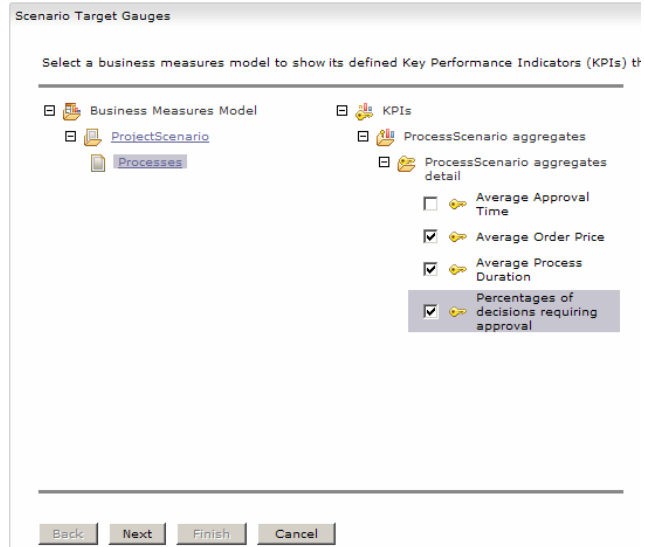
## Section

# ***Gauges View Configuration***

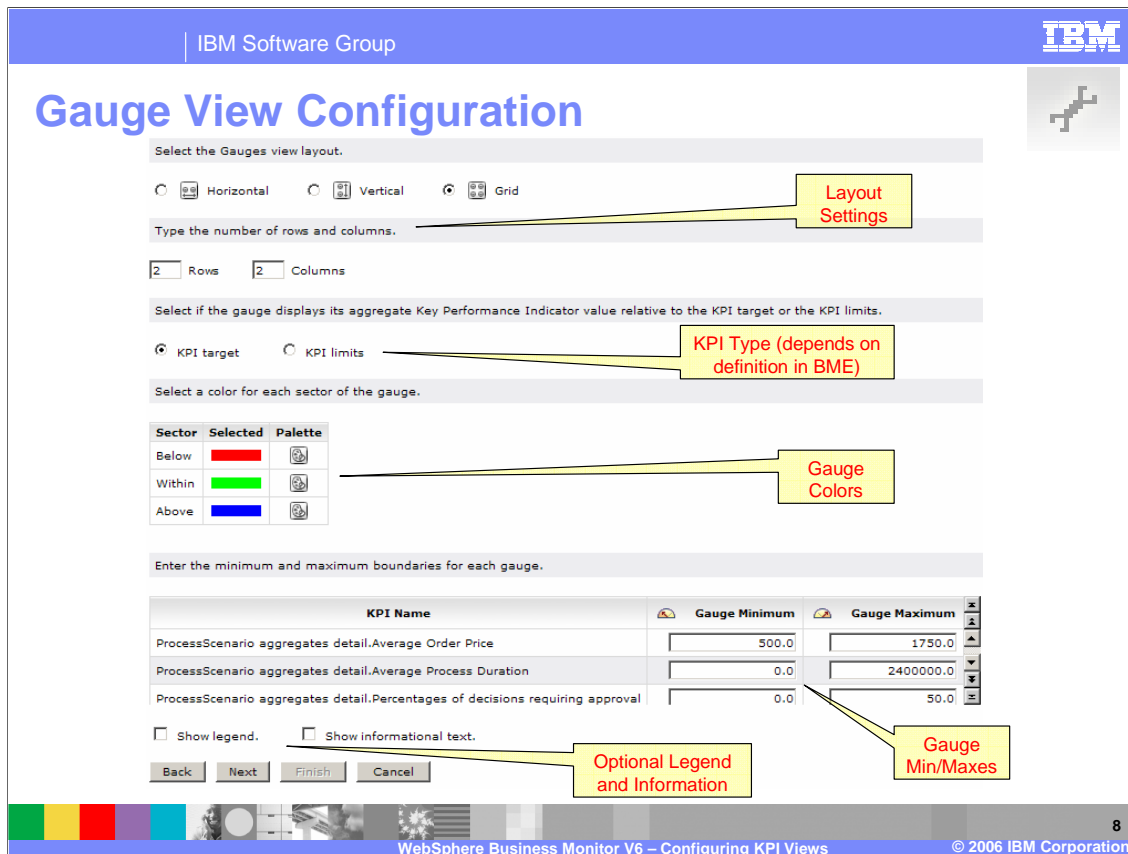
This section will cover configuration of the gauges view.

## Gauge View Configuration – Select KPIs

- Select the model and the KPI to display



When you click configure for this view, the first thing you must do is select which business measures model you want to display, then which of the KPI you want to display. If you mix and match the two types of KPI (those with a target and those with limits), you will not be able to get past the screen after this one, so it is important that you only select one type of KPI. You can select as many KPI as you like as you like as long as they are all the same type.



After you click Next, you will see this page, where you can control the layout and the colors used in the gauge. You must also specify the minimum and maximum that you want to show for each gauge.

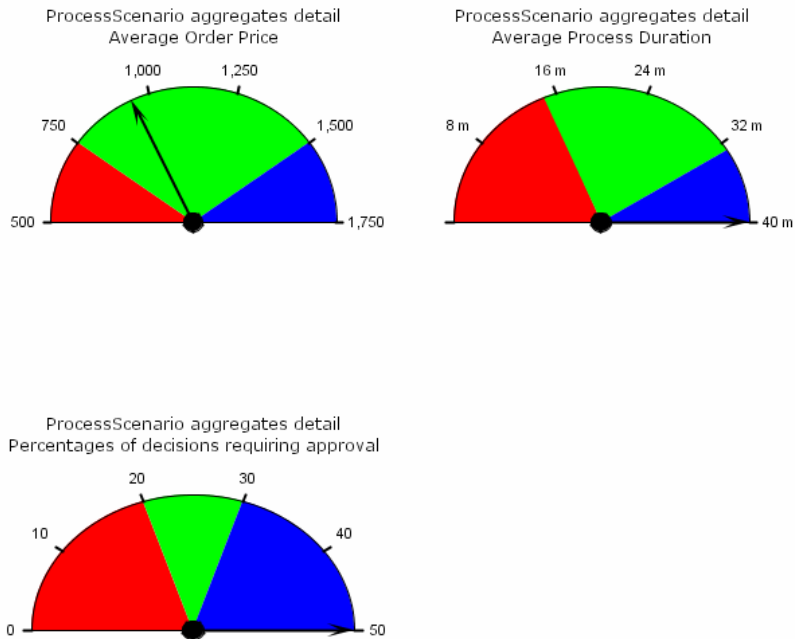
A duration KPI must specify its gauge min/max using milliseconds (1000 milliseconds = 1 second).

As mentioned on the previous page, you **must** specify what type of KPI you are displaying, whether limits or targets based. If you specify the wrong type, you will get an error message informing you that it is not a major problem to make a mistake. If you choose to show the legend, it will look different depending on the KPI types.

- Limit gauges show the legend **below lower limit, within limits, above upper limit**
- Target gauges show the legend **below target, on target, above target**



## Gauge View Configuration – Preview



The preview page shows you what your view currently looks like based on your settings. You can click Back if there is a problem or Finish if they are correct.

When configuring a duration KPI, you had to specify its gauge min/max using milliseconds (1000 milliseconds = 1 second), but the final display will convert this to friendlier units as shown above in the top right gauge.

## Section

# *Gauges View Edit*

This section will cover editing the gauges view.

## Gauge View Edit



- Cannot select model or KPIs
- Cannot select KPI type – limit or targets
- Can select layout, colors, legend, informational text

The pencil icon indicates that this slide provides information about the Edit mode. When you click Edit instead of Configure, you are presented with fewer options. Specifically, you cannot change which model or KPI are displayed. You can only affect the cosmetic behaviour, such as layout, colors, legend and help text.

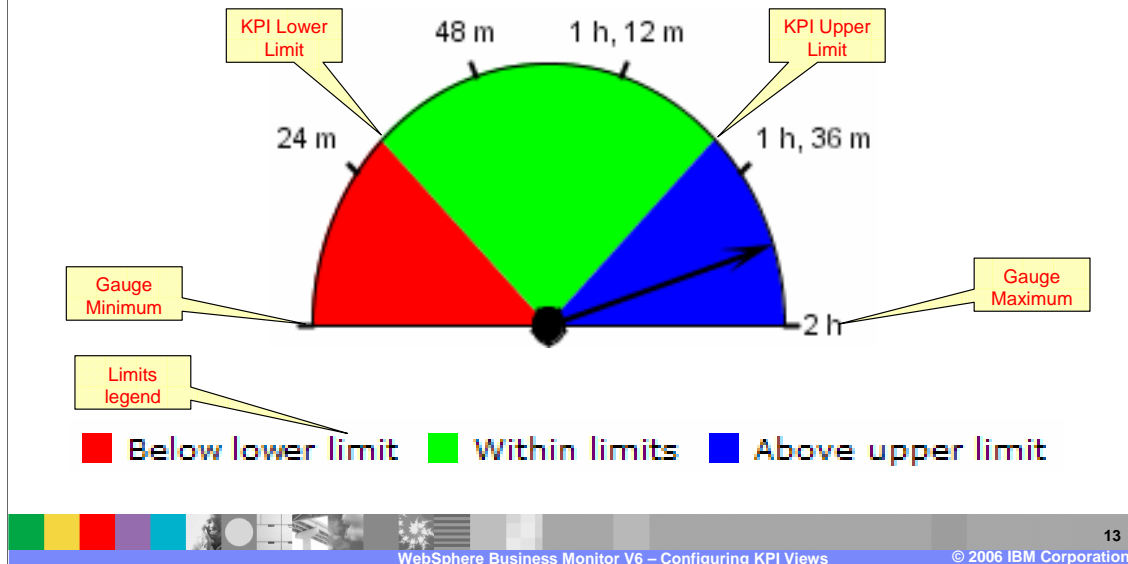
## Section

# *Gauges View Examples*

This section will provide some examples of the gauges view.

## Gauge Example – KPI with Limits

- Lower limit = 30 mins, Upper limit = 1 hour 30 mins

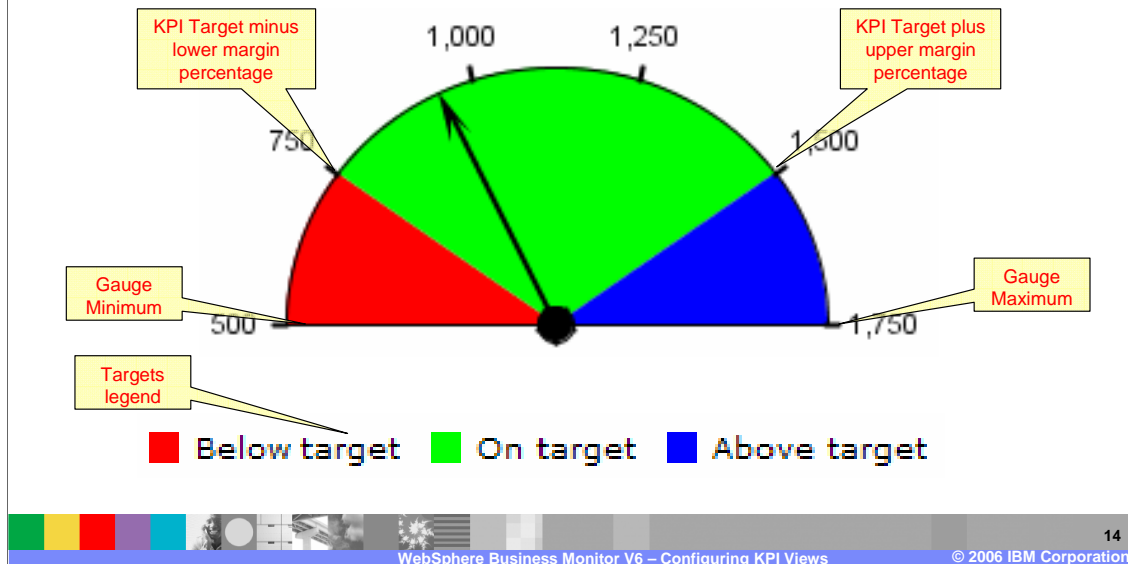


Shown here is an example Gauge configured for a **limits** KPI with labels to help you understand what each of the previous settings affect in the final gauge view.

The KPI Lower Limit and Upper Limit values were defined when the business measures model was created in Modeler using the Business Measures Editor and they cannot be changed when you are configuring the dashboard view. The gauge minimum and maximum were specified when you configured the view. The limits can be toggled on or off in the gauges view configuration. The legend refers to the **limits**.

## Gauge Example – KPI with Target and Margins

- Target 1000, lower margin 25%, upper margin 50%



Shown here is an example Gauge configured for a **targets** KPI with labels to help you understand what each of the previous settings affect in the final gauge view.

The boundaries are defined as the target +/- (the upper/lower) percentage margins were defined when the business measures model was created in Modeler using the Business Measures Editor. They cannot be changed when you are configuring the dashboard view. The gauge minimum and maximum were specified when you configured the view.

The legend can be toggled on or off in the gauges view configuration. The legend refers to the **targets**.


## Section





# ***Key Performance Indicators View Overview***

This section will provide an overview of the Key Performance Indicators view.

## Key Performance Indicator (KPI) View

- Shows the status and value of KPIs

KPI	Status	Value
ProcessScenario aggregates detail.Average Approval Time		1 h, 47 m, 23 s

 Below limit
  Within limits
  Above limit
  Not Available

The KPI has a value of 1 h, 47 m, 23 s. It is above the upper limit 1 h, 30 m.

- Non-numeric values can be displayed as well
  - True/false, date and time
- Status can be shown using different icons from a palette
  - Tool tip shows more info
- Status is only shown if KPI definition in BME has lower and upper limits

This view, like the Gauges view, is dedicated to visualizing KPI. You must have already defined a measure as a KPI in order to see it displayed in the KPI view. The view provides a simple way of seeing the status (shown with an icon) and the value for a KPI measure. You can hover over the value to see more informative text if you like. You can also display non-numeric values like a date/time or a boolean, unlike the Gauges view. Status will show **Not available** for all target KPI, only limit KPI will show this as below, above or within limits.



## Section

# ***Key Performance Indicators View Configuration***

This section will cover configuration of the Key Performance Indicators view.

## KPI View Configuration – Select KPIs

- Select the model and the KPIs to display

Scenario Key Performance Indicators (KPI's)

Select one or more aggregated KPIs:

- Business Measures Model
  - ProjectScenario
    - Processes
- KPIs
  - ProcessScenario aggregates
    - ProcessScenario aggregates detail
      - Average Approval Time
      - Average Order Price
      - Average Process Duration
      - Percentages of decisions requiring approval







Back Next Finish Cancel

The first configuration step is to select the model and which KPI to display.

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## KPI View Configuration

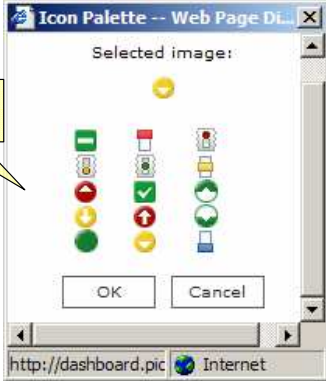
Select icons to represent KPI status:

Status	Selected	Palette
Below limit		
Within limits		
Above limit		

Show legend     Show informational text

Icon Palette -- Web Page DI...

Selected image:



OK Cancel

http://dashboard.pic Internet

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The next configuration step is a simple cosmetic setup and consists of choosing which icons you want to indicate below, above and within limits. There is a pre-defined palette to choose from, you simply click the palette link and then choose an icon. You can also choose whether or not to show the legend and the help text.

## Section

# ***Key Performance Indicators View Edit***

This section will cover editing the Key Performance Indicator view.

## KPI View Edit



- Cannot change model and KPIs
- Can change icons, legend, information text



The steps for editing the KPI view are the same as those for KPI Configuration, except you cannot choose which model or which KPI to show. You can still change the cosmetics.

## Section





# ***Scorecards View Overview***

This section will provide an overview of the Scorecards view.

## Scorecards View

- Shows KPIs grouped by 'perspective'
  - A perspective is simply a group of related KPIs
- Shows 'score' information for each KPI based upon the targets defined in BME

### Efficiency

KPI Name	↑↓	Status ↑↓	Value	Target	Score	↑↓
ProcessScenario aggregates detail.Average Process Duration			1 h, 47 m, 26 s	30 m		358%
ProcessScenario aggregates detail.Percentages of decisions requiring approval			96.429	25		386%

 Below target
  On target
  Above target
  Not Available

- Status, target and score only shown if KPI definition in BME has target defined
  - Also not shown if KPI is non-numeric

The Scorecards view is also dedicated to displaying KPI and visualizing their status. It allows you to group related KPI together into categories called **perspectives**, which allow you to look at the business performance from different perspectives. For example, you might group all financial KPI into a financial perspective, all satisfaction KPI into a **customer sat** perspective and so on. The KPI are displayed as a score against the target values that you set, therefore this view is primarily for target KPI. Limit KPI can also be added but the status, target and score values will not be populated.

## Scorecards View – Perspectives

- Scorecards group related KPIs into perspectives
- These offer scorecards for different aspects of the business
- Four default perspectives
  - ▶ Financial, Internal Business Process, Learning & Growth, Customer
- Completely customizable
  - ▶ Create, Delete, Edit perspectives
- Add minimum of one KPI to each perspective

There are four perspectives provided, each assigned a unique name and you can add or delete those perspectives from the list, or edit the existing names. You must then add at least one KPI to each perspective that you define.



## Perspective Examples

- Sample scorecard showing Financial (default) and Efficiency (custom) perspectives

### Financial

KPI Name	↑↓	Status ↑↓	Value	Target	Score	↑↓
ProcessScenario aggregates detail.Average Order Price		✓	945.143	1,000	<div style="width: 94%;"></div> 94%	

### Efficiency

KPI Name	↑↓	Status ↑↓	Value	Target	Score	↑↓
ProcessScenario aggregates detail.Average Process Duration		⚠	1 h, 47 m, 26 s	30 m	<div style="width: 358%;"></div> 358%	
ProcessScenario aggregates detail.Percentages of decisions requiring approval		⚠	96.429	25	<div style="width: 386%;"></div> 386%	

The perspective name is shown above all of the KPI that have been added to that perspective and a KPI can be added to multiple perspectives at the same time if necessary.

## Section

# ***Scorecards View Configuration***

This section will cover configuration of Scorecards views.

## Scorecard View Configuration – Perspective

- Create, Delete and Edit perspective names as necessary

New Perspective   Delete Perspective   Edit Perspective

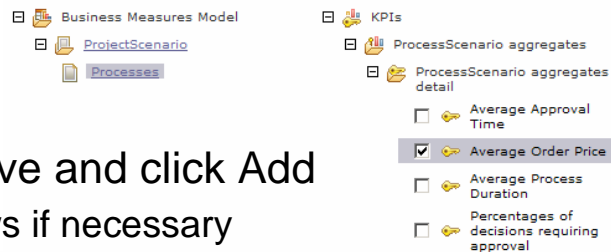
<input type="checkbox"/>	Perspective	Description
<input type="checkbox"/>	Financial	
<input type="checkbox"/>	Internal Business Process	
<input type="checkbox"/>	Learning & Growth	
<input type="checkbox"/>	Customer	

Back   Next   Finish   Cancel

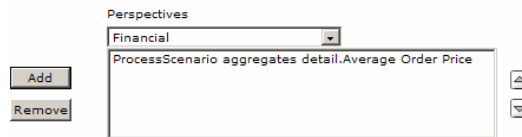
The first step in configuring a scorecard view is to specify what perspective names you want. You can add, delete or edit the pre-defined list and create your own as necessary.

## Scorecard View Configuration

- Select the Model and some KPIs



- Select the perspective and click Add
  - ▶ Re-order using arrows if necessary



- Repeat for all perspectives
  - ▶ Must add at least one KPI to each perspective

The next step is to choose the model and the KPI, then a perspective and click Add or Remove to decide whether those KPI should belong to that perspective. Repeat this step for each perspective, ensuring that you have at least one KPI for each perspective.

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# Scorecard View Configuration

Select one or more columns to show in the View mode.

Show the KPI value column.     Show the KPI target column.     Show the KPI score column.

Select the Scorecard view layout:

Vertical     Horizontal     Grid

Select icons to represent KPI status:

Status	Selected	Palette
Below target		
On target		
Above target		

Show legend     Show informational text

Back    Next    Finish    Cancel

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The next configuration page determines whether you want to display all columns (you can toggle value, target and score) and what layout you want to use as this determines the layouts of the perspectives. Similar to the KPI view, you can use the palette to change the icons that represent the status.

# Scorecard View Configuration – Preview



## Financial

KPI Name	Status	Value	Target	Score
ProcessScenario aggregates detail.Average Order Price		945.143	1,000	94%

## Internal Business Process

KPI Name	Status	Value	Target	Score
ProcessScenario aggregates detail.Average Process Duration		1 h, 47 m, 26 s	30 m	358%
ProcessScenario aggregates detail.Percentages of decisions requiring approval		96.429	25	386%

## Learning & Growth

KPI Name	Status	Value	Target	Score
ProcessScenario aggregates detail.Percentages of decisions requiring approval		96.429	25	386%

## Customer

KPI Name	Status	Value	Target	Score
ProcessScenario aggregates detail.Average Order Price		945.143	1,000	94%

Below target 
 On target 
 Above target 
 Not Available

Shown here is an example using four perspectives. Notice that there is one or more KPI for each perspective.

## Section

# ***Scorecards View Edit***

This section will cover editing Scorecards views.

## Scorecard View Edit



- Cannot change perspectives
- Cannot add/remove measures from perspectives
- Can change layout, columns, icons, legend, information text



Editing a Scorecard view is the same as configuring one, except that you cannot edit the perspectives or choose which KPI are shown in each one. A preview page is also available.



## Summary

- Overview of three types of views
- Configuring and editing of Gauges, KPI, and Scorecards views

In summary, this presentation provided an overview of the Gauges, Key Performance Indicators, and Scorecards views and described how to configure and edit each type of view.

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