#### IBM WEBSPHERE BUSINESS MONITOR 6.0 - LAB EXERCISE

# Configuring a Dashboard in WebSphere Business Monitor V6

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#### What this exercise is about

What this avaraise is shout

The objective of this lab is to provide you with instructions on how to create a WebSphere Business Monitor 'dashboard' for displaying business information about the execution of processes in a WebSphere Process Server. A dashboard is a set of views that show business measures information for your

processes. These business measures are defined earlier using WebSphere Business Modeler and you should refer to the Business Measures Editor (BME) lab for information about how to do that.

Once the process has been created and the business measures are defined, you must then deploy your process to WebSphere Process Server and your business measures to WebSphere Business Monitor. The End-to-End scenario lab shows you how to do this, and must be completed before you can start this lab

#### Lab Requirements

List of system and software required for the student to complete the lab.

- WebSphere Business Monitor environment installed with the following components:
  - Runtime WebSphere Process Server
  - Monitor Server
  - Dashboard Client
- Successfully deployed Scenario application and configured Monitor for this application.
  - EAR file deployed and running in the runtime WebSphere Process Server.
  - Business Measures model deployed/imported into WebSphere Business Monitor.
  - Replication daemons started.
- Configured the Action Manager (only if you want to use the Alerts view).
- Internet Explorer Version 6.0 or above.

Note: You can fulfill these requirements by completing the following labs:

- 1. WBMonitorV6 InstallPart1-DashboardClientLab.doc
- 2. WBMonitorV6 InstallPart2-MonitorServerLab.doc
- 3. WBMonitorV6 InstallPart3-ProcessServerLab.doc
- 4. WBMonitorV6 EndToEndScenarioLab.doc
- 5. WBMonitorV6\_ActionManagerLab.doc (only needed for the Alerts view)

# What you should be able to do

At the end of this lab you should be able to:

- Create dashboard pages.
- Create the following views:
  - Gauges
  - KPIs

- Scorecards
- Active Instances
- Reports
- Dimensions
- Alerts
- Export Values
- Organizations
- Work with the created dashboard to analyze data.

#### Introduction

This lab will show you how to create a dashboard that will allow you to monitor the Project Scenario process. You will interact with the Dashboard Client and this server is built upon WebSphere Portal. Therefore you will perform some steps that are basic administration tasks for WebSphere Portal.

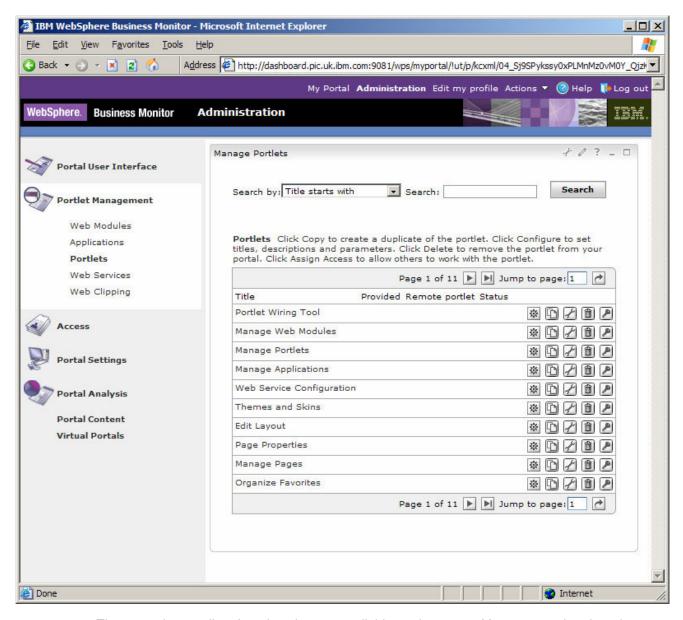
The main focus of this lab, however, will be the creation and customization of individual dashboard views – each providing different pieces of monitoring information about the process. The dashboard views are supplied with WebSphere Business Monitor and they are implemented as 'portlets' – reusable components that can be assembled together on a page for a user.

# Part 1: Copying the template dashboard views

In this part of the lab you will perform an *essential* first administration task. You will copy the template views that are provided with WebSphere Business Monitor. You must do this because you will be customizing these templates to create your own views to show information about your process.

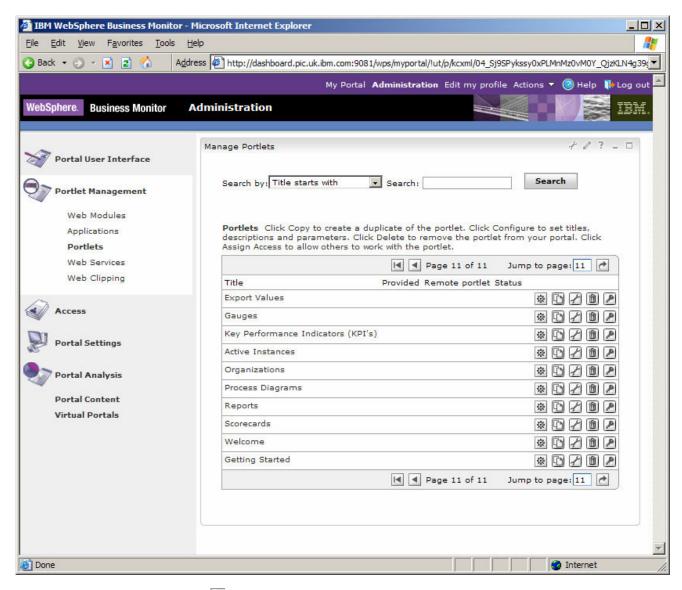
Note: You must not customize the out-of-the box dashboard views for your own process. You must preserve the out-of-the-box views as *templates* and copy them every time you want to configure a view for your process. If you accidentally customize one of the templates then there is no way of removing that customization – in this case you will probably have to re-install the Dashboard Client to restore the templates.

1. Start all the servers and the replication manager daemons.	
a. On the Dashboard Client, start WebSphere Portal. Start > All Programs > IBM WebSphere Portal Server v5.1 > Start the Server.	>
b. On the Monitor Server, start WebSphere Process Server 6.0.0 monitor profile. Start > All Programs > IBM WebSphere > Process Server 6.0 > Profiles > monitor > Start the server	∍r.
c. On the Runtime Server, start the runtime WebSphere Process Server v6.0.1 Start > All Programs > IBM WebSphere > Process Server 6.0 > Profiles > ProcSrv01 > Start the server.	
d. Start all the replication manager daemons if they are not running as described in the End to E scenario lab.	∃nd
1. If you are not logged in already, login to WebSphere Portal.	
a. Go to <a href="http://localhost:9081/wps/portal">http://localhost:9081/wps/portal</a> if you are working on the Dashboard Client, or alternating go to <a href="http://cyour_dashboard_server&gt;:9081/wps/portal">http://cyour_dashboard_server&gt;:9081/wps/portal</a> if you are connecting to it remotely.	vely
b. Login with username 'wpsadmin' and password 'wpsadmin' (or your own attributes if you have changed the defaults). (Click Log-in at the top right).	е
2. Locate the template portlets in the WebSphere Portal portlet administration.	
a. Click on the <b>Administration</b> link at the top of the page.	
My Portal Administration Edit my profile Actions ▼	
b. Click <b>Portlet Management</b> on the left, then click <b>Portlets.</b>	

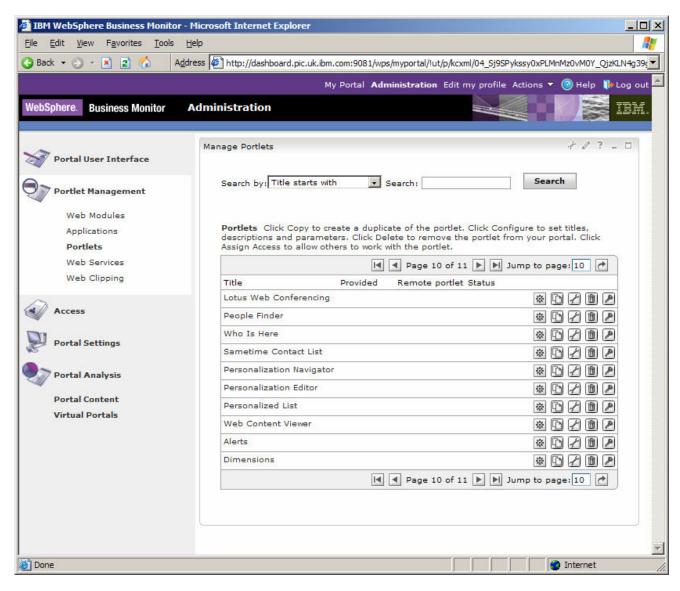


- \_\_ c. The page shows a list of portlets that are available on the server. You can see that there is more than one page of portlets (11 pages shown above).
- \_\_ d. Click the arrow to jump to the last page this is where you will find the Monitor template portlets:

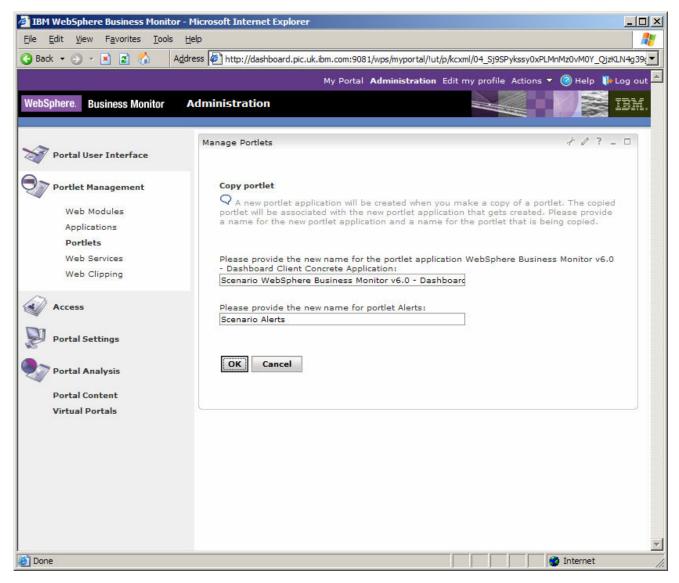
**Note:** If you completed the End to End scenario lab then you will have created two template copies already. These will show at the end of your portlets list and will give you 12 pages of portlets.



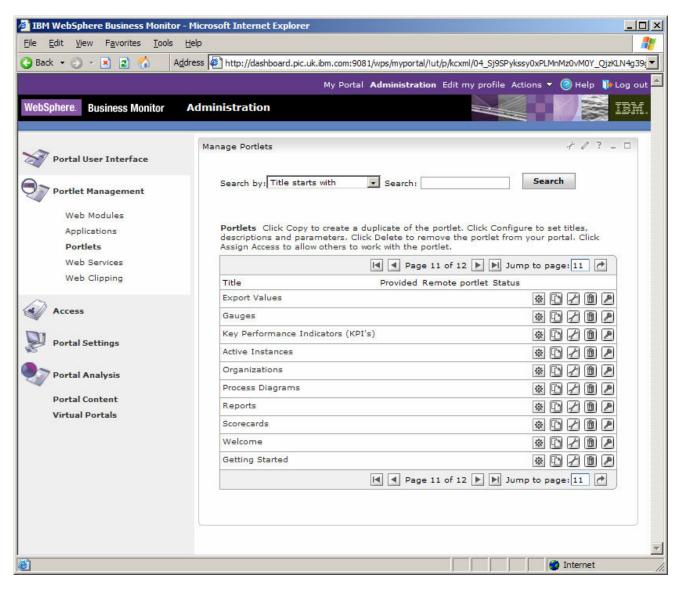
\_\_ e. Click the left arrow \_\_\_ to go back a page. You should see the first Monitor portlets at the bottom – Alerts and Dimensions. If you completed the End to End lab then you will probably have to click again to go back an extra page because you created two additional portlets in that lab. You are looking for the Alerts portlet which is the first of the Monitor dashboard views.



- . Copy the Monitor template view portlets.
- \_\_ a. Click the copy icon to the right of the 'Alerts' portlet.
- \_\_ b. Change 'Copy of' to 'Scenario' in both fields to rename the portlet application to 'Scenario WebSphere Business Monitor v6.0 Dashboard Client Concrete Application' and the portlet to 'Scenario Alerts'.



- \_\_ c. Click OK.
- \_\_ d. Perform a similar copy for the 'Dimensions' portlet by clicking its copy icon and renaming in the same way.
- \_\_ e. Now click the right arrow to move to the next page where the other portlet templates can be found:



\_\_ f. Make copies of each of the following template portlets, for each one renaming them in the same way (change 'Copy of' to 'Scenario'):

**Export Values** 

Gauges

Key Performance Indicators (KPIs)

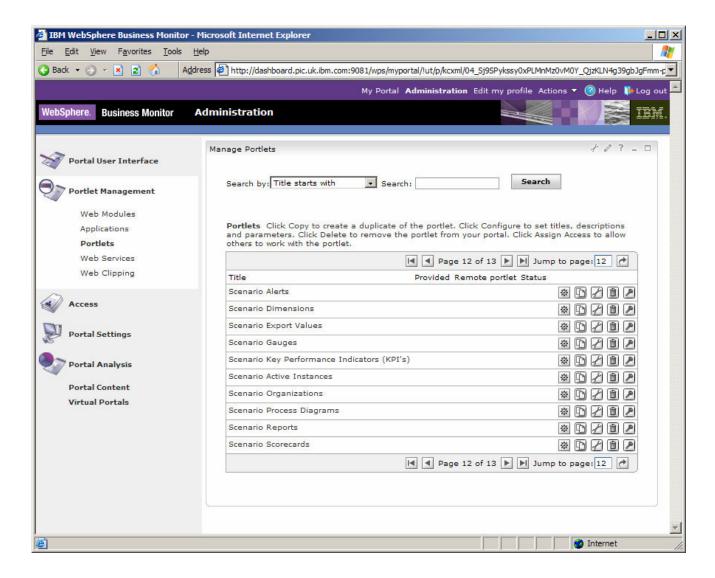
**Active Instances** 

Organizations

**Process Diagrams** 

Reports

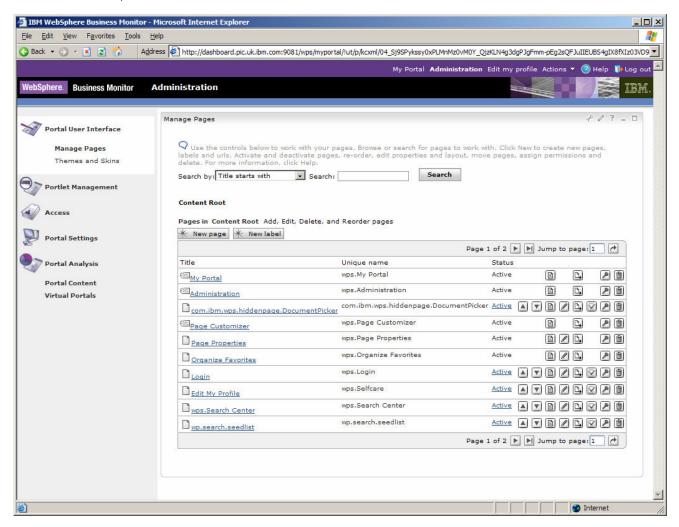
Scorecards



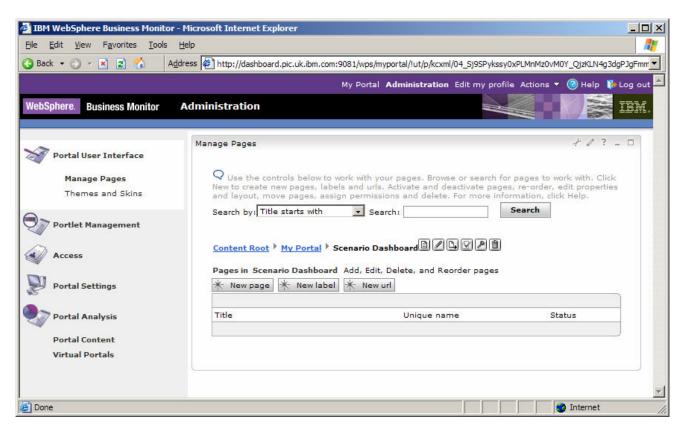
#### Part 2: Create the dashboard pages

In this part you will create the pages for the dashboard. Each page can have any number of portlets added to it and you will create four pages for your dashboard – each one hosting different views.

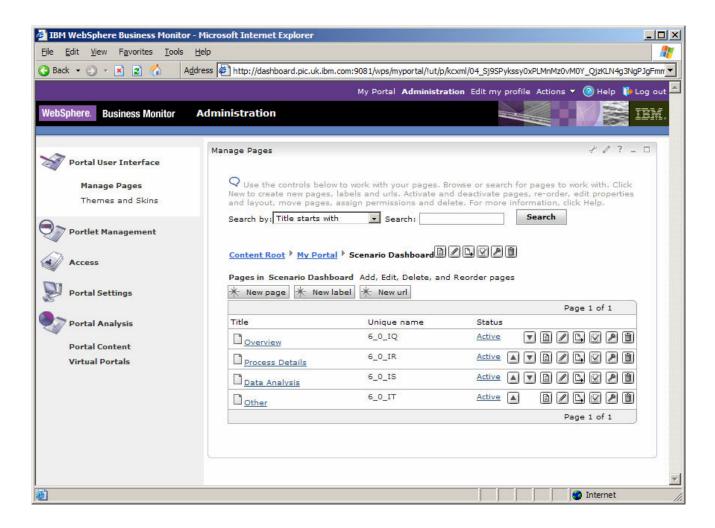
- \_\_\_\_ 1. Create a parent page called 'Dashboard' within 'My Portal' and then add four sub-pages called 'Overview', 'Process Details', 'Data Analysis' and 'Other'.
  - \_\_ a. Click on **Portal User Interface** then **Manage Pages** in the Portal administration console.
  - \_\_ b. Click on **Content Root** (if you are already at the Content Root then you will not be able to click on it).



- c. Click on My Portal.
- \_\_ d. Click the New page button (be sure you click the button, and do not click on an existing page called 'NewPage' that you may have created in the End to End lab) and enter the title 'Scenario Dashboard' and click OK. Click OK again to acknowledge the page creation.
- e. Click on Scenario Dashboard.



- \_ f. Click **New page** and enter the title '**Overview**' and click **OK**. Click **OK** again to acknowledge the page creation.
- \_\_ g. Click **New page** and enter the title '**Process Details**' and click **OK**. Click **OK** again to acknowledge the page creation.
- \_\_ h. Click New page and enter the title 'Data Analysis' and click OK. Click OK again to acknowledge the page creation.
- \_\_ i. Click **New page** and enter the title '**Other**' and click **OK**. Click **OK** again to acknowledge the page creation.



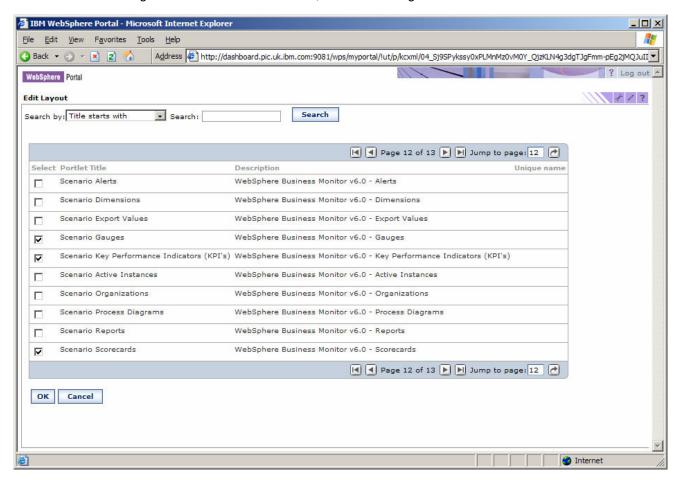
#### Part 3: Add the views to the dashboard pages

In this part you will add your portlet views for Scenario to each of the relevant dashboard pages you created.

1.	Add the Gauges, KPI and Scorecard views to the 'Overview' page.
_	$\_$ a. Click the Edit Page Layout icon $ extstyle igstyle igstyle$ for the 'Overview' page.
_	_ b. Click the 'one column' layout icon and then click <b>OK</b> to confirm the change.

\_\_ c. Click the **Add portlets** button.

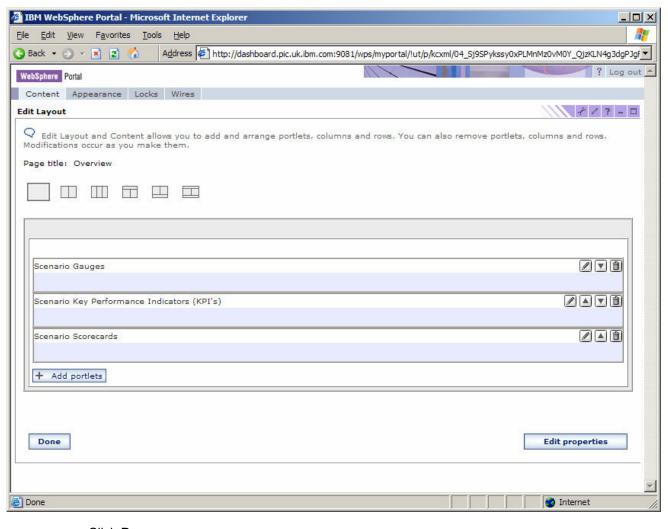
\_\_ d. Use the arrows to move to the page showing the Scenario copies of the views and select the following three views: 'Scenario KPIs', 'Scenario Gauges' and 'Scenario Scorecards'.



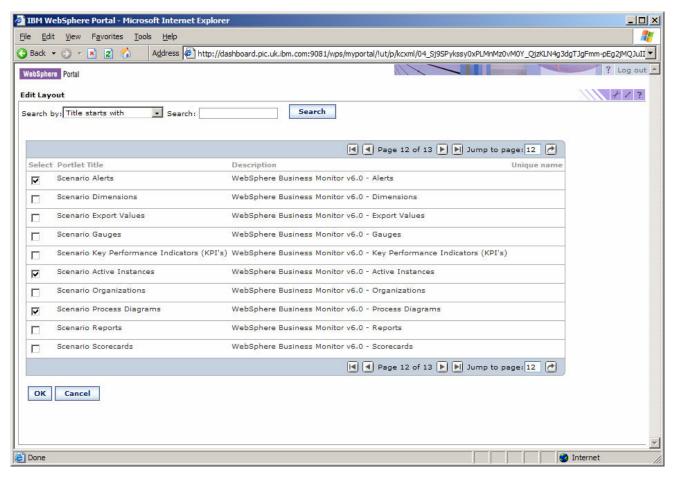
Note: You may have to navigate through multiple pages if the three views are not all together on one page

\_\_ e. Click **OK.** 

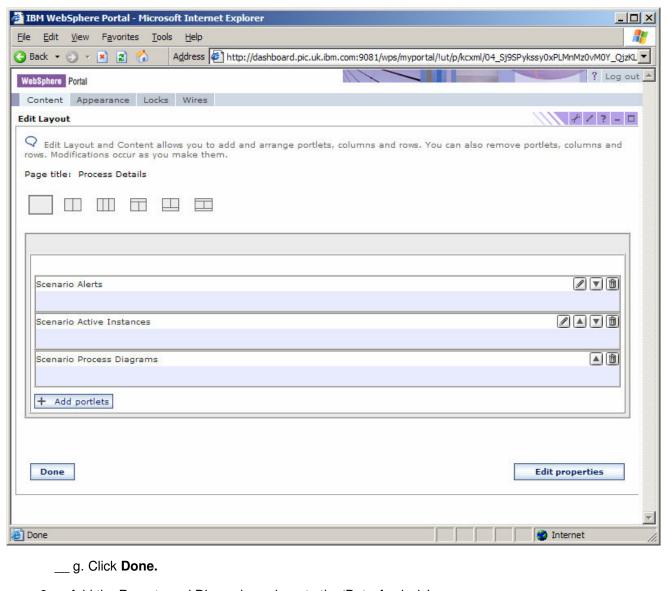
\_\_ f. Re-order the views using the up and down arrows to move them into this order (from the top): Gauges, KPIs, Scorecards.



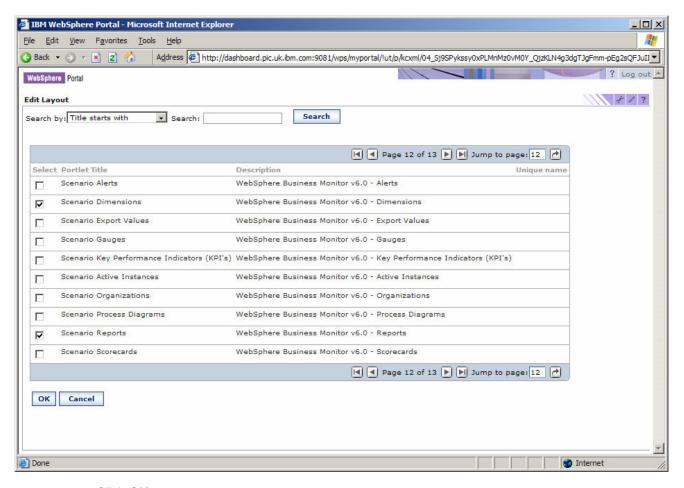
- \_\_ g. Click Done.
- 2. Add the Active Instances, Process Diagram and Alerts views to the 'Process Details' page.
  - \_\_ a. Click the Edit Page Layout icon don't for the 'Process Details' page.
  - \_\_ b. Click the 'one column' layout icon and then click **OK** to confirm the change.
  - \_\_ c. Click the **Add portlets** button.
  - \_\_ d. Use the arrows between to move to the page showing the Scenario copies of the views and select the following three views: 'Scenario Active Instances', 'Scenario Process Diagrams' and 'Scenario Alerts'.



- \_\_ e. Click OK.
- \_\_ f. If necessary, re-order the views using the up and down arrows 🖾 🗷 to move them into this order (from the top): Alerts, Active Instances, Process Diagrams.

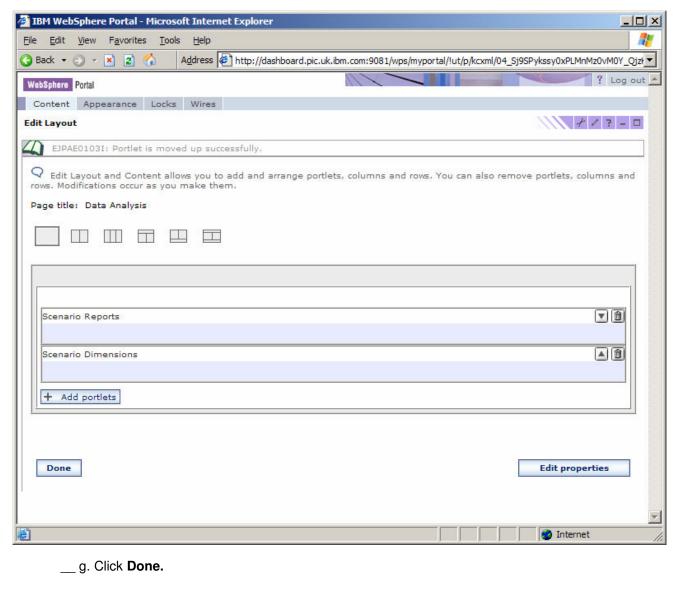


- \_\_\_\_\_ 3. Add the Reports and Dimensions views to the 'Data Analysis' page.
  - \_\_ a. Click the Edit Page Layout icon do for the 'Data Analysis' page.
  - \_\_ b. Click the 'one column' layout icon and then click **OK** to confirm the change.
  - \_\_ c. Click the **Add portlets** button.
  - \_\_ d. Use the arrows to move to the page showing the Scenario copies of the views and select the following two views: 'Scenario Dimensions' and 'Scenario Reports'.

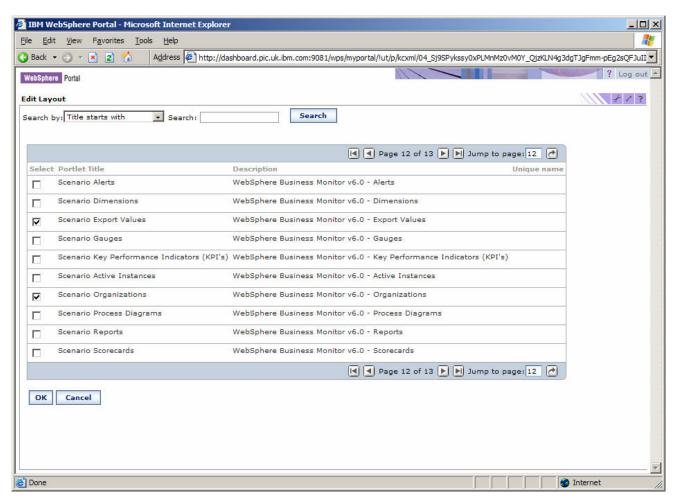


e. Click **OK.** 

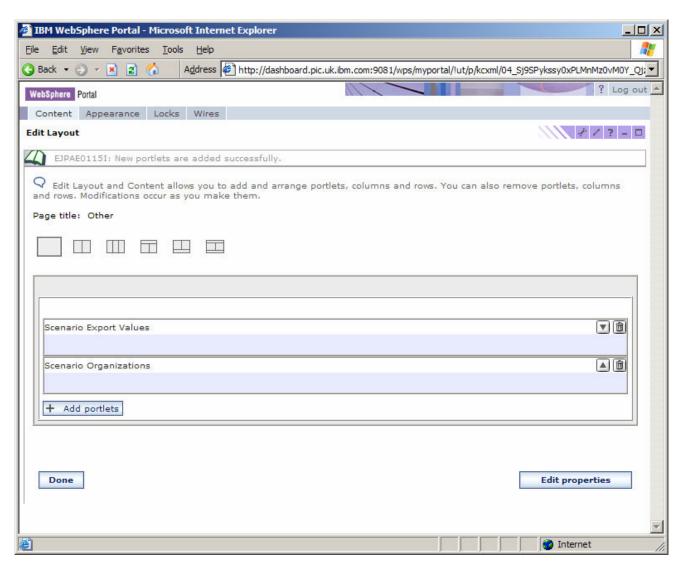
\_\_ f. If necessary, re-order the views using the up and down arrows 🔎 💌 to move them into this order (from the top): Reports, Dimensions.



- \_\_\_\_\_ 4. Add the Organizations and Export Values views to the 'Other' page.
  - \_\_ a. Click the Edit Page Layout icon for the 'Other' page.
  - \_\_ b. Click the 'one column' layout icon and then click **OK** to confirm the change.
  - \_\_ c. Click the **Add portlets** button.
  - \_\_ d. Use the arrows to move to the page showing the Scenario copies of the views and select the following two views: 'Scenario Export Values' and 'Scenario Organizations'.



- \_\_ e. Click OK.
- \_\_ f. If necessary, re-order the views using the up and down arrows 🔎 🔟 to move them into this order (from the top): Export Values, Organizations.



\_\_ g. Click Done

# Part 4: Configuring the Gauges view

In this part you will go to the Overview page that you just created and then you will configure the Gauges portlet that you placed on this page. You will use it to show information about the Scenario business process. The Gauges view displays individual KPI values, in the form of a gauge that looks like a speedometer or tachometer. Values are either relative to KPI lower- and upper-limit values or relative to the KPI target value. The Gauges view focuses on representing numeric KPIs that belong to aggregated business measures in a business measures model. Each gauge represents the value of a single KPI. You may want to review the business measures model for the Scenario process – you can build it yourself using the Business Measures Editor lab, or you can open the pre-supplied completed model as shown in the end to end scenario lab.

We will create a gauge to display the 'Average Approval Time' KPI that was defined in BME as follows:

Measure type: KPI

Name: Average Approval Time

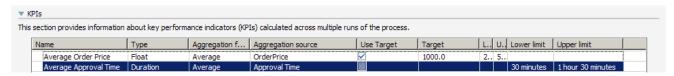
Type: **Duration** 

Aggregation function: Average

Aggregation source: Approval Time (a stopwatch)

Lower limit: 30 minutes

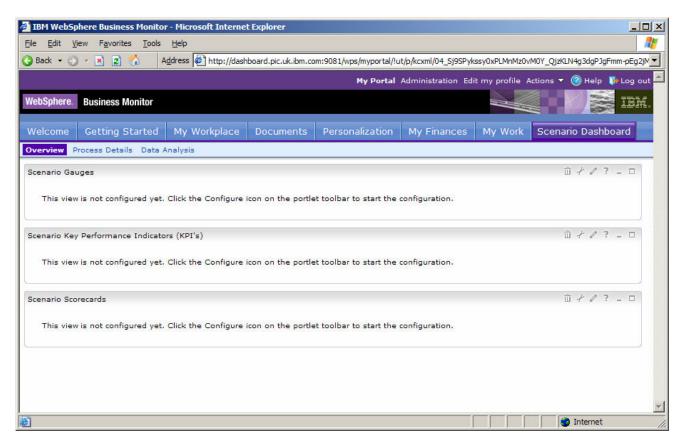
Upper limit: 1 hour 30 minutes



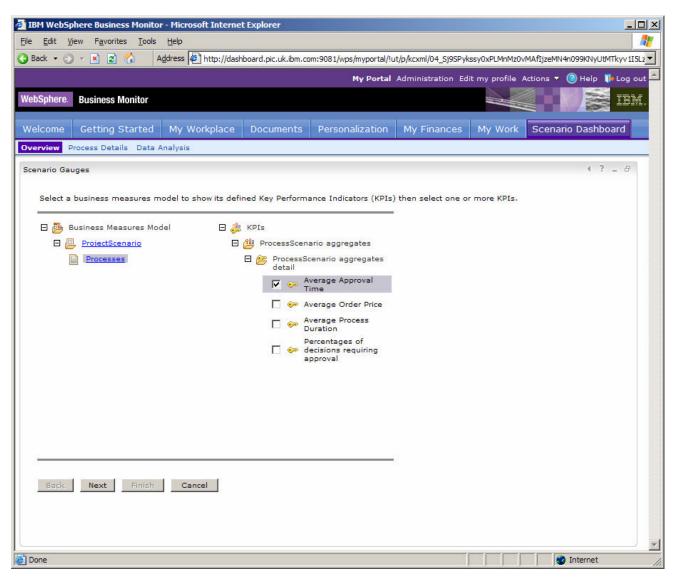
- \_\_\_\_\_ 1. If you are not logged in already, login to WebSphere Portal. Go to the Overview page you created.
  - a. Go to http://<dashboard\_server>:9081/wps/portal and click Log-in at the top right.
  - b. Enter your userid/password (defaults to wpsadmin/wpsadmin).

Note: If you are already logged in then you may be still looking at the Administration pages. In this case you must click **My Portal** at the top to leave the Administration.

- c. Click on the 'Scenario Dashboard' tab at the top.
- \_\_ d. Click on the 'Overview' sub-tab under the main tab bar.



- \_\_\_\_\_ 2. Configure the Gauges view to show the Average Approval Time KPI.
  - \_\_ a. Click the configure icon at the top right of the Scenario Gauges portlet.
  - b. Expand Business Measures Model > ProjectScenario > Processes and click on the Processes leaf.
  - \_\_ c. Check the 'Average Approval Time' KPI.



- d. Click Next.
- \_\_ e. You do not need to change the layout of the number of rows/columns as you are only configuring one gauge in this lab.
- \_\_ f. Make sure that KPI limits is specified (you created this KPI using limits in the Modeler business measures lab).
- \_\_ g. Set the gauge minimum to **0** and the maximum to **7200000**.



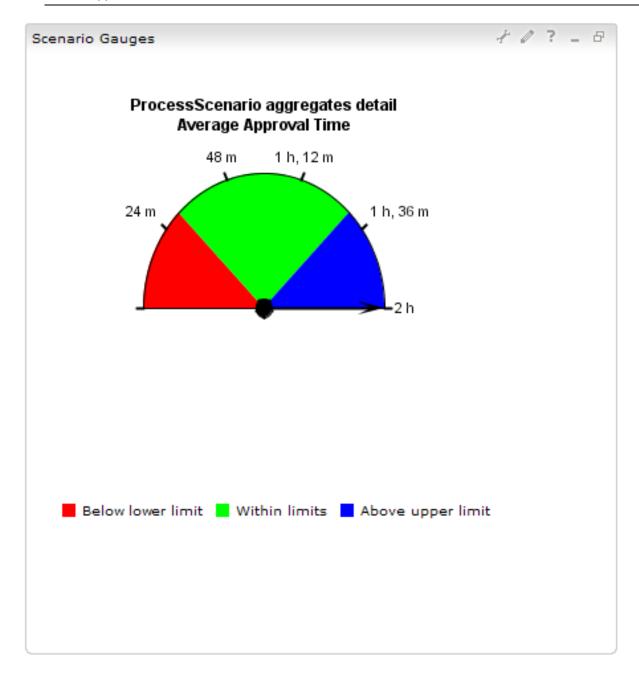
**Note:** The units for durations are 'milliseconds' so the 7200000 figure represents 2 hours. Note that the KPI was defined with a lower limit of 30 minutes and an upper limit of 1 hour 30 minutes.

\_\_ h. Optionally de-select the 'Show informational text' and click **Next.** 

2006 February, 02

\_\_ i. Review the gauge and click Finish.

**Note:** The position of the gauge hand will depend on the processes you have executed and how long they took to approve.



#### Part 5: Configuring the KPIs view

In this part you will go to the Overview page that you just created and then you will configure the KPIs portlet that you placed on this page. You will use it to show information about the Scenario business process. The KPIs view displays all KPI information so that business users can easily monitor them and take action if necessary. The KPIs view focuses on representing KPIs with lower and upper limits. The KPIs view can display both numeric and non-numeric KPIs: numeric KPIs return numbers or percentages, while non-numeric KPIs return true or false, or date-and-time values, for example.

We will create a KPI view to display the 'Average Approval Time' KPI that was defined in BME as follows:

Measure type: KPI

Name: Average Approval Time

Type: **Duration** 

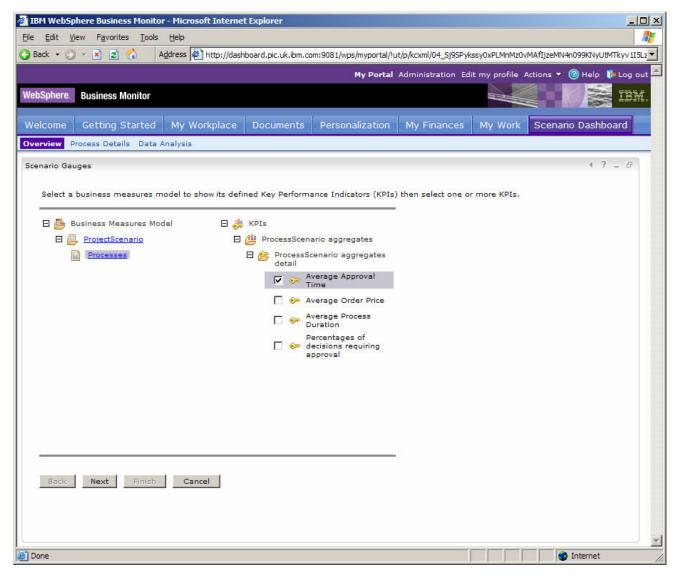
Aggregation function: Average

Aggregation source: **Approval Time** (a stopwatch)

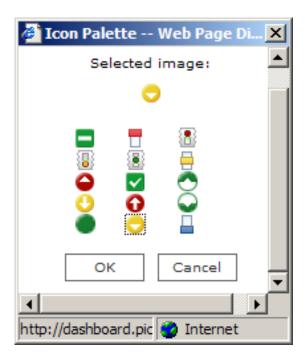
Lower limit: 30 minutes

Upper limit: 1 hour 30 minutes

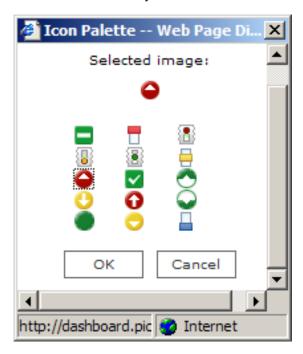
This section provides infor	mation about key perf	ormance indicators (KP	Is) calculated across multip	le runs of the process.						
Name	Туре	Aggregation f	Aggregation source	Use Target	Target	L.	. U.,	Lower limit	Upper limit	
Average Order Pri		Average	OrderPrice	<u>~</u>	1000.0	2.	. 5			
Average Approval	Time Duration	Average	Approval Time					30 minutes	1 hour 30 minutes	
creat	ed.		ly, login to Web	·						
a. G	o to <u>http://<c< u=""></c<></u>	<u>lashboard</u> s	<u>erver&gt;:9081/w</u> r	os/portal and	click <b>Lo</b>	g-in a	at t	he top r	ight.	
b. E	nter your use	erid/passwor	d (defaults to w	/psadmin/wp	sadmin).					
c. Cl	ick on the 'S	Scenario Da	shboard' tab a	t the top.						
d. C	ick on the 'C	<b>Overview</b> ' su	ıb-tab under the	e main tab ba	ar.					
2. Confi	gure the KP	I view to sho	w the Average	Approval Tir	ne KPI.					
a. C	ick the confi	gure icon	at the top rig	ght of the Sce	enario Ke	ey Pe	rfo	rmance	Indicators po	ortle
	kpand Busir rocesses lea		res Model > Pi	rojectScena	rio > Pro	cess	es	and cli	ck on the	
c. Cl	neck the 'Av	erage Appro	val Time' KPI.							



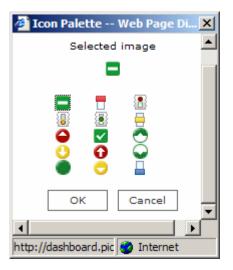
- d. Click Next.
- \_\_ e. This page allows you to customize the look of your KPI view. Click the 'Palette' icon on the for the 'Below limit' option. Then check the yellow down icon and click **OK**.



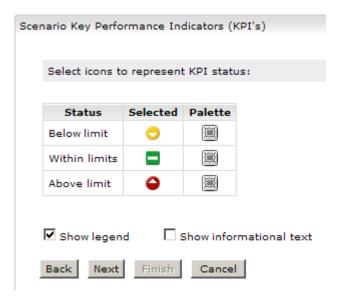
\_\_ f. Change the 'Above limit' icon in the same way:



\_\_ g. Change the 'Within limits' icon in the same way:



\_\_ h. Optionally de-select the 'Show informational text' option and click Next.



\_\_ i. Review the KPI view and then click Finish.



#### Part 6: Configuring the Scorecards view

In this part you will go to the Overview page that you just created and then you will configure the Scorecards portlet that you placed on this page. You will use it to show information about the Scenario business process. A scorecard is a set of performance measures that are linked to objectives and goals of a specific business area. The Scorecard view allows users to monitor groups of KPIs, where for each KPI, information is available for the KPI relative to its target value. This view is used to display numeric KPIs for which a target value was specified in the BME definition of the KPI. If no targets are defined then the status, target and score will not be shown.

We will create two scorecards – Financial (which is a default scorecard) and Efficiency. The Financial scorecard will be used to show the 'Average Order Price' KPI, the Efficiency scorecard will show 'Percentage of decisions requiring approval' and 'Average Process Duration'. There three KPIs were defined as follows:

Measure type: KPI

Name: Average Order Price

Type: Float

Aggregation function: Average

Aggregation source: **OrderPrice** (a metric)

Target: 1000

Lower target margin (%): 25 Upper target margin (%): 50

Measure type: KPI

Name: Percentage of decisions requiring approval

Type: Float

Aggregation function: User Defined

Aggregation source: (('Total Approvals' / 'Total Decisions')) x 100.0

Target: 25

Lower target margin (%): 20 Upper target margin (%): 20

Measure type: KPI

Name: Average Process Duration

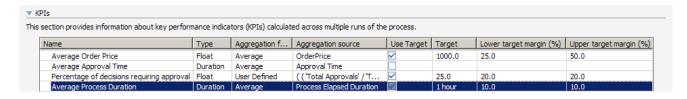
Type: **Duration** 

Aggregation function: Average

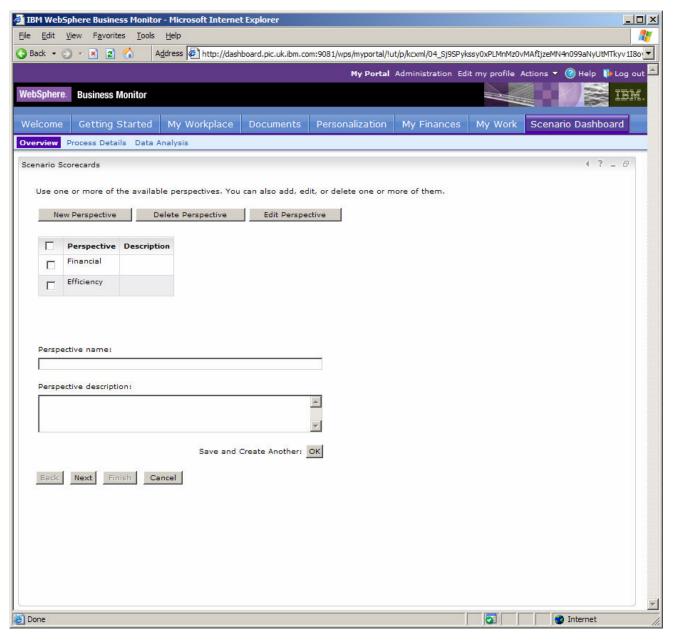
Aggregation source: **Process Elapsed Duration** (an inbuilt stopwatch)

Target: 1 hour

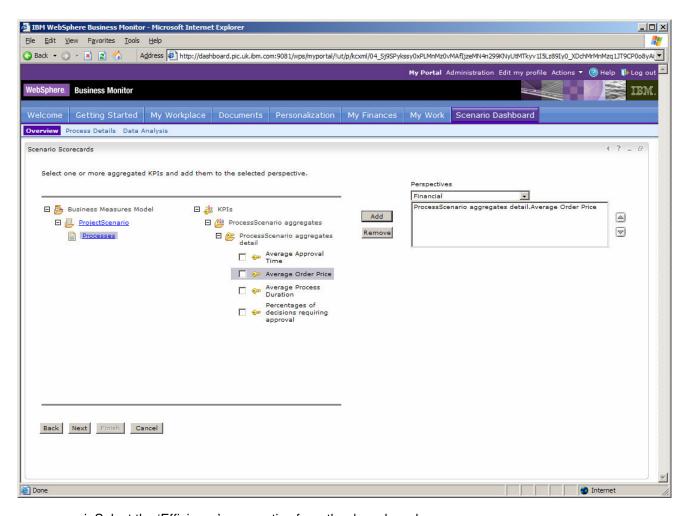
Lower target margin (%): **10** Upper target margin (%): **10** 



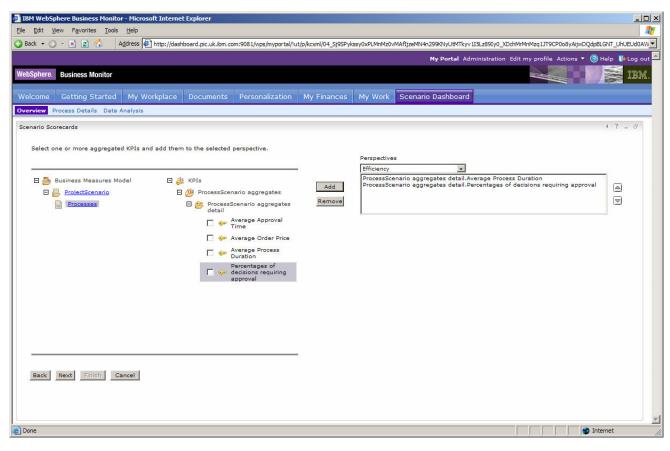
 _ 1.	If you are not logged in already, login to WebSphere Portal and go to the Overview page you created.
_	_ a. Go to http:// <dashboard_server>:9081/wps/portal and click Log-in at the top right.</dashboard_server>
_	_ b. Enter your userid/password (defaults to wpsadmin/wpsadmin).
_	_ c. Click on the 'Scenario Dashboard' tab at the top.
_	_ d. Click on the 'Overview' sub-tab under the main tab bar.
_ 2.	Configure the Scorecards view to show the targeted KPIs using two scorecards – Financial and Efficiency.
_	_ a. Click the configure icon at the top right of the Scenario Scorecards portlet.
_	_ b. Select the 'Learning & Growth' and the 'Customer' perspectives and click 'Delete Perspective'.
_	_ c. Click <b>Yes</b> in the confirmation box.
_	_ d. Select the 'Internal Business Process' and click 'Edit Perspective'.
_	_ e. Edit the perspective name and change it to 'Efficiency' and then click the OK button.



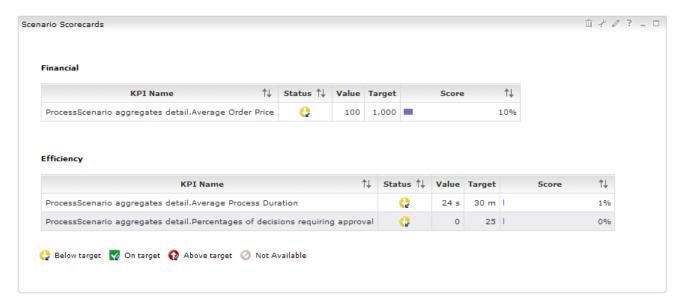
- f. Click Next.
- \_\_ g. Expand **Business Measures Model > ProjectScenario > Processes** and click on the **Processes** leaf.
- \_\_ h. Select 'Average Order Price' and click **Add** to add this KPI to the Financial scorecard.



- \_\_ i. Select the 'Efficiency' perspective from the drop-down box.
- \_\_ j. Select the 'Average Process Duration' and the 'Percentages of decisions requiring approval' and click **Add** to add them to the Efficiency perspective.



- \_\_ k. Click Next.
- \_\_ I. Optionally change the palette as you did for the KPIs view.
- \_\_ m. Optionally de-select the 'Show information text' option.
- \_\_ n. Click Next.
- Review the scorecards and click Finish.



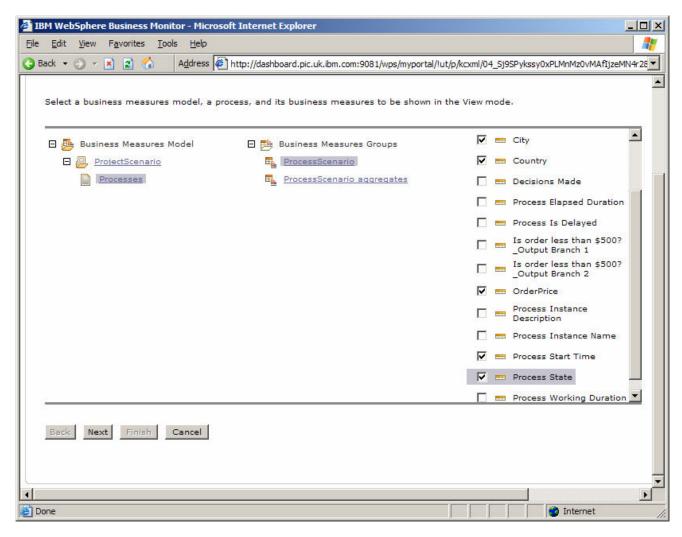
Note: The values shown will depend upon the data in the processes you have executed.

# Part 7: Configuring the Active Instances view

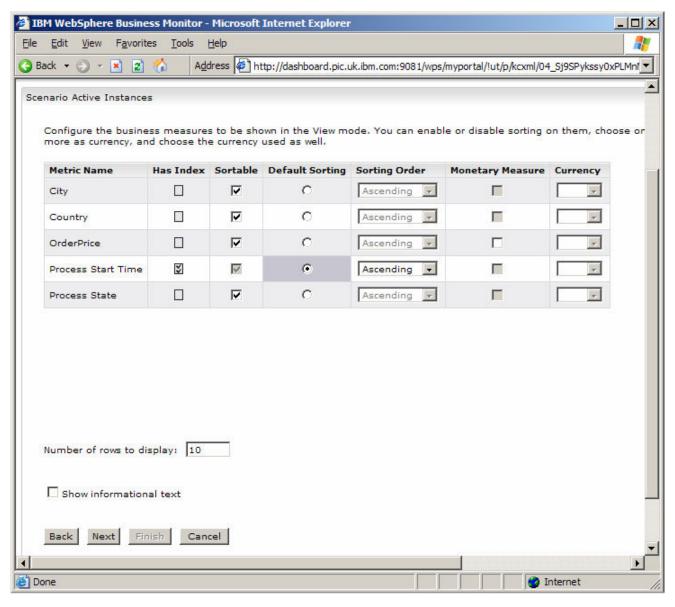
In this part you will go to the Process Details page that you created and then you will configure the Active Instances portlet that you placed on this page. You will use it to show information about the Scenario business process. The Active Instances view shows the details of a process at run time. It displays information about running instances as they happen. Viewing the details of this runtime analysis can help you to closely monitor your business processes.

Using the Active Instances view, you can also monitor values of aggregate KPIs and metrics. The available process instances for a selected business-measure group are displayed. You can view and monitor the values of their associated KPIs, metrics, keys, timers, and counters. You can drill down on child instances of a parent instance to view the underlying activities, for example, items in process instances, whether they are realized by activities, local subprocesses, or global (reusable) subprocesses.

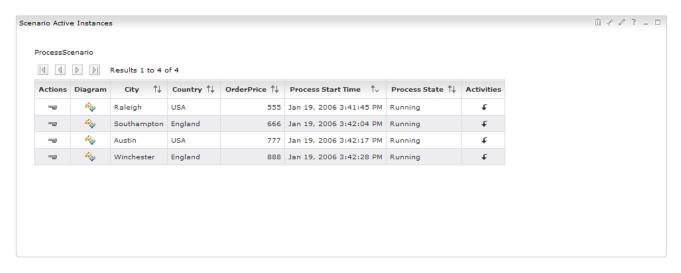
_ 1. If you are not logged in already, login to WebSphere Portal and go to the Process Details page you created.
a. Go to http:// <dashboard_server>:9081/wps/portal and click Log-in at the top right.</dashboard_server>
b. Enter your userid/password (defaults to wpsadmin/wpsadmin).
c. Click on the 'Scenario Dashboard' tab at the top.
d. Click on the 'Process Details' sub-tab under the main tab bar.
 2. Configure the Active Instances view to show information about active Scenario processes.
Note: You may wish to start some instances of the process with an OrderPrice greater than 500. This will cause the processes to stop at the human task for approval. These processes will then be 'active' in the runtime engine and you can see them in this active instances view. You can refer to the end to end scenario lab for details of how to do this.
a. Click the configure icon at the top right of the Scenario Active Instances portlet.
b. Expand Business Measures Model > ProjectScenario > Processes and click on the Processes leaf.
c. Click <b>ProcessScenario</b> under 'Business Measures Groups'.
d. Select the following Business Measures:
e. City, Country, OrderPrice, Process Start Time, Process State



- \_\_ f. Click Next.
- \_\_ g. Check the 'Sortable' option for all of the measures and accept the warnings for those measures that do not have indexes (you can specify to create an index in the Modeler tool if you wish).
- \_\_ h. Select the 'Default Sorting' option for Start Time.
- \_\_ i. Optionally de-select the 'Show information text' option.



- \_\_ j. Click Next.
- \_\_ k. You can optionally configure a filter if you wish. Click Next.
- I. Click Finish.



- \_\_\_\_ 3. Drill down on a process instance.
  - \_ a. Click the Activities icon for any of the process instances to see the state of the activities that occur within the process instance.



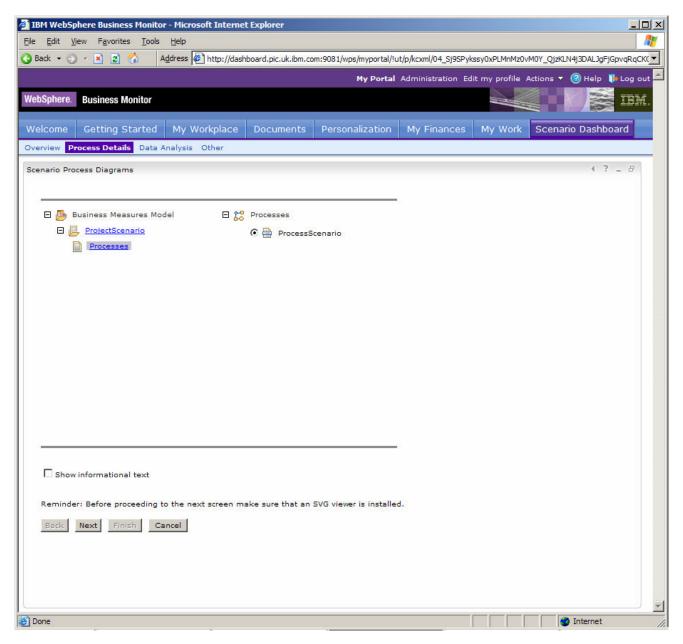
- \_\_ b. Click the '**Drill Up**' button to return to the active instances view.
- \_\_ c. You can also click on the Actions icon and then suspend, resume or terminate a process instance. It will take a few minutes for the action to filter through to the information shown in the active instances view, and you will need to refresh the page to see this. Also you will not get any feedback when you select one of these actions so it may seem like nothing is happening.

### Part 8: Configuring the Process Diagrams view

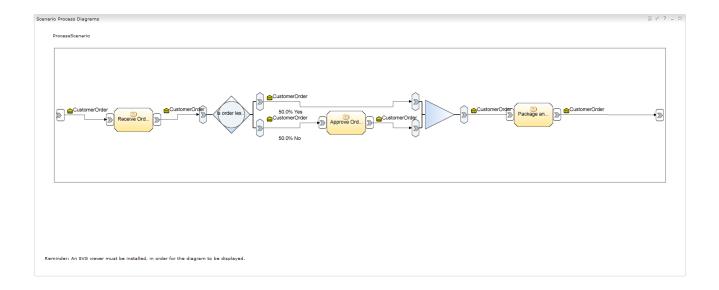
In this part you will go to the Process Details page and configure the Process Diagrams portlet that you placed on this page. This view shows a Scalable Vector Graphic (SVG) picture of the process diagram, as seen in the business measures editor's 'Diagram' view.

Note: You will need to install an SVG viewer for your Internet Explorer before you can use this view. You can obtain a viewer from the internet, for example <a href="http://www.adobe.com/svg/viewer/install/main.html">http://www.adobe.com/svg/viewer/install/main.html</a>.

1. If you a created	are not logged in already, login to WebSphere Portal and go to the Process Details page you d.
a. Go	to <a href="http://&lt;dashboard_server&gt;:9081/wps/portal">http://<dashboard_server>:9081/wps/portal</dashboard_server></a> and click <b>Log-in</b> at the top right.
b. Ent	er your userid/password (defaults to wpsadmin/wpsadmin).
c. Clic	k on the 'Scenario Dashboard' tab at the top.
d. Clic	ck on the 'Process Details' sub-tab under the main tab bar.
2. Config	ure the Process Diagrams view to show information about the Scenario process.
a. Clic	ck the configure icon at the top right of the Scenario Process Diagrams portlet.
	pand Business Measures Model > ProjectScenario > Processes and click on the ocesses leaf.
c. Clic	ek <b>ProcessScenario</b> under 'Processes'.
d. Opt	tionally de-select the 'Show information text' option.



- \_\_ e. Click Next.
- \_\_ f. You should see the Scenario process diagram previewed. Click Finish.



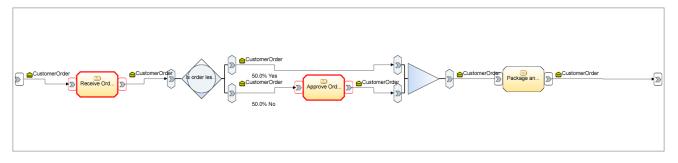
## Part 9: Wiring the Active Instances view to the Process Diagrams view

In this part you will create a 'wire' – a link between two portlets on a page that allows them to interact with each other. You will do this so that you can click on a process in the active instances view and have the process diagrams view update to show this process.

1.	If you are not log	gged in already, l	ogin to WebSphere	e Portal and go t	o the Administra	tion page.	
	a. Go to http://<	dashboard serve	er>:9081/wps/porta	al and click <b>Log-</b>	in at the top righ	ıt.	
	b. Enter your us	serid/password (d	defaults to wpsadm	in/wpsadmin).			
	c. Click on the '	Administration'	link at the very top	of the page.			
2.	Configure the wi	ire between the A	Active Instances vie	ew and Process	Diagrams view o	on the Proce	ess
	a. Click on <b>Por</b> t	tal User Interfac	e > Manage Page	s.			
	b. Click on 'My	Portal' then click	on 'Scenario Das	shboard'.			
	c. Click the Edit	Page Layout icc	on 🗷 to the right of	'Process Details	s'.		
	d. Click the 'Wi	res' tab at the top	p of the page.				
	e. Select <b>'Scen</b>	ario Active Insta	ances' as the Sour	ce portlet.			
	f. Select 'Instar	nce Information	– OUT' as the Ser	iding option.			
	g. Select 'Proc	<b>ess Details</b> ' as t	he Target page.				
	h. Select 'Scen	ario Process Di	agrams' as the Ta	rget portlet.			
	i. Select <b>'Insta</b> r	nce Information	– <b>IN</b> ' for the Recei	ving option.			
	j. Select ' <b>Publi</b>	o' for the Wire Ty	pe.				
	k. Click the Add	l icon 🛨 .					
Wires for	page: Process Deta	ils					
Source	portlet	Sending	Target page	Target portlet	Receiving	Wire Type	
Scenario	Active Instances	Instance Information - OU	Process Details T	Scenario Process Diagrams	Instance Information - IN	Public	â
	I. Click <b>Done.</b>						
3.	Test the wire.						
	a. Click 'My Po	rtal' at the top of	the page.				
	b. Click the 'Sc	enario Dashboa	rd' tab and then th	e 'Process Deta	ails' sub-tab.		
	c. Click on the '	្រ Diagram' icon	for one of the a	ctive instances.			

**Note:** You will need to have started some process instances and not completed the Approve Order for there to be any processes in your active instances view.

\_\_ d. The Process Diagrams view will update to show the process diagram for the instance you selected, and will highlight the activities that have started in red:



\_\_ e. You can click the 'Restore Original Content' button at the bottom of the view to reset the Process Diagrams view back to its normal behavior.

#### Part 10: Configuring the Reports view

In this part you will go to the Data Analysis page that you created and then you will configure the Reports portlet that you placed on this page. You will use it to show information about the Scenario business process. The Reports view displays data about the process over a specified period of time, for example month to date, year to date or specific date ranges.

We will create a reports view to display the order price and instances count, broken down by Country and shown daily for the month to date. The OrderPrice metric was configured as quantitative data in the BME, with Country and City defined as qualitative data levels of a 'Location' metric. The order price metric was defined as a 'Sum' aggregation so the report will show the total order price by country and date. For reference, the metric definitions that were created in BME are:

Measure type: **Metric** Name: **OrderPrice** 

Type: Float

Usage in WebSphere Business Monitor: Quantitative data in dimensional analysis

Aggregation measure name: Total Cost of Order

Aggregation function: Sum

Measure type: **Metric** Name: **Country** Type: **String** 

Usage in WebSphere Business Monitor: Aggregation group in dimensional analysis

Part of dimension key: **Location** Aggregation group level: **0** 

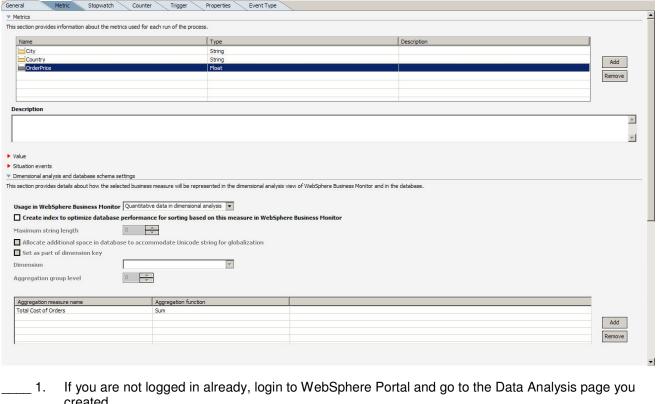
Measure type: Metric

Name: City Type: String

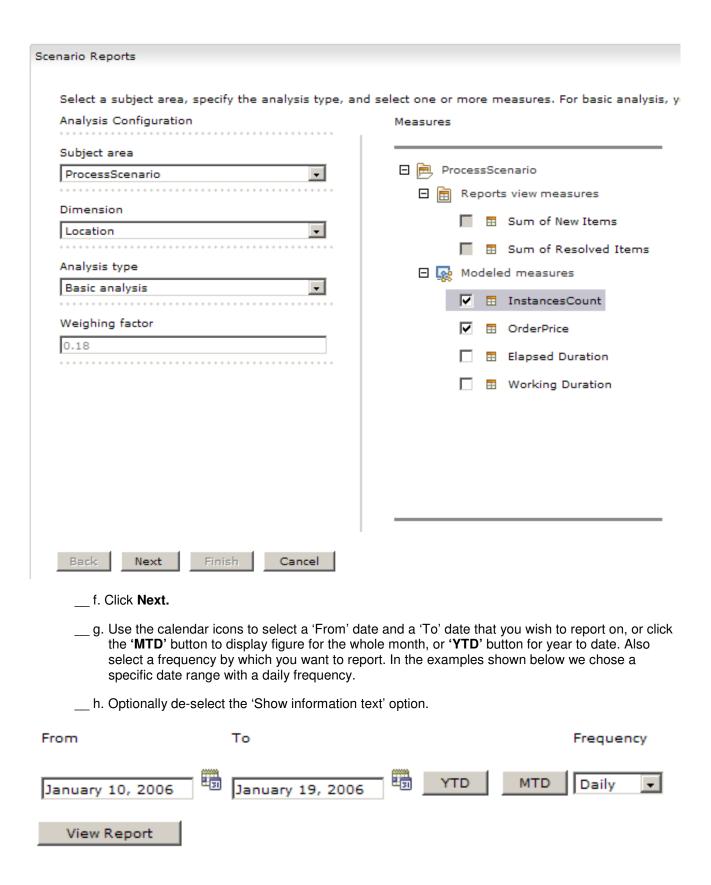
Usage in WebSphere Business Monitor: Aggregation group in dimensional analysis

Part of dimension key: **Location**Aggregation group level: **1** 

Some of this information is shown in the BME screen capture below:

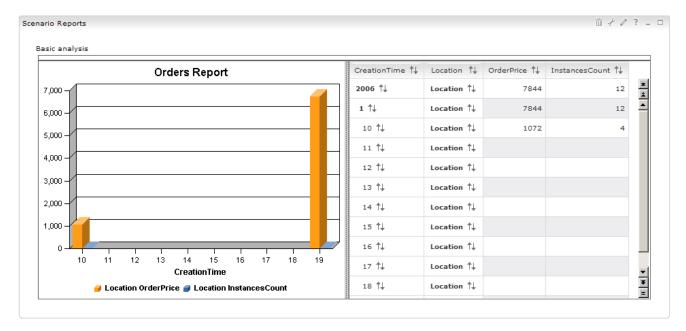


- created.
  - \_\_ a. Go to http://<dashboard\_server>:9081/wps/portal and click Log-in at the top right.
  - \_\_ b. Enter your userid/password (defaults to wpsadmin/wpsadmin).
  - \_\_ c. Click on the 'Scenario Dashboard' tab at the top.
  - d. Click on the 'Data Analysis' sub-tab under the main tab bar.
- Begin by configuring the Reports view to show OrderPrice by Location over a specific date range for the Scenario process.
  - a. Click the configure icon at the top right of the Scenario Reports portlet.
  - \_\_ b. Select 'ProcessScenario' as the subject area.
  - \_\_ c. Click 'Location' as the dimension.
  - d. Review the other types of analysis that the report can show but choose the default, 'Basic Analysis'.
  - e. Select the 'OrderPrice' measure.



**Note:** The chart and table defaults to showing just the current day's data. When you click 'View Report' you will cause the chart and table to reflect the range and frequency that you specified.

- \_\_ i. Click 'View Report'.
- \_\_ j. Right click on the chart background again and choose 'Chart Options...'
- \_\_ k. Enter a title, 'Orders Report' and click OK.
- Click Finish.

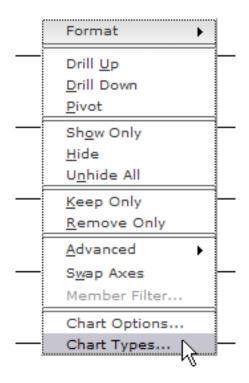


Note: Your data will be different depending on the range and how many processes you have run. You will also see that the InstancesCount bar is probably dwarfed by the OrderPrice – we will fix this in the next part of this lab.

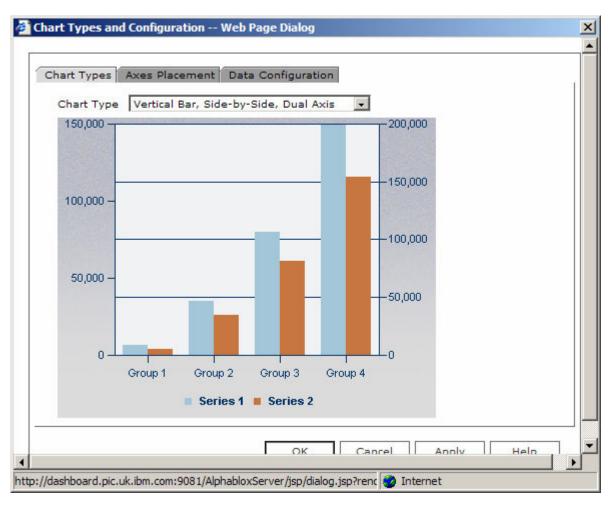
#### Part 11: Use the Reports view to analyze data

In this part you will use the Reports view you just created to perform some further analysis.

- 1. Change the chart type to dual axis to better display the two measures.
  - \_\_ a. Right click on the chart background and select 'Chart Types...'



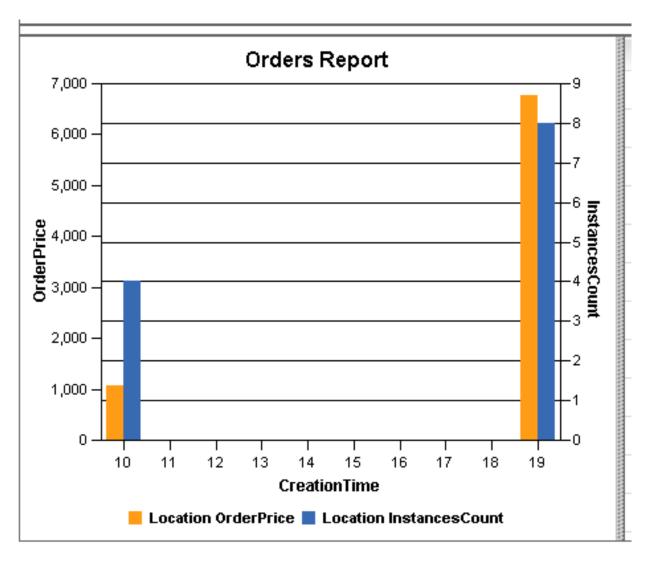
\_\_ b. Select the 'Vertical Bar, Side-by-Side, Dual Axis' for the chart type.



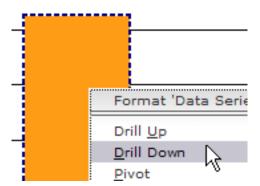
- \_\_ c. Click on the 'Axes Placement' tab.
- \_\_ d. Change the 'InstancesCount' to '2nd y-axis'.



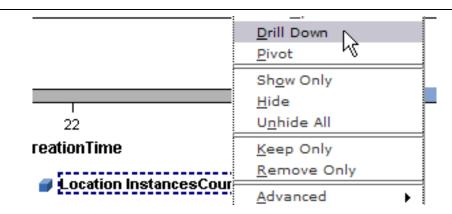
\_\_ e. Click **OK**. You should see that the instances count is now shown against the second y-axis.



- \_\_\_\_\_ 2. Drill down on the location to show the information by country.
  - \_\_ a. Right click on one of the bars and choose 'Drill Down'.



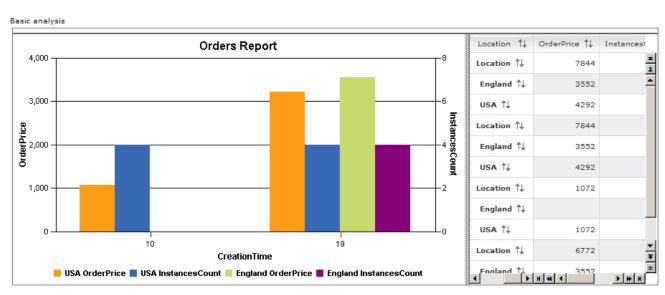
**Note:** You can also click on the legend values to achieve the same result or on the bolded '**Location**' in the table on the right:



or:

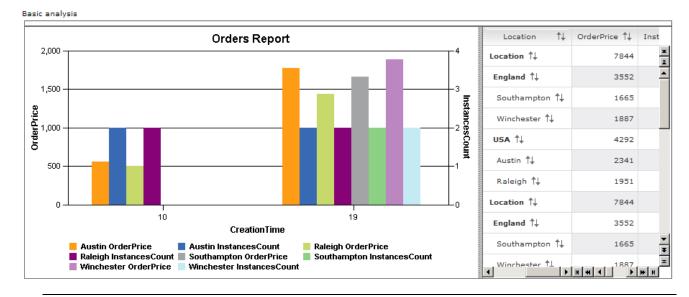
		<b>A</b> 1	- 1 Al
CreationTime 1	Locatio	n I∔	OrderPrice ↑↓
2005 ↑↓	Locatio	n ↑↓	7238
11 ↑↓	Locatio	n ↑l Sor	7238
21 ↑↓	Locatio		
14	Locatio	Dril	l <u>U</u> p
22 ↑↓	Locatio		I Down
'\		<u>E</u> xp	and All

- \_\_ b. Click **OK** to drill down on Location.
- \_\_ c. The chart will update to show the breakdown by country as well.
- \_\_ d. If you like you can right click on certain days on the x-axis and select 'hide' to exclude them from the view. We have done that in the example shown so that we do not display days when there were no orders:



**Note:** In the example shown, only two countries (England and USA) have been used on orders. If you have more countries you will see a greater number of bars.

\_\_ e. You can optionally drill down on one of your countries (for example England or USA as shown here) to see the measures by city. If you drill down on the table (instead of the chart) you can drill down on each country one at a time to show data from cities in one or more countries, for example:



Note: These changes will not be saved to the Reports view and will be lost when you next log in.

#### Part 12: Configuring the Dimensions view

In this part you will go to the Process Details page that you created and then you will configure the Dimensions portlet that you placed on this page. Using the Dimensions view users can generate multidimensional reports that analyze different business aspects of historical business-performance data. Charts and grids present data for analysis against different dimensions.

You will use the Dimensions view to show analysis of the OrderPrice quantitative data and the Location (Country and City) qualitative dimension. You can also use the Dimensions analysis against the inbuilt default dimensions of Creation Time and Termination Time, and the inbuilt default measure of InstancesCount.

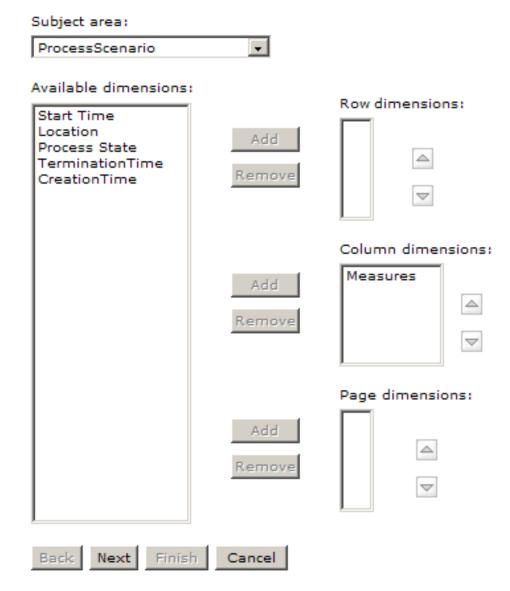
The Dimensions view is the most powerful analysis view in the dashboard.

The relevant measures that you defined in the BME are shown above in the Reports view configuration part of this lab.

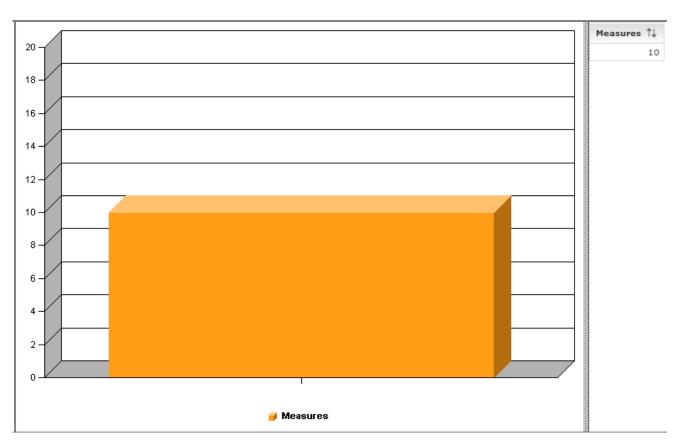
	you are not logged in already, login to WebSphere Portal and go to the Data Analysis page you eated.
a.	Go to <a href="http://&lt;dashboard_server&gt;:9081/wps/portal">http://<dashboard_server>:9081/wps/portal</dashboard_server></a> and click <b>Log-in</b> at the top right.
b.	Enter your userid/password (defaults to wpsadmin/wpsadmin).
c.	Click on the 'Scenario Dashboard' tab at the top.
d.	Click on the 'Data Analysis' sub-tab under the main tab bar.
	egin to configure the Dimensions view, specifying the Measures dimension as a column mension.
a.	Click the configure icon at the top right of the Scenario Dimensions portlet.
b.	Select 'ProcessScenario' as the subject area.
c.	Select 'Measures' from the 'Available dimensions' list and click Add to add it to the 'Column dimensions' list.

**Note:** You can also add other dimensions to the row, column or page dimensions list at this stage. At a minimum you must add one dimension to the columns list. Instead, we will use the 'Edit Layout' feature (on the next configuration page) to specify the other dimensions. You can use either

Also note that the 'Measures' dimension contains all of the quantitative measures that you defined in BME, as well as some pre-defined ones like 'InstancesCount'.



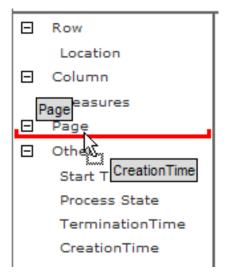
\_\_ d. Click **Next**. The single measures dimension is shown as a column with a simple graph. We will use the interactive layout customization to show more information:



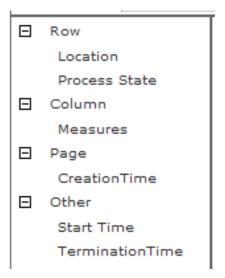
- \_\_\_\_\_ 3. Customize the layout to show other dimensions.
  - \_\_ a. Optionally de-select the 'Show informational text' option.
  - \_\_ b. Click the 'Show Layout' icon as indicated by the arrow below:



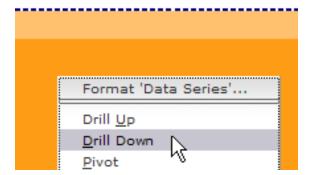
\_\_ c. Using the layout panel to the left of the graph, drag and drop dimensions (as shown).



\_\_ d. Create the overall configuration as shown below:



- \_\_ e. Click the 'Show Layout' icon again to turn off the layout view.
- \_\_\_\_\_4. Set up the chart to show the InstancesCount and OrderPrice measures.
  - \_\_ a. Right click on the 'Measures' bar in the chart and select 'Drill Down'.

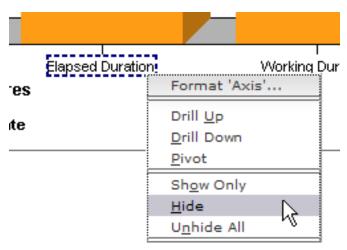


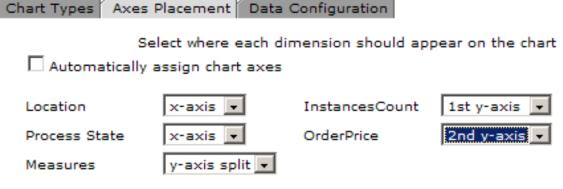
\_\_ b. Make sure that 'Measures: Measures' is selected and click **OK.** 

2006 February, 02

**Note:** The measures dimension contains the inbuilt dimensional measures – InstancesCount, Working Duration and Elapsed Duration. It also contains any user defined metrics that were defined for use in Monitor as quantitative multidimensional analysis measures. In the BME lab you defined the 'OrderPrice' metric in this way so this is the fourth entry that you will see in the Measures dimension.

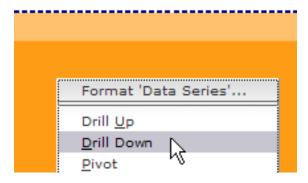
\_\_ c. Right click on 'Elapsed Duration' at the bottom of the chart column and select 'Hide'.



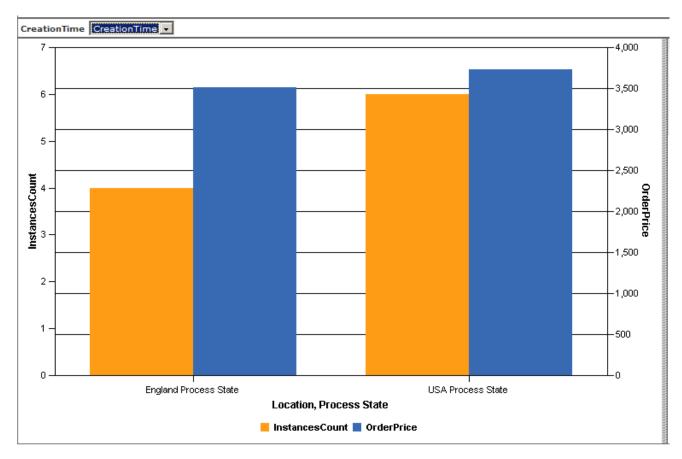


- \_\_ g. Click OK.
- \_\_\_\_\_6. Configure the chart to show the OrderPrice and InstancesCount measures by country.

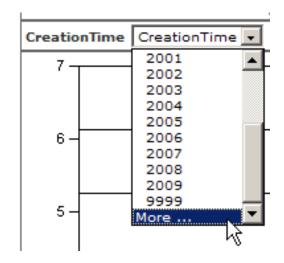
\_\_ a. Right click on either of the bars in the chart and select 'Drill Down'.



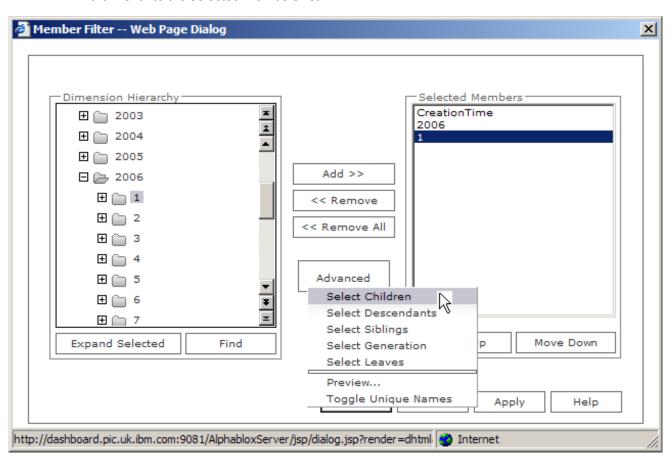
\_\_ b. Make sure that 'Location:Location' is selected and click **OK**. The chart should now look similar to the one shown below, depending on how many different countries you have received orders from:



- \_\_\_\_ 7. Configure the chart page dimension to allow showing any day's data for the current year/month.
  - \_\_ a. Select 'More...' from the 'CreationTime' dropdown (this is the 'page' dimension you specified).

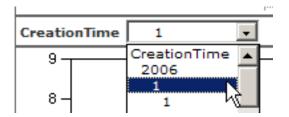


- \_\_ b. Expand the 'Dimension Hierarchy' and select **CreationTime > 2006** (or whatever the current year is for you). Click **Add >>** to add 2006 to the selected members list.
- \_\_ c. Expand 2006 and click **1** (for January) or whatever the current month is for you. Click **Add** >> to add the month to the selected members list.
- \_\_ d. Click **Advanced** and then choose '**Select Children**' from the list. This adds all of the days within the month to the selected members list.



\_\_ e. Click OK.

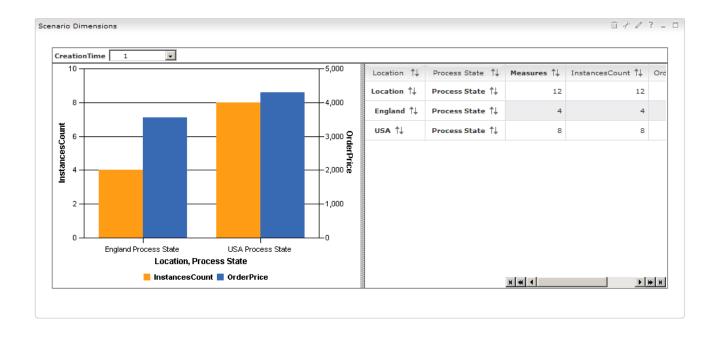
\_\_ f. Select the month in the CreationTime drop down (note that the choices are determined by the members list that you just defined).



\_\_ g. The view preview should look similar to this:



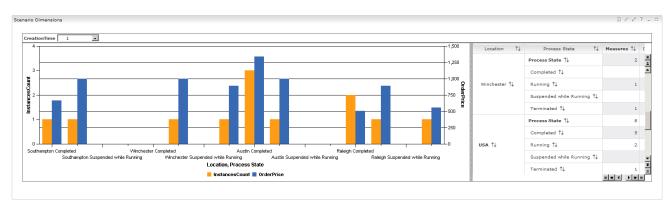
h. Click Finish.



### Part 13: [Optional] Use the Dimensions view to further analyze data

In this part you can use your dimensions view and interact with it to perform further multi dimensional analysis.

- Try using the table instead of the chart to perform further analysis for example drill down on the process state dimension or expand all cities in all countries (right click on various cells in the table and experiment).
- \_\_\_\_\_ 2. The following example shows OrderPrice and InstancesCount for January 2006 broken down by both process state and city (across all countries):



#### Part 14: [Optional] Using the Export Values view

In this part you will go to the Other page that you created and you will configure the Export Values portlet that you placed on this page. Through this view, you can export the average values of processes for a selected business measures model. Exporting actual data from WebSphere Business Monitor helps you to more precisely analyze and manipulate processes information.

You can export the average values of all processes that belong to a specific business measures model. You select a start date and end date to define the duration during which values are calculated and recorded. If the business measures model whose values you want to export contains one or more child business measures models, the averages for every process belonging to those child business measures models will be exported as well. The exported values are:

- The average of elapsed duration and working duration for the entire process and for each underlying activity.
- The actual percentages of the different paths in each process.

The exported data is saved to an XML file, which can be imported into WebSphere Business Modeler to update the modeled processes with actual values. You can import the elapsed durations and the probabilities on decisions (percentages of paths taken) to WebSphere Business Modeler.

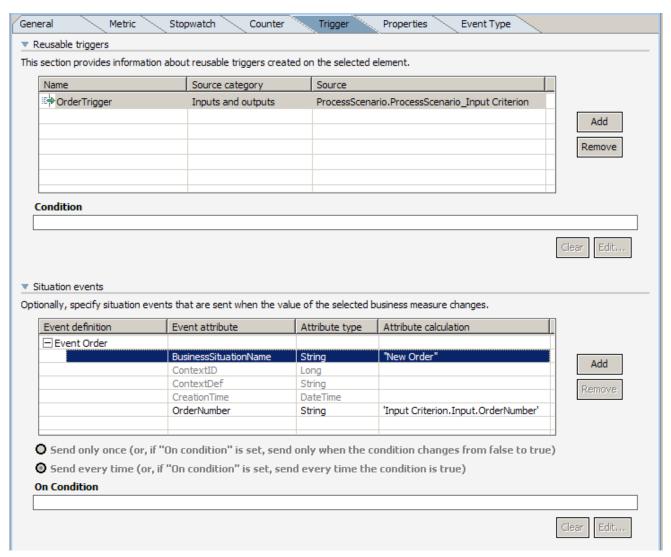
1. If you are not logged in already, login to We	bSphere Portal and go to the Other page you created.
a. Go to http:// <dashboard_server>:9081/w</dashboard_server>	rps/portal and click <b>Log-in</b> at the top right.
b. Enter your userid/password (defaults to v	wpsadmin/wpsadmin).
c. Click on the 'Scenario Dashboard' tab a	at the top.
d. Click on the 'Other' sub-tab under the m	ain tab bar.
2. Export data for the last week.	
a. Click the calendar icon to set the From d	ate to one week prior to now.
b. Expand <b>Business Measures Model &gt; P</b> leaf.	ProjectScenario > Processes and select the Processes
From	
January 10, 2006	🖯 🔑 Business Measures Model
	🖯 🖒 📙 ProjectScenario
То	Processes
January 19, 2006	
c. Click the 'Export Link' and save the XM the end-to-end scenario lab.	L file. You can re-import this into Modeler as shown in

#### Part 15: [Optional] Configuring the Alerts view

In this part you will go to the Process Details page that you created and you will configure the Alerts portlet that you placed on this page. The Alerts view displays alerts that notify business users of defined situations occurring at run time.

Note: You must have completed the Action Manager Configuration lab to be able to see alerts in this view.

In the BME lab you created a situation event, 'New Order', that occurs whenever a new order is received:



In the Action Manager lab you configured this to produce an Alert.

You will now configure the dashboard to display those Alerts.

- 1. If you are not logged in already, login to WebSphere Portal and go to the Process Details page you created.
  - \_\_ a. Go to http://<dashboard server>:9081/wps/portal and click Log-in at the top right.

b. Enter your userid/password (defaults to wpsadmin/wpsadmin).
c. Click on the 'Scenario Dashboard' tab at the top.
d. Click on the 'Process Details' sub-tab under the main tab bar.
2. Configure the Alerts view.
a. Click the configure icon at the top right of the Scenario Alerts portlet.
b. Optionally de-select the 'Show information text' option.
c. Change any other options if you wish to alter the default setup.
d. Click <b>Next.</b>
e. Click <b>Finish.</b>
Scenario Alerts  Mark Read Mark Unread Remove
[4
☐ Time ↑↓ Subject ↑↓ Alert Source
♠

Note: Your alert may have a different subject depending on what you defined in the Action Manager lab.

- \_\_\_\_ 3. Read one of the Alerts.
  - \_\_ a. Click the link in the Subject column.

Scenario Alerts
Details:
Alert time:
Nov 24, 2005 3:25:26 PM
Subject:
New Order Arrived!
Business Situation Name:
New Order
Body:
New Order has arrived with number: 27
<u> </u>
Back

\_\_ b. You can also expand the full content of the Situation Event if you left the 'Show Situation Event' option enabled when you configured the Alerts view.

#### 🎅 Situation event:

elapsedTime: 12000 extensionName: Event Order globalInstanceId: CE11DA5CFE853802E0C787E43382B4F582 priority: 50 sequenceNumber: 12 severity: 10 version: 1.0.1 ☐ ♠ extendedDataElements name: BusinessSituationName type: string □ (□) values New Order ☐ ♠ extendedDataElements name: OrderNumber type: string □ (□) values 27

\_\_ c. Click Back.

# Part 16: [Optional] Wire the Alerts view to the Process Diagrams and Active Instances Views

In this part you will create two further 'wires' – links between two portlets on a page that allows them to interact with each other. You will do this so that you can click on an alert in the Alerts view and be shown the process instance in the active instances view, and the diagram in the Process Diagrams view.

1. If you are	not logged in already,	login to WebSp	here Portal and go t	o the Administration	ı page.	
a. Go to	http:// <dashboard_serv< th=""><th><u>/er&gt;:9081/wps/</u>j</th><th>oortal and click <b>Log-</b></th><th>in at the top right.</th><th></th><th></th></dashboard_serv<>	<u>/er&gt;:9081/wps/</u> j	oortal and click <b>Log-</b>	in at the top right.		
b. Enter	your userid/password (	defaults to wps	admin/wpsadmin).			
c. Click c	n the 'Administration	' link at the very	y top of the page.			
2. Configure page.	the wire between the	Alerts view and	Process Diagrams v	view on the Process	Details	
a. Click o	on Portal User Interfac	e > Manage P	ages.			
b. Click o	on ' <b>My Portal</b> ' then clic	k on <b>'Scenario</b>	Dashboard'.			
c. Click t	ne Edit Page Layout ico	on 🗷 to the rig	ht of 'Process Details	s'.		
d. Click t	he <b>'Wires</b> ' tab at the to	p of the page.				
e. Select	'Scenario Alerts' as t	he Source port	let.			
f. Select	Instance Information	- OUT' as the	Sending option.			
g. Select	'Process Details' as t	the Target page	ə.			
h. Select	'Scenario Process Di	iagrams' as the	e Target portlet.			
i. Select	Instance Information	- IN' for the Re	eceiving option.			
j. Select	<b>Public</b> ' for the Wire Ty	pe.				
k. Click tl	ne Add icon .					
Wires for page: Process De		Tourstone	Toward and late	Description.	Mine Tone	
Scenario Active Instances	Sending  Instance Information - OUT	Process Details	Target portlet Scenario Process Diagrams	Receiving Instance Information - IN	Public	â
Scenario Alerts	Instance Information - OUT	Process Details	Scenario Process Diagrams	Instance Information - IN	Public	
<b>Note:</b> The first v	vire shown in this diagr ns view.	am was created	d earlier when wiring	the active instance	s view to	the
3. Configure	the wire between the	Alerts view and	Active Instances vie	w on the Process D	etails paç	ge.
a. Select	'Scenario Alerts' as t	he Source port	let.			
b. Select	'Instance Information	n – OUT' as the	e Sending option.			

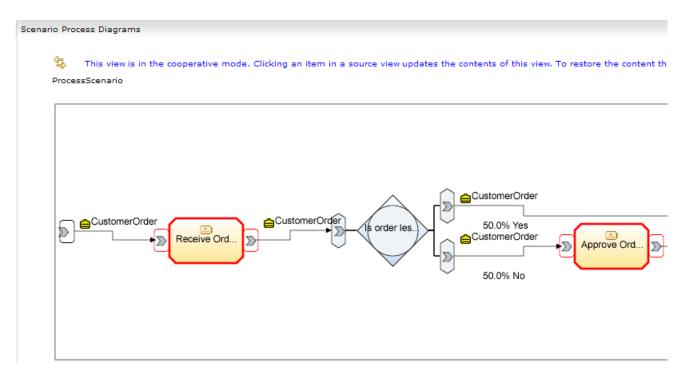
c. Select <b>'F</b>	Process Details' as t	he Target page	).			
d. This time	e select <b>'Scenario A</b> o	ctive Instances	s' as the Target port	let.		
e. Select <b>'I</b>	nstance Informatior	n – IN' for the R	leceiving option.			
f. Select <b>'P</b> g. Click the	Public' for the Wire Ty	ype.				
Wires for page: Process Deta	ils					
Source portlet	Sending	Target page	Target portlet	Receiving	Wire Type	
Scenario Active Instances	Instance Information - OUT	Process Details	Scenario Process Diagrams	Instance Information - IN	Public	Û
Scenario Alerts	Instance Information - OUT	Process Details	Scenario Process Diagrams	Instance Information - IN		Û
Scenario Alerts	Instance Information - OUT	Process Details	Scenario Active Instances	Instance Information - IN	Public	Û
Select One	V	Process Details	v	v	Personal 🔻	+
b. Click the	y Portal' at the top of e 'Scenario Dashboa the 'Alert Source' ico	ard' tab and the	en the <b>'Process Det</b> a' of the alerts in the A			
has not yet been a	click on an alert that approved – this will en the order is not active	nsure that the p	rocess instance is s	till active (it will be v	waiting on	nat
	ve Instances view an pecific instance that t			oth update to show	informatior	า
Scenario Active	Instances					

# This view is in the cooperative mode. Clicking an item in a source view

ProcessScenario

A B Results 1 to 1 of 1

Actions	Diagram	Approval Time †	Approvals Made	City	Country
-w	a <sub>y</sub>	1 m, 30 s	0	Austin	USA



\_\_ e. Click 'Restore Original Content' in either view to take them back to their defaults.

### Part 17: [Optional] Configuring and using the Organizations view

In this part you will go to the Other page that you just created and then you will configure the Organizations portlet that you placed on this page. The Organizations view helps business users view the structure of their organization. They can see a high-level picture in a tree form, see lists of organizations and employees, and retrieve employee information from a user registry.

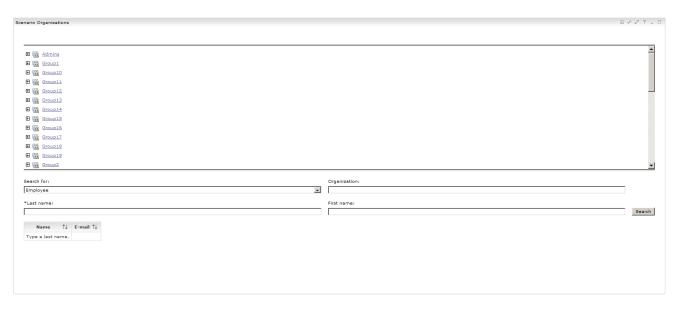
**Note:** This view requires that your WebSphere Portal be correctly configured for security. WebSphere Portal security configuration is done using the configuration wizard that can be found in C:\IBM\WebSphere\PortalServer\config\wizard\configwizard.bat.

Further information is available in the WebSphere Portal InfoCenter, available online at <a href="http://publib.boulder.ibm.com/infocenter/wpdoc/v510/index.jsp">http://publib.boulder.ibm.com/infocenter/wpdoc/v510/index.jsp</a>.

1. If you are not logged in already, login to WebSphere Portal and go to the Other page you created.	
a. Go to http:// <dashboard_server>:9081/wps/portal and click Log-in at the top right.</dashboard_server>	
b. Enter your userid/password (defaults to wpsadmin/wpsadmin).	
c. Click on the 'Scenario Dashboard' tab at the top.	
d. Click on the 'Other' sub-tab under the main tab bar.	
2. Configure the Organizations view.	
a. Click the configure icon at the top right of the Scenario Organizations portlet.	
b. Select the appropriate WebSphere Member Manager vault slot name.	
c. Select the employee name format that you wish to see.	
d. Optionally de-select the 'Show informational text'.	

Scenario Organizations
Select WMM vault slot name:
wmm.system.id.user 🔻
Select employee name format:
<ul> <li>First name Last name</li> <li>Last name First name</li> <li>Last name, First name</li> </ul>
Sort employee name by:
○ First name • Last name
Show informational text  Finish Cancel

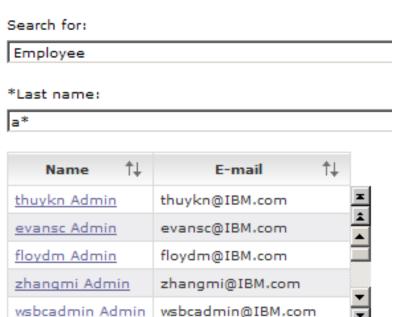
\_\_ e. Click Finish.



\_\_\_\_\_ 3. Use the Organizations view to search for employees or Organizations.

deank Admin

- \_\_ a. Select whether to search for an employee or an organization.
- \_\_ b. Specify the necessary last name, first name or organization fields appropriate to your security registry. (You can use wildcards in the search strings). Click **Search**:



c. Clicking on a name in the search results will take you to that person in the hierarchy view above.

deank@IBM.com

\_\_\_ d. You can also manually expand the groups in the hierarchy part of the Organizations view.

Note: If you have security enabled on the business process server as well as the WebSphere Portal then your processes will each execute under a certain userid. In this situation, you can configure a wire

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between the Organizations view and the Reports view when they are placed on the same page. This allows you to click on a user in the Organizations view and that will cause the Reports view data to be redrawn for that specific user.

#### What you did in this exercise

In Part 1 you created copies of the template dashboard views.

In Part 2 you created your own dashboard pages for the monitoring the Scenario process.

In Part 3 you placed different views onto each of your pages.

In Part 4 you configured a gauge view to show a gauge graphic of a KPI status against limits.

In Part 5 you configured the KPIs view to show the status of KPIs against target values and boundaries.

In Part 6 you configured the Scorecard view to show Financial and Efficiency scorecards based on the achievement of KPI targets.

In Part 7 you configured the Active Instances view to show details of process that are actively executing in the system.

In Part 8 you configured the Process Diagrams view to show an SVG picture of the process.

In Part 9 you configured a wire between the Active Instances and Process Diagrams views so that you could click on an active instance and be shown a picture of the process diagram, including highlighting the executing activities within the process.

In Part 10 you configured the Reports view to show Order Price and Instances Count by day for the month-to-date.

In Part 11 you performed further analysis using the Reports view to show the data by country and city and used a dual axis chart to better display the values.

In Part 12 you configured the Dimensions view to show you Order Price and Instances Count and to analyze them by process state, creation date and country.

In Part 13 you used the Dimensions view table to further analyze the data for all cities.

In Part 14 you used the Export Values view to export data for the last seven days.

In Part 15 you configured the Alerts view to show Alerts produced by the Action Manager.

In Part 16 you wired the Alerts view so that clicking on an individual alert would display data for that process instance in the active instances view and would show the state of the process in the process diagram view.

In Part 17 you configured the Organizations view and used it to search against users in your organization.

