WebSphere Business Monitor V6.2

Business space dashboards

What this exercise is about

The objective of this lab is to show you how to use WebSphere Business Monitor dashboards in business space.

Lab requirements

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

- WebSphere Business Monitor V6.2 Toolkit installed with business space and Alphablox.

What you should be able to do

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

- Import the ClipsAndTacks model into a new workspace
- Create a new dashboard and add widgets to the dashboard
- Configure dashboard widgets
- Configure Alphablox based widgets

Introduction

Similar to the dashboard of an automobile that provides easy access to your odometer and check-engine light, WebSphere® Business Monitor offers a browser-based dashboard that can provide easy access to important information about the current state of your business.

Business Space is the featured browser-based dashboard that is provided with WebSphere Business Monitor and other WebSphere products. WebSphere Business Monitor also provides portlet-based dashboards for WebSphere Portal users. Business Space and portlet-based dashboards provide the same functionality.

This lab shows you how to use business space dashboards.

Widgets: Alert manager, alerts, instances, KPI manager, KPIs, KPI history and prediction, diagrams, human tasks, export values

Alphablox based widgets: Dimensions and Report

For more information about the human tasks and export values, refer to lab for Clips And Tacks BPM, WBMonitorV62_ClipsAndTacksLab_BPM.pdf.

For more information about the KPI history and prediction widget, refer to lab for KPI history and prediction, WBMonitorV62_KPIHistoryPredictionLab.pdf.

Prerequisite: For displaying the diagrams widget, ensure that one of the following is installed:

- Adobe SVG Viewer – http://www.adobe.com/svg
- Renesis SVG Viewer - http://www.examotion.com

Part 1: Import the Clips And Tacks visual monitor model

In this section, you will import the Clips and Tacks visual monitor model into the workspace.

____ 1. Start Rational Application Developer or WebSphere Integration Developer and setup the environment

__ a. Start Rational Application Developer or WebSphere Integration Developer, and when prompted point to a new workspace such as c:\workspaces\ClipsAndTacks

__ b. Click **OK**

__ c. Close the Welcome tab

__ d. You want to open the Business Monitoring perspective. From the main menu select **Window → Open Perspective → Business Monitoring**

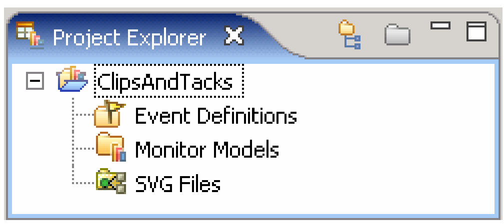
__ e. If prompted for Confirm Enablement, click **OK**

____ 2. Create a new monitoring project

__ a. Right click the Project Explorer, then select **New → Business Monitoring Project…** from the pop-up menu

__ b. Enter **ClipsAndTacks** in the 'Project name' field

__ c. Click **Finish**. You will see the new project in the Project Explorer view



____ 3. Import the supplied **cbe** files with the ClipsAndTacks lab files

__ a. Right click in the Project Explorer view, and then select **Import…** from the pop-up menu

__ b. Select **General → File system** from the **Import** dialog and click **Next**

__ c. In the following panel, click the **Browse** button to locate the files, for example, **<LABFILES62>\ClipsAndTacks**

__ d. Select **ActivityEvent.cbe**

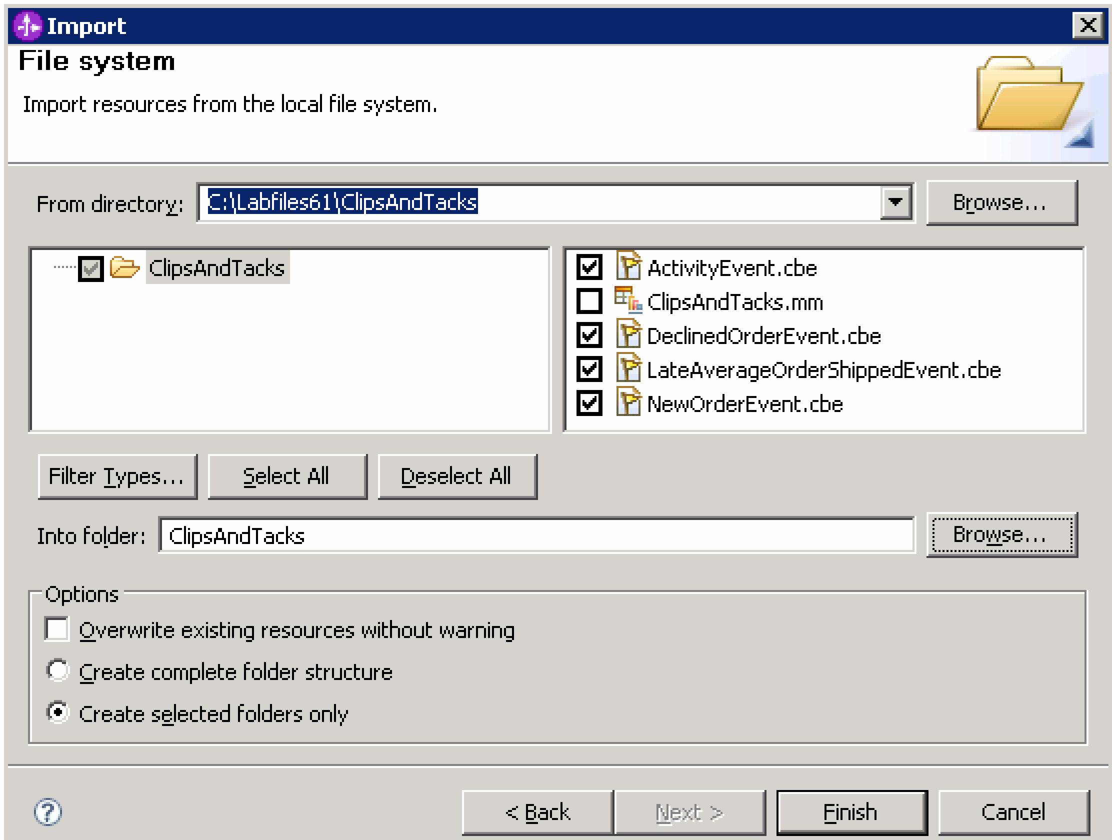
__ e. Do not select the .mm file in this folder

__ f. Select **DeclinedOrderEvent.cbe**

__ g. Select **LateAverageOrderShippedEvent.cbe**

__ h. Select **NewOrderEvent.cbe**

__ i. Click the **Browse** button and select **ClipsAndTacks** from the “Import Into Folder” dialog



__ j. Click **Finish**

____ 4. Import the supplied **mm** and **svg** files

__ a. Right click in the Project Explorer view, and then select **Import…** from the pop-up menu

__ b. Select **General → File system** from the **Import** dialog and click **Next**

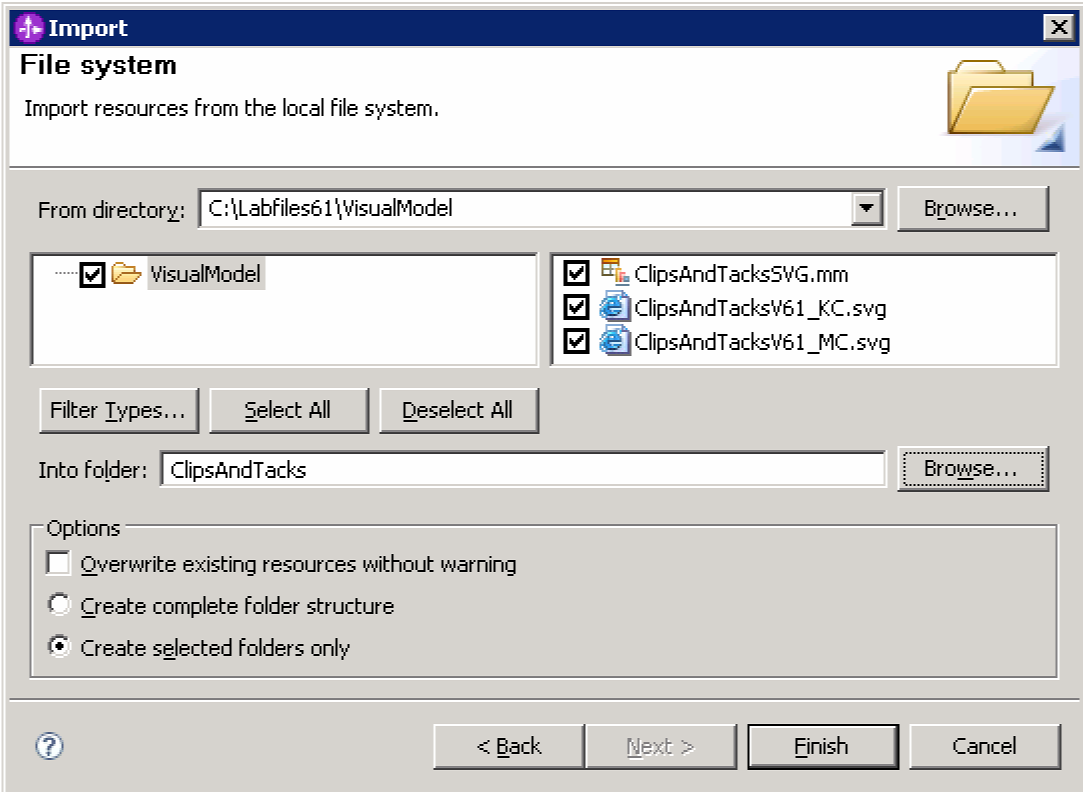
__ c. In the following panel, click the **Browse** button to locate the files, for example, **<LABFILES62>\VisualModel**

__ d. Select **ClipsAndTacksSVG.mm**

__ e. Select **ClipsAndTacks_KC.svg**

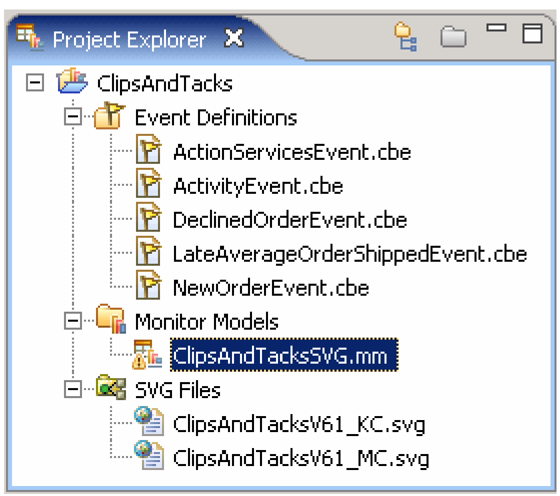
__ f. Select **ClipsAndTacks_MC.svg**

__ g. Click the **Browse** button and select **ClipsAndTacks** from the “Import Into Folder” dialog



__ h. Click **Finish**

____ 5. Expand the project in the Project Explorer view, then expand the Event Definitions and you will see the new events listed. Expand Monitor Models and you will see the new ClipsAndTacks model listed. Expand the SVG files and you will see the SVG files listed.



Part 2: Publish the model to the server

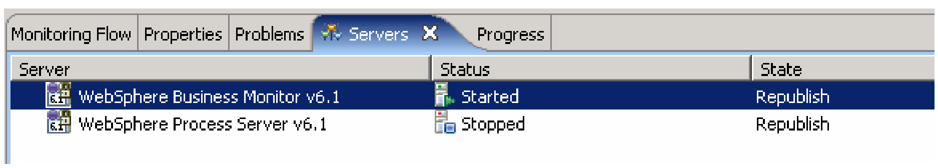
In this section you will use Rational Application Developer or WebSphere Integration Developer to publish the monitor model to the monitor server.

____ 1. In Project Explorer, expand ClipsAndTacks → Monitor models → ClipsAndTacks.mm. Right click over ClipsAndTacks.mm and then select Generate Monitor J2EE Projects from the context menu

____ 2. If you have already generated the ClipsAndTacks model for another lab, then you may need to select 'overwrite existing projects'. Then click **Finish**.

____ 3. A progress dialog shows the status of the operation and it closes when the operation is complete. Check for errors in the Problems view. There may be warnings, but there should not be any errors. If you see errors, then try to perform a clean to see if the errors can be removed: Project > Clean… > select 'Clean all projects', then click OK.

____ 4. Click the Servers tab, then right click and select the **Start** option to start the server WebSphere Business Monitor v6.2. This may take a few minutes to complete.



____ 5. Right click in the servers view and then select **Add and Remove Projects…**

____ 6. Click Add to move the ClipsAndTacksApplication from the list of available projects to the list of configured projects. Click Finish. Note: If the application is already in the list of configured projects, then you may have run another lab and published this application already, so in that case, cancel this window and select the 'Publish' option from the server menu.

____ 7. A progress message is displayed in the lower right corner of the window.

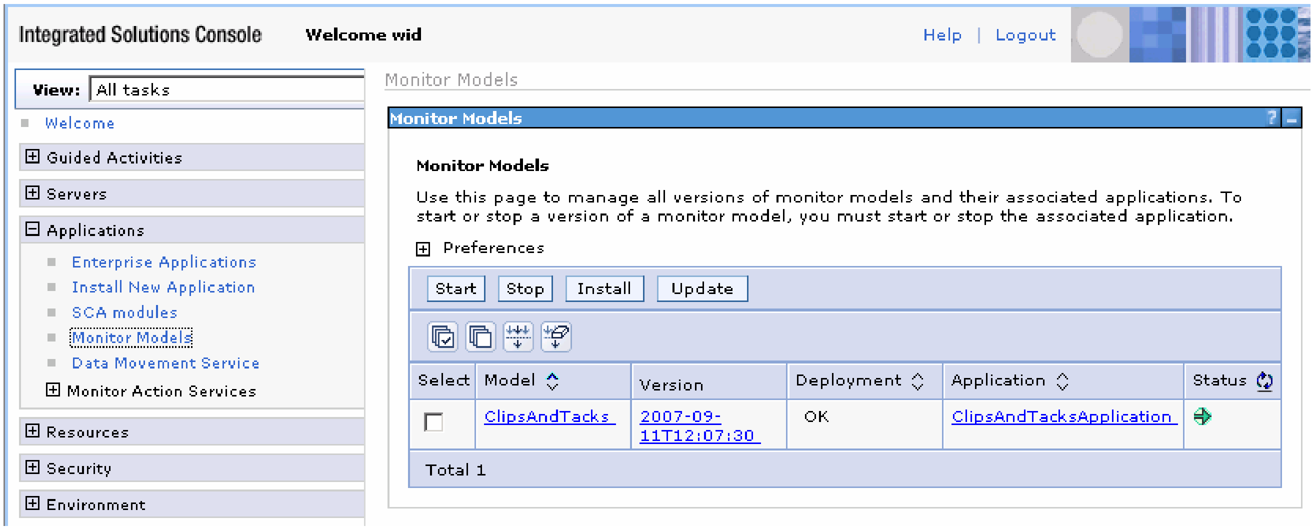
____ 8. Check the messages in the console view. You should see the following message when the application has been started:

Application started: ClipsAndTacksApplication

____ 9. In the servers view, right click, then select **Run administrative console**. You should see it open in a separate tab. It will prompt you for user ID and password. Enter **admin** for user ID and then enter **admin** for password.

____ 10. Click **Log in**

____ 11. Click **Applications > Monitor Models**. The application should show green status if it started successfully.



____ 12. If the model shows red (stopped), then wait a moment, then refresh by clicking on the icon to the right of Status in the last column of the table. You should see green (started) for the model. If it does not show green, be patient and keep refreshing until it does show green.

____ 13. Check the server log to ensure there are no problems. You can check this in the console view.

____ 14. If you are using the integrated server within WebSphere Integration Developer or Rational Application Developer, then you do not need to setup Monitor data security, since the administrative user is automatically authorized to all models. If you are using a different server, then you should open the administrative console, navigate to **Security > Monitor Data Security,** then add the model, role and user information to a resource group.

Part 3: Run events to exercise the model

Rather than installing a J2EE application to actually create the events that you want to monitor, you are going to use a program to simulate the submission of events from the application.

The supplied program is 'BatchCBEWriter61' and it will submit the events to the Common Event Infrastructure. Look for the program in \Labfiles62\ClipsAndTacks\BatchCBEWriter. This program reads XML files which represent the common base events for the model.

____ 1. Update BatchCBEWriter61.bat to point WAS_HOME to the monitor server home, for example 'set WAS_HOME=C:\IBM\WebSphere\AppServer'. If you are using the integrated monitor server in WebSphere Integration Developer, the path would be <WID-Install-Path>\pf\WBMonSrv_wps. If you are using the integrated monitor server in Rational Application Developer, the path would be <RAD-Install-Path>\pf\WBMonSrv.

____ 2. Update config.properties, setting the serverName and portNumber. You can find the port number by browsing the server log and finding 'bootstrap port'. For example, check for the log at C:\IBM\WebSphere\AppServer\profiles\WBMon01\logs\server1\SystemOut.log . For the integrated server in WebSphere Integration Developer, the path would be <WID-Install-Path>\pf\WBMonSrv_wps\logs\server1\SystemOut.log and the portNumber should be 2810. For the integrated server in Rational Application Developer, the path would be <RAD-Install-Path>\pf\WBMonSrv\logs\server1\SystemOut.log and the portNumber should be 2810. Here is an example of the config.properties settings:

__ a. `connect.serverName = localhost`

__ b. `connect.portNumber = 2810`

____ 3. Open a command window, then change directory to the folder containing BatchCBEWriter61, for example, type this command

__ a. cd \Labfiles62\ClipsAndTacks\BatchCBEWriter

____ 4. Run commands to load the common base events to the server.

__ a. batchcbewriter61 -Dsource.filename="c:/labfiles62/clipsandtacks/cbe/allevents.xml"

__ b. When it prompts you for user identity and password, enter 'admin' for both (without the quotation marks)

____ 5. When you run BatchCBEWriter61, you should see results such as:

```
C:\drivers\events>batchcbewriter61 -Dsource.filename="c:/drivers/events/clipsand
tacks/allevents.xml"
Getting CBEs.
Getting Emitter.
Removing GlobalInstanceIds.
Setting missing values.
Changing Instance Ids.
Updating timestamps.
Validating CBEs.
Sending CBEs.
START=09:14:10.875
Sending cbe[10].
Sending cbe[20].
Sending cbe[30].
Sending cbe[40].
Sending cbe[50].
Sending cbe[60].
Sending cbe[70].
Sending cbe[80].
END=09:14:24.390
TotalTime=13515 milliseconds.
CBEs/second=6.215316315205327
```

Part 4: Create a dashboard in business space

In this section you will build a dashboard in business space.

____ 1. Create the dashboard.

__ a. The default browser is 'Internal Web Browser', but you should not use this one since some standard functions are not provided that you may need. Select Window > Preferences > General > Web browser > select 'Use external Web browser'. Select an external browser. Click OK.

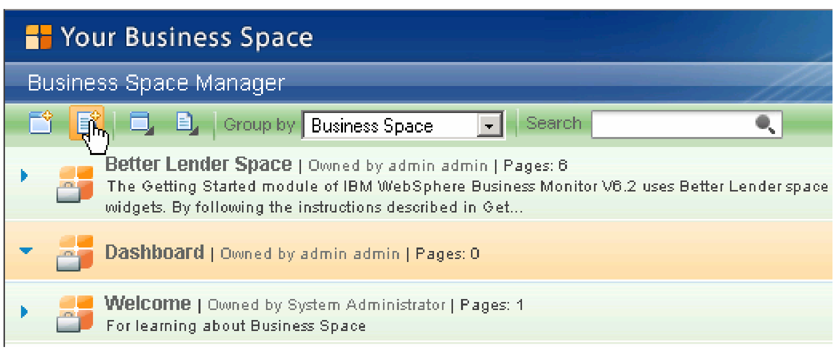
__ b. In WebSphere Integration Developer, in the servers view, right click and select **Business Space**

__ c. When prompted, enter **admin** for the user ID and enter **admin** for the password. You must log in with 'admin' so that you can view the alerts which were setup in action manager to be sent to this particular user ID. Also, in the toolkit environment, this is the user that is automatically defined on the secured server.

__ d. Click the icon to create a new space.

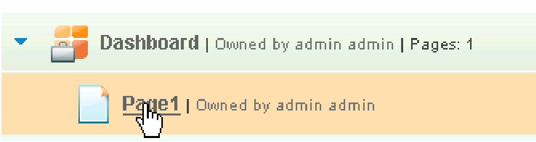
__ e. Enter a name such as Dashboard, select Empty, then click **OK**.

__ f. Click the icon to create a new page in the Dashboard space.



__ g. Enter a name such as Page1, select Empty, then click **OK**.

__ h. Click Page1 to open it.



__ i. Now you can add widgets to the page by clicking on 'Add widgets' in the upper right corner 

, then dragging a widget to the page. If you want to rename the page, change the layout or remove the page from display, use the icons to the right of the page name on the tab 

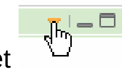
. To return to the business space list, click 'Manage Business Spaces' in the upper right corner

Part 5: Instances widget

____ 1. Add the instances widget to the dashboard, and configure it to cooperate with other widgets.

__ a. Click **Add widgets**, then select **Instances** and drag it to the page.

__ b. Click **Configure** on the widget menu.

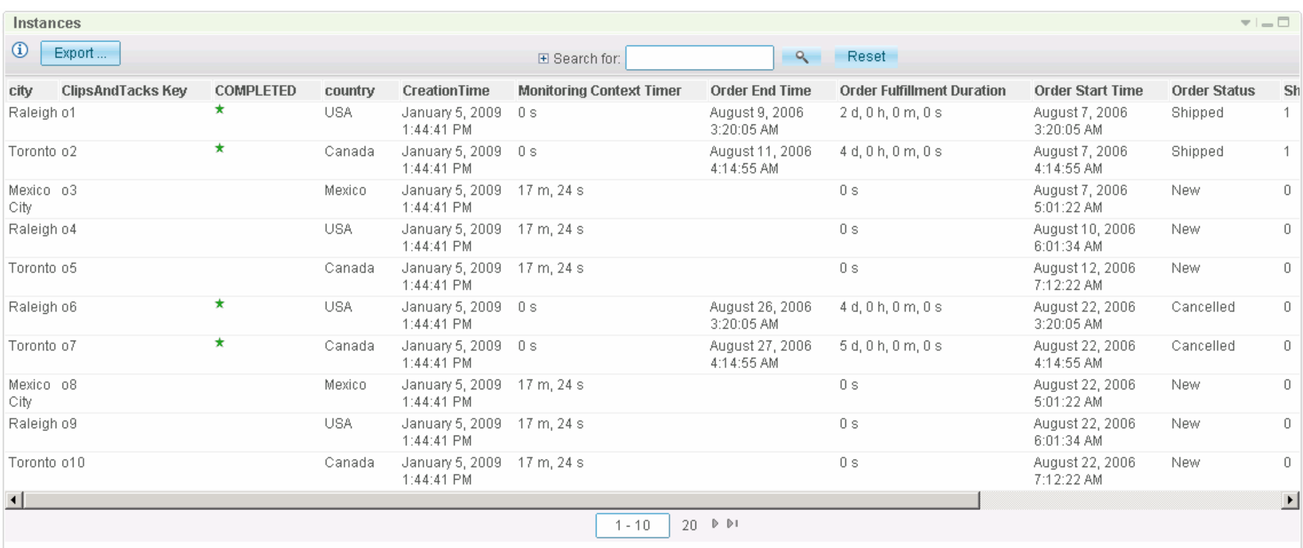
1) To Access the menu, hover the mouse over the right corner of the widget  and then click the down arrow. On this menu you can configure the widget, refresh the widget and delete the widget.

__ c. Click the **Show/Hide** tab, and select monitoring context 'ClipsAndTacks MC'.

Click button >> to move all the fields to the Selected box. Also, click button 'Set as default' which will make this the default monitoring context to display.

__ d. Click the **Cooperative** tab, then select 'Enable this widget to interact with other widgets.'. This will allow you to link this widget to other widgets such as diagrams or KPIs.

__ e. Then click **OK**. You should see a list of monitoring context instances for the events that you just processed.



Instances

Export ... Search for: Reset

city	ClipsAndTacks Key	COMPLETED	country	CreationTime	Monitoring Context Timer	Order End Time	Order Fulfillment Duration	Order Start Time	Order Status	Sh
Raleigh	o1	★	USA	January 5, 2009 1:44:41 PM	0 s	August 9, 2006 3:20:05 AM	2 d, 0 h, 0 m, 0 s	August 7, 2006 3:20:05 AM	Shipped	1
Toronto	o2	★	Canada	January 5, 2009 1:44:41 PM	0 s	August 11, 2006 4:14:55 AM	4 d, 0 h, 0 m, 0 s	August 7, 2006 4:14:55 AM	Shipped	1
Mexico City	o3		Mexico	January 5, 2009 1:44:41 PM	17 m, 24 s		0 s	August 7, 2006 5:01:22 AM	New	0
Raleigh	o4		USA	January 5, 2009 1:44:41 PM	17 m, 24 s		0 s	August 10, 2006 6:01:34 AM	New	0
Toronto	o5		Canada	January 5, 2009 1:44:41 PM	17 m, 24 s		0 s	August 12, 2006 7:12:22 AM	New	0
Raleigh	o6	★	USA	January 5, 2009 1:44:41 PM	0 s	August 26, 2006 3:20:05 AM	4 d, 0 h, 0 m, 0 s	August 22, 2006 3:20:05 AM	Cancelled	0
Toronto	o7	★	Canada	January 5, 2009 1:44:41 PM	0 s	August 27, 2006 4:14:55 AM	5 d, 0 h, 0 m, 0 s	August 22, 2006 4:14:55 AM	Cancelled	0
Mexico City	o8		Mexico	January 5, 2009 1:44:41 PM	17 m, 24 s		0 s	August 22, 2006 5:01:22 AM	New	0
Raleigh	o9		USA	January 5, 2009 1:44:41 PM	17 m, 24 s		0 s	August 22, 2006 6:01:34 AM	New	0
Toronto	o10		Canada	January 5, 2009 1:44:41 PM	17 m, 24 s		0 s	August 22, 2006 7:12:22 AM	New	0

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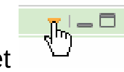
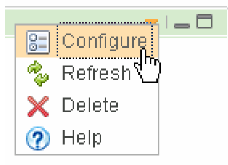
Part 6: Diagrams widget and cooperation with instances widget

____ 1. Add the diagrams widget to the dashboard, and configure it to cooperate with other widgets.

__ a. Click **Add widgets**, then select **Diagrams** and drag it to the page.

__ b. Click **Configure** on the widget menu.

1) To Access the menu, hover the mouse over the right corner of the widget  and then click the down arrow. On this menu you can configure the widget, refresh the widget and delete the widget.

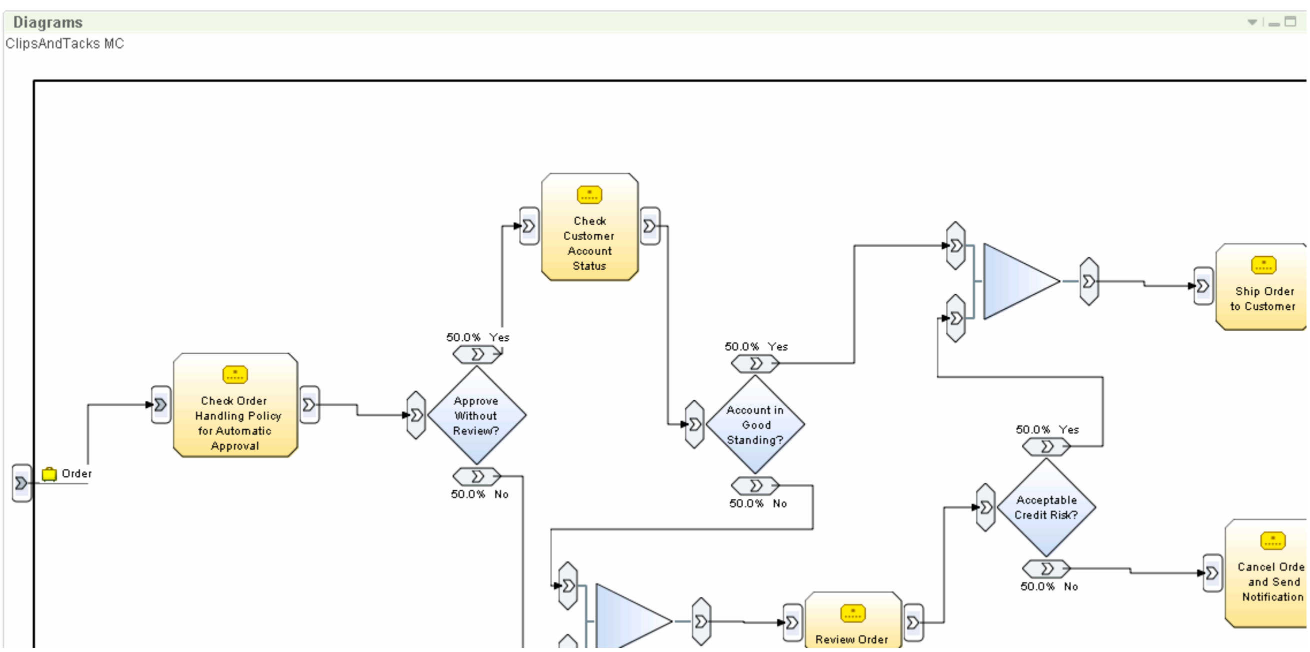


__ c. Select the model and monitoring context.

- Select the **ClipsAndTacks model**
- Select "**Monitoring context**"
- Select "**ClipsAndTacks MC"**

__ b. Click the **Cooperative** tab, then select 'Enable this widget to interact with other widgets.'.

__ c. Then click **OK**. You should see the diagram displayed in the view.

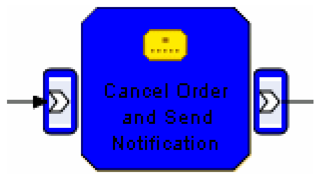


____ 2. Click the diagram icon in the instances widget to see the diagram for specific instances.

__ a. In the dashboard, scroll up to the instances widget and find one of the monitoring contexts that show 'Cancelled' in the order status column.

	Raleigh	o6	★	USA	0 s	August 26, 2006 2:20:05 AM	4 d, 0 h, 0 m, 0 s	August 22, 2006 2:20:05 AM	Cancelled	0	350
	Toronto	o7	★	Canada	0 s	August 27, 2006 3:14:55 AM	5 d, 0 h, 0 m, 0 s	August 22, 2006 3:14:55 AM	Cancelled	0	400

__ b. For this item, click the icon in the first column in the diagram column. This will cause the monitoring context diagram view to be updated for this specific monitoring context. The visual model in the monitor model is designed to color code the shapes in the diagram based on the status of the order. Since this particular order is cancelled, the diagram should show the task 'Cancel Order and Send Notification' as blue in color.

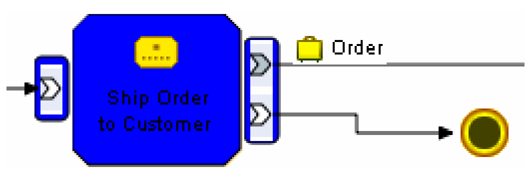


__ c. Click 'Restore Original Context' at bottom of this diagram to return this diagram to the generic diagram.

__ d. In the dashboard, scroll up to the instances view and then find one of the monitoring contexts that show 'Shipped' in the order status column.

	Raleigh	o1	★	USA	0 s	August 9, 2006 2:20:05 AM	2 d, 0 h, 0 m, 0 s	August 7, 2006 2:20:05 AM	Shipped	1	100
	Toronto	o2	★	Canada	0 s	August 11, 2006 3:14:55 AM	4 d, 0 h, 0 m, 0 s	August 7, 2006 3:14:55 AM	Shipped	1	150

__ e. For this item, click the icon in the first column, the diagram column. This will cause the monitoring context diagram view to be updated for this specific monitoring context. Since this particular order is shipped, the diagram should show the task 'Ship Order to Customer' as blue in color.

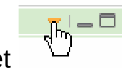


Part 7: KPIs widget

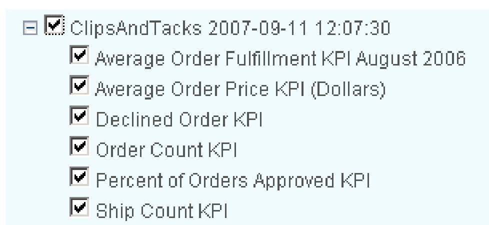
____ 1. Add the **KPIs** widget to the dashboard and configure it

__ a. Click **Add widgets**, then select **KPIs** and drag it to the page.

__ b. Click **Configure** on the widget menu.

1) To Access the menu, hover the mouse over the right corner of the widget  and then click the down arrow. On this menu you can configure the widget, refresh the widget and delete the widget.

__ c. On the KPIs tab, click the (+) icon to expand the ClipsAndTacks model's available KPI metrics

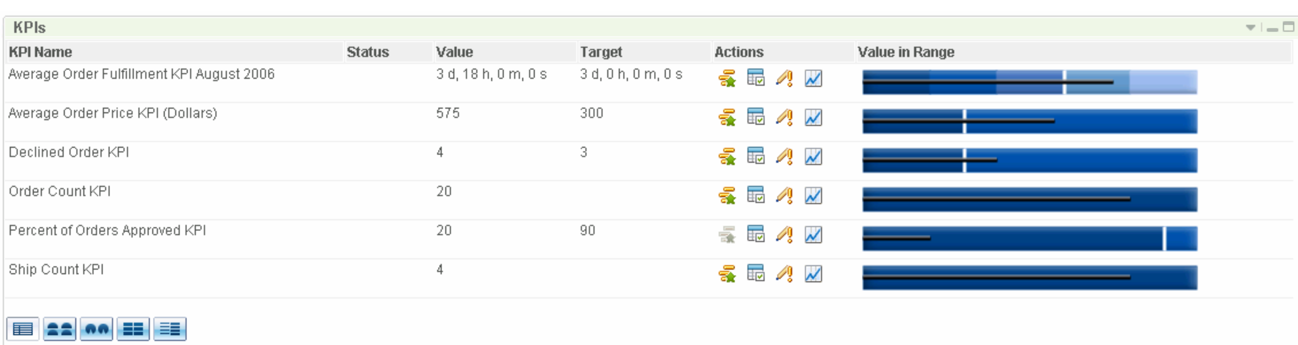


__ d. Select the check boxes next to the KPIs you want to monitor.

__ e. Click the **Cooperative** tab, then select 'Enable this widget to interact with other widgets.'.

__ f. Click **OK**

__ g. The KPIs are displayed in the default table view as shown below:



KPI Name	Status	Value	Target	Actions	Value in Range
Average Order Fulfillment KPI August 2006		3 d, 18 h, 0 m, 0 s	3 d, 0 h, 0 m, 0 s		
Average Order Price KPI (Dollars)		575	300		
Declined Order KPI		4	3		
Order Count KPI		20			
Percent of Orders Approved KPI		20	90		
Ship Count KPI		4			

__ h. The status column shows icons for the range that is associated with the current value. In this case, the icons have not been defined. You can define the icons for the ranges by opening the KPI properties, and clicking the Range tab.

__ i. This widget shows for each KPI the current value, target value and a bar chart that depicts the current value, target value and ranges.

__ j. On the widget menu you can select 'Send Widget…' to send a screen capture of the KPIs as an attachment to a human task.

__ k. In the Actions column, you can click icons to perform various functions:

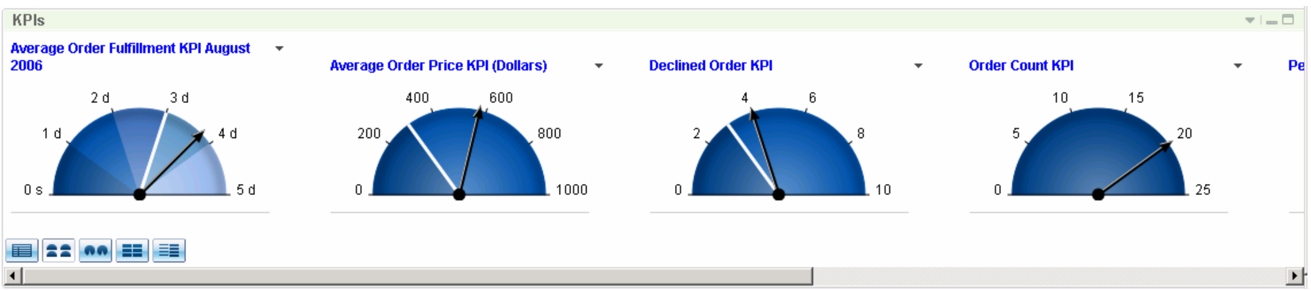
1) Show instances in the instances widget for this KPI. For this to work, you need to click the **Cooperative** tab on both the instances widget and the KPIs widget, and select 'Enable this widget to interact with other widgets.'.

2) Show KPI properties for this KPI.

3) Show alerts for this KPI. This will open the Alert Manager and show only alerts for this KPI.

4) Open the KPI history and prediction configuration for this KPI.

__ l. To view the KPIs in a different layout, click one of the icons in the lower left corner of the widget. For example, here is the widget after selecting the half gauge format:

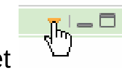


Part 8: Alerts widget

____ 1. Add the **Alerts** widget to the dashboard and configure it.

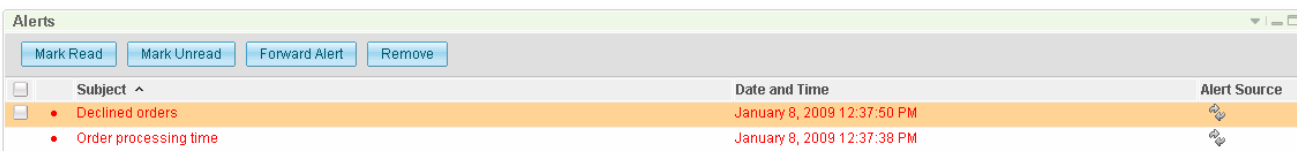
__ a. Click **Add widgets**, then select **Alerts** and drag it to the page.

__ b. Click **Configure** on the widget menu.

1) To Access the menu, hover the mouse over the right corner of the widget  and then click the down arrow. On this menu you can configure the widget, refresh the widget and delete the widget.

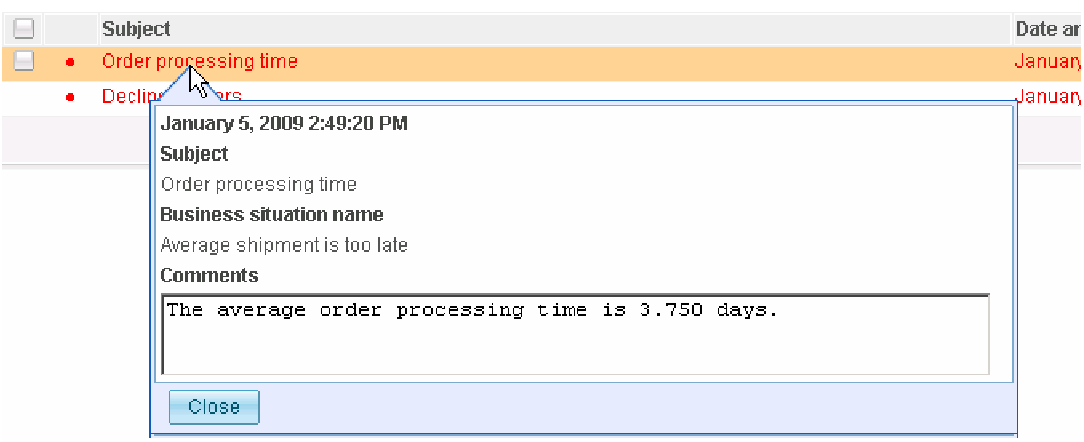
__ c. Click the **Cooperative** tab, then select 'Enable this widget to interact with other widgets.'.

__ d. The alerts view is added to your dashboard, and you should see alerts listed.



__ e. There are buttons to mark and alert as read or unread. There are also buttons to forward the alert or remove an alert.

__ f. You can click an alert in the list, then you will get a pop-up showing the details of the alert.



__ g. The column **Alert Source** can be used to show the instance or diagram for the alert. Notice that in this case, the alert source icons are disabled (grey), and that is because these alerts were based on KPIs rather than on monitoring context instances. If you have alerts based on instances and you setup the **cooperative** mode on the widgets, then you could click on the alert source to see the corresponding instance data or diagram instance information.

__ h. Click **Configure** on the widget menu and you can customize the view including changing the color of the read and unread alerts.

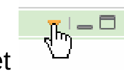
Part 9: Reports widget

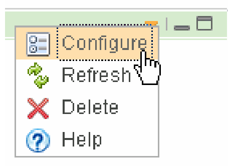
In this section you will add the reports widget to the dashboard and configure it. The reports widget uses Alphablox for displaying multi-dimensional data in graph form, where the data is displayed relative to the time axis.

____ 1. Add the **Reports** view to the dashboard canvas and configure it to analyze the performance data relative to time

__ a. Click **Add widgets**, then select **Reports** and drag it to the page.

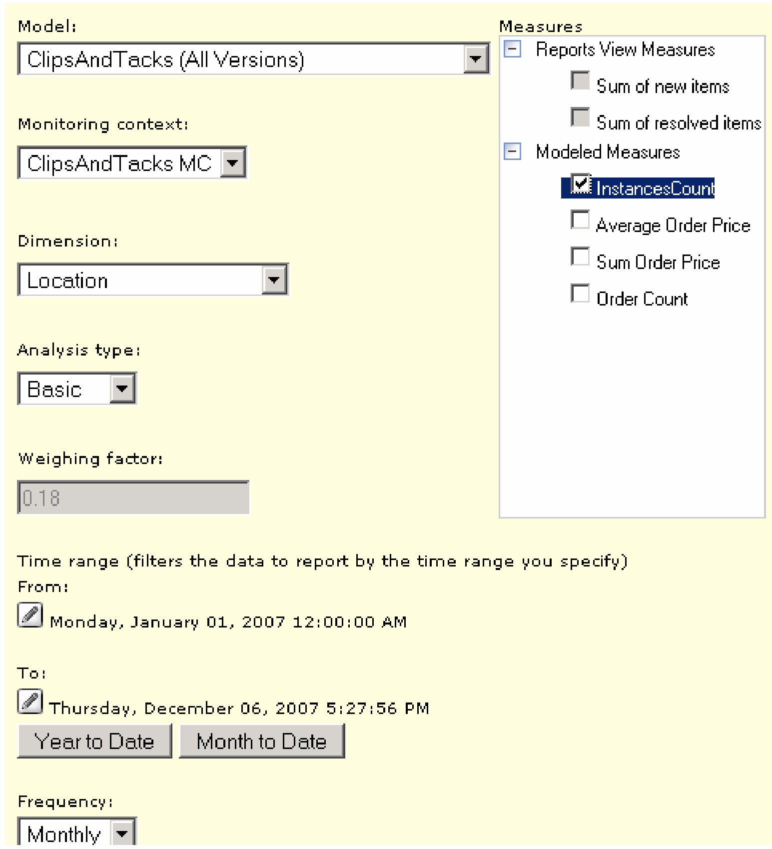
__ b. Click **Configure** on the widget menu.

1) To Access the menu, hover the mouse over the right corner of the widget  and then click the down arrow. On this menu you can configure the widget, refresh the widget and delete the widget.



__ c. On the report options tab select the following values:

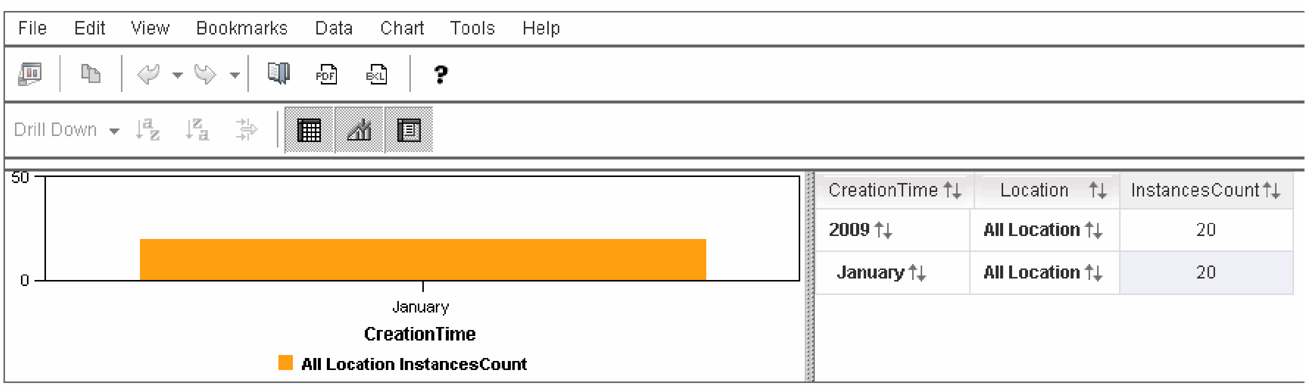
- Monitoring Model : **ClipsAndTacks (All Versions)**
- Monitoring Context : **ClipsAndTacks MC**
- Dimension : **Location**
- Analysis Type : **Basic**
- Time range : Click button 'Year to Date'
- Frequency : **Monthly**
- Measures : Select the check box next to **InstancesCount**



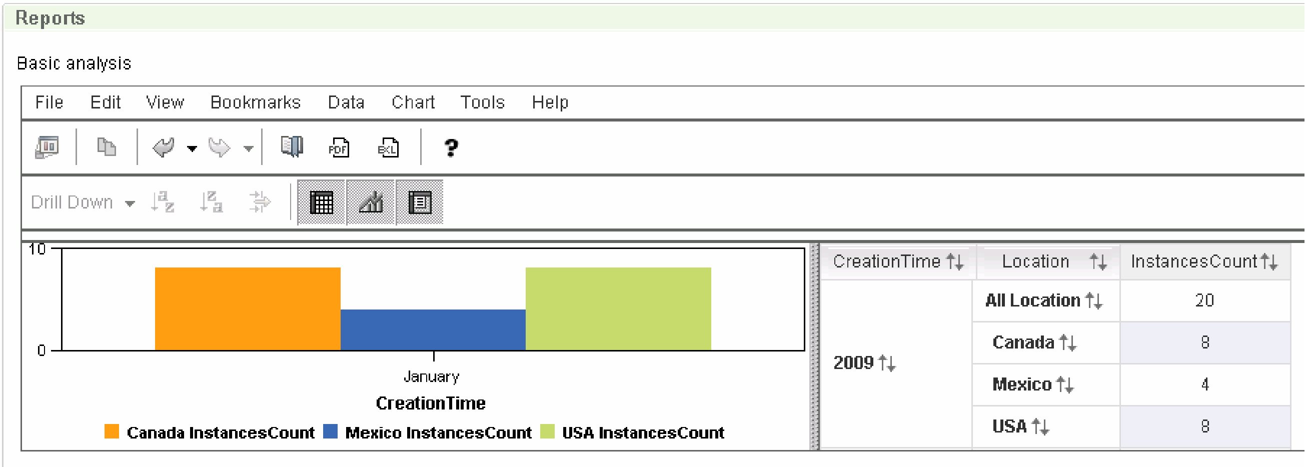
__ d. Click the **Cooperative** tab, then select 'Enable this widget to interact with other widgets.'.

__ e. Click **OK**

__ f. The Reports view displays the instances count based on location relative to creation time as shown below.

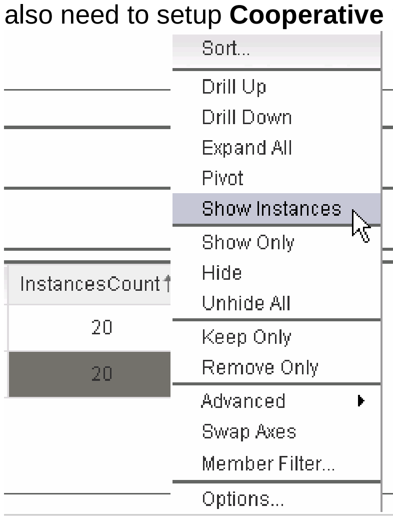


____ 2. Double click **All Location** on the first row to drill down by location.



____ 3. Use the main menu of the reports view to manipulate the visualization of the performance analysis to your needs

____ 4. To see the instances that aggregate to the counts in the table, just right click any cell in the table and select menu item **Show Intances**, then this will show the instances in the instances widget. You also need to setup **Cooperative** mode on both widgets to enable this capability.

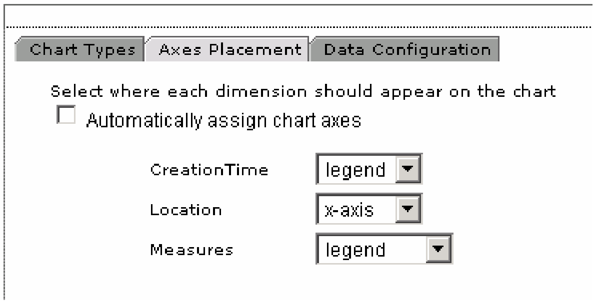


____ 5. You can also configure additional measures in this view. To do this, click the configure option and select any of the **Measures** and save the configuration.

____ 6. If you want to see how to place a different dimension other than CreationTime on the X axis of the chart, then follow this procedure.

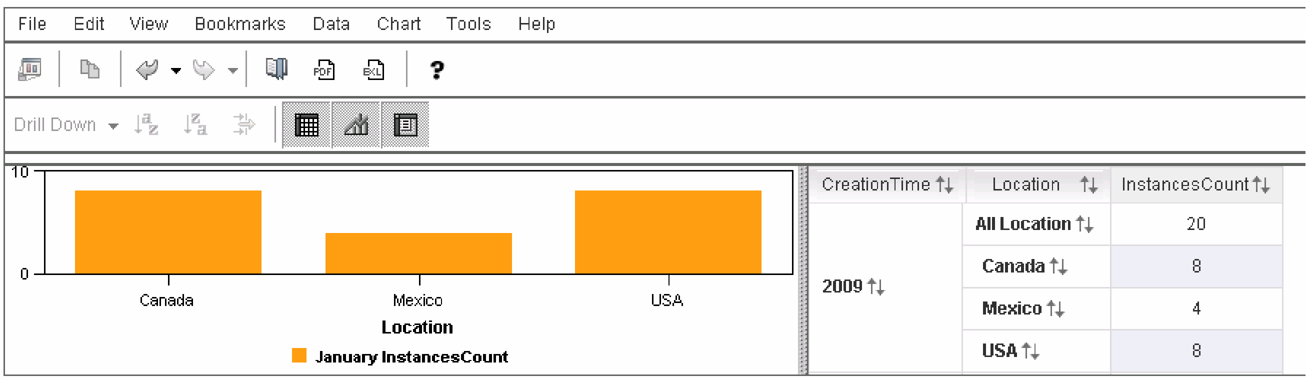
__ a. Click **Chart > Axis Placement…**

__ b. Change CreationTime to 'legend', and change Location to 'x-axis'. This will put Location on the X axis of the chart.



__ c. Click OK.

__ d. Now you will see Location on the X axis of the chart.



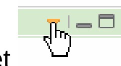
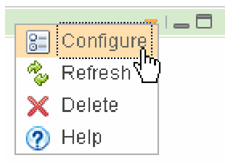
Part 10: Dimensions widget

In this section you will add the dimensions widget to the dashboard and configure it. The dimensions widget uses Alphablox for displaying multi-dimensional data in graph form, where the data can be displayed and analyzed using dimensions which are defined in the model.

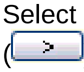
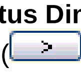
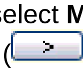
____ 1. Add the **Dimensions** view to the dashboard canvas and configure it

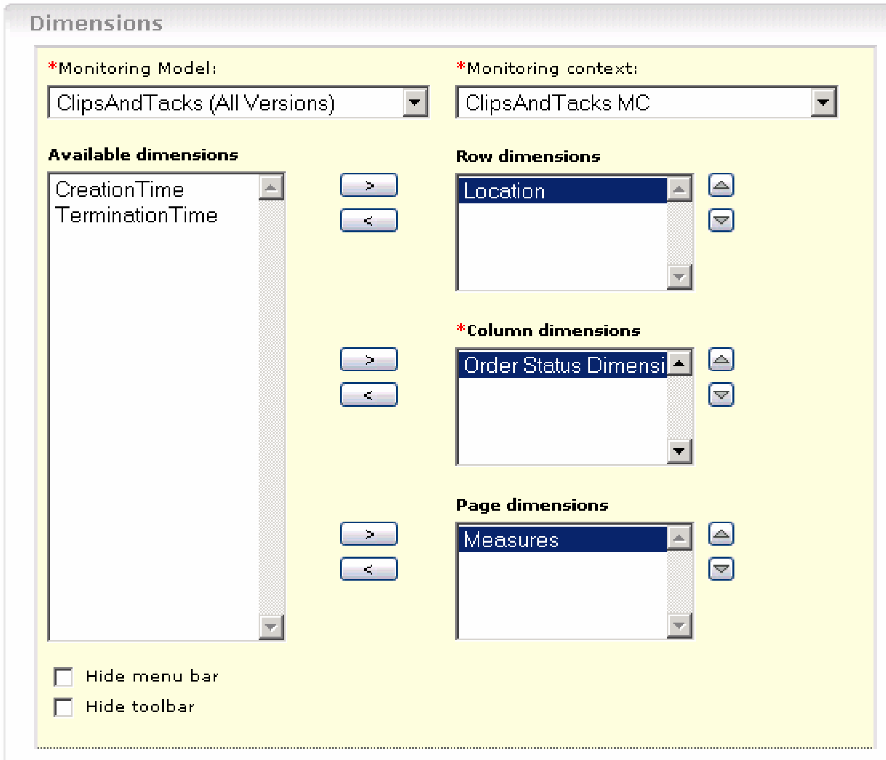
__ a. Click **Add widgets**, then select **Dimensions** and drag it to the page.

__ b. Click **Configure** on the widget menu.

__ c. To Access the menu, hover the mouse over the right corner of the widget  and then click the down arrow. On this menu you can configure the widget, refresh the widget and delete the widget. 

__ d. In the Select Dimensions tab, select the following values:

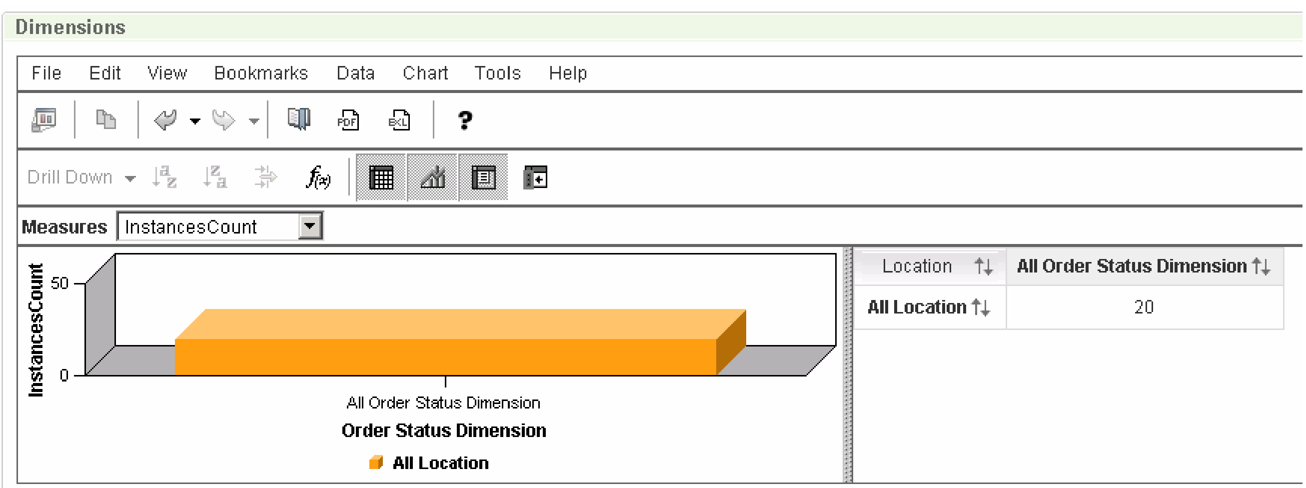
1. Monitoring Model: **ClipsAndTacks (All Versions)**
2. Monitoring Context : **ClipsAndTacks MC**
3. Select **Location** from the **Available Dimensions** list and click the right direction arrow () next to **Row Dimensions** text area.
4. Now select **Order Status Dimension** from the **Available Dimensions** list and click the right directional arrow () next to **Column Dimensions** text area
5. Now select **Measures** from the **Available Dimensions** list and click the right direction arrow () next to **Page Dimensions**



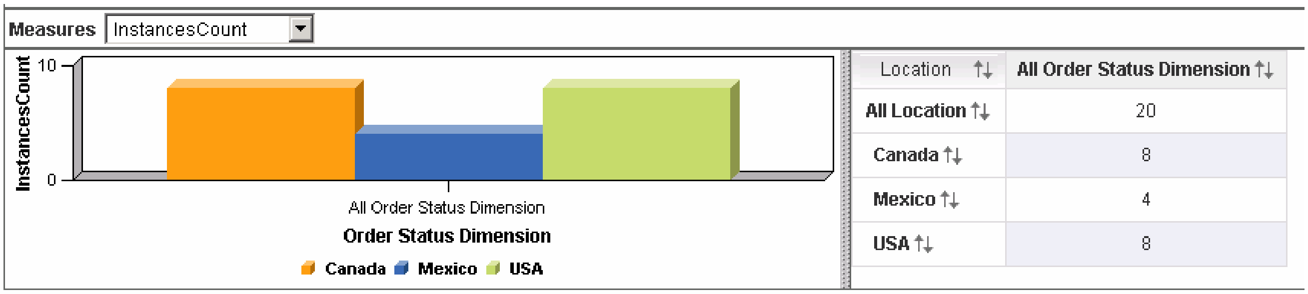
__ e. Click the **Cooperative** tab, then select 'Enable this widget to interact with other widgets.'.

__ f. Click **OK**.

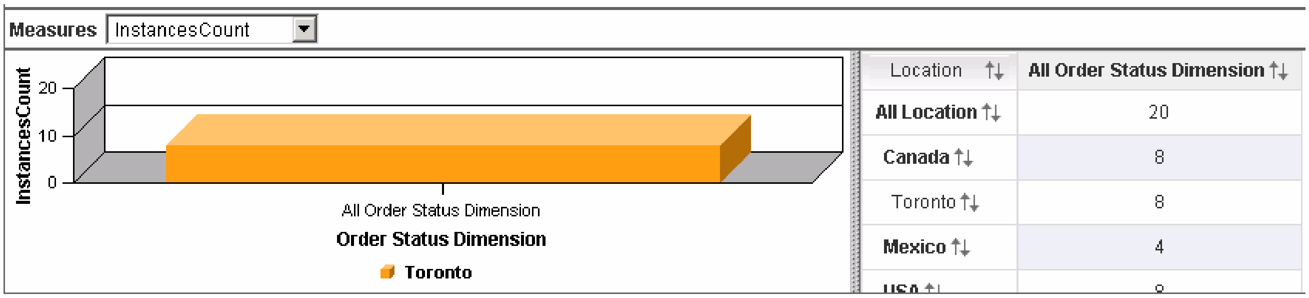
__ g. The Dimensions view displays the instances count based on location and order status.



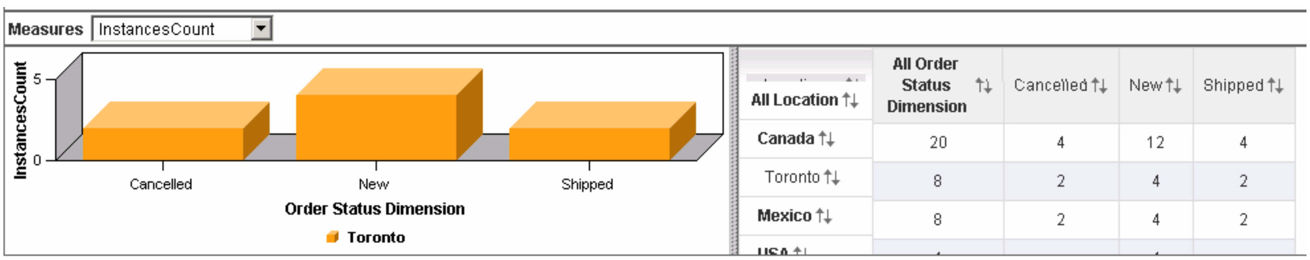
____ 2. You can double click **All Location** to drill down on location.



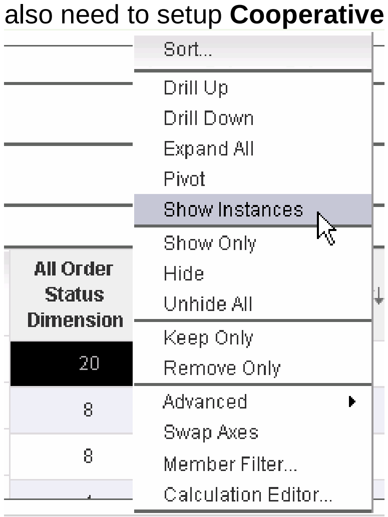
____ 3. You can double click **Canada** to drill down on a specific country.



____ 4. You can double click 'All Order Status Dimension' to drill down on order status.



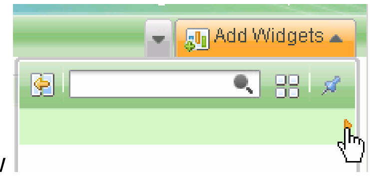
____ 5. To see the instances that aggregate to the counts in the table, just right click any cell in the table and select menu item **Show Intances**, then this will show the instances in the instances widget. You also need to setup **Cooperative** mode on both widgets to enable this capability.



____ 6. If you want to perform analysis on different dimensions in the model, select the Configure widget menu option and move different dimensions to the row, column and page dimensions.

Part 11: KPI manager

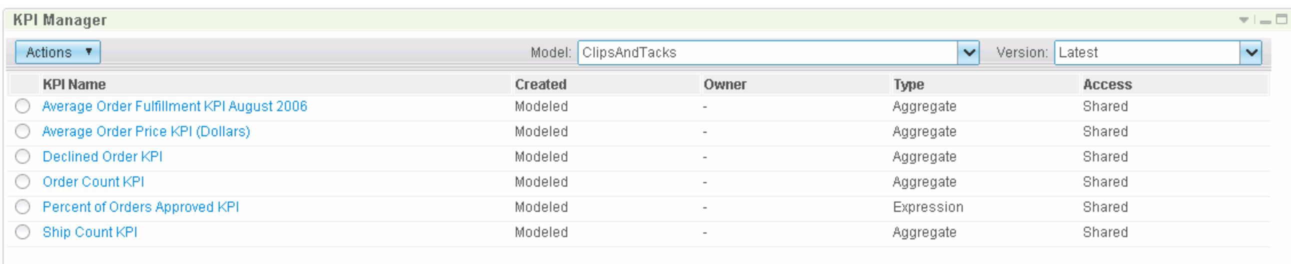
You can use the KPI manager to view existing KPIs and to create, copy and delete KPIs.

____ 1. Click **Add widgets**, then page forward using the right arrow 

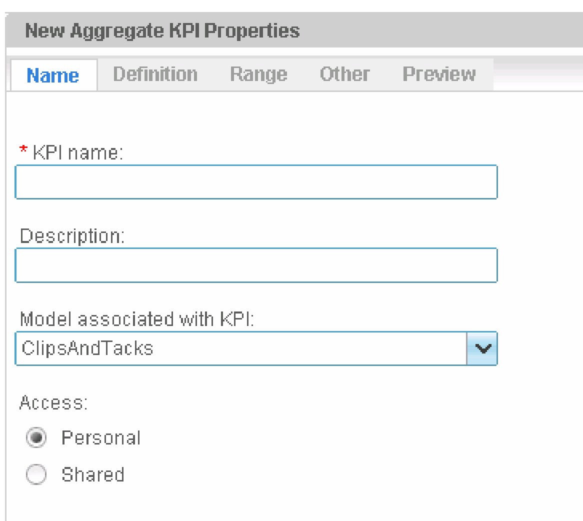
, then select **KPI Manager** and drag it to the page.

____ 2. Select **ClipsAndTacks** from the drop down list for the **Model** field

____ 3. You see a list of the existing KPIs that were defined using the Monitor Model Editor. You can click the KPI Name to edit a KPI, or you can use the Actions button to create, edit, copy or delete KPIs. Note that for KPI's that were created in the monitor model editor, you can only update the target, and the remainder of the settings including ranges are not modifiable. If you need to update these settings, you could make a copy of the KPI, then update the copy.



____ 4. To create a new KPI, click the **Actions** button. You can create an aggregate KPI that performs a function against a metric. You can also create a calculated KPI that uses calculations that reference other KPIs. For this example, select **New Aggregate KPI**.

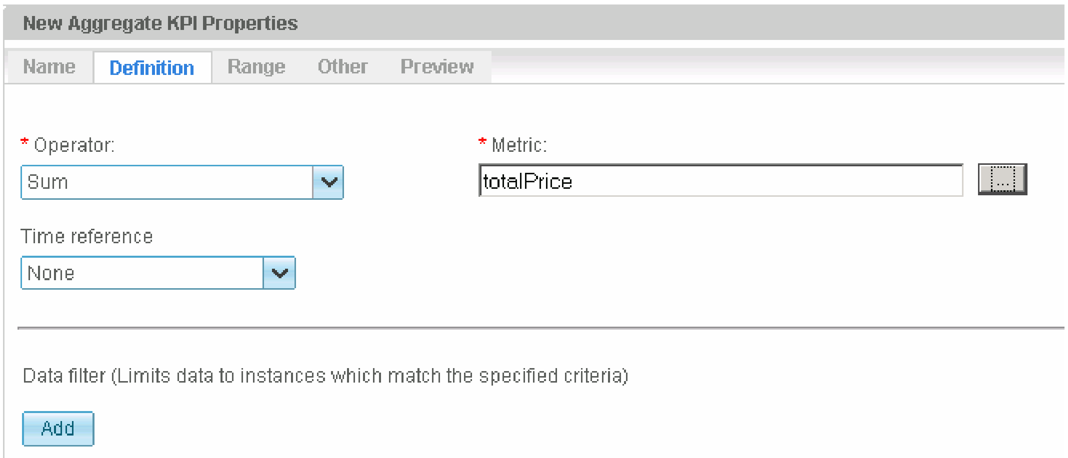


____ 5. Create a KPI that sums the total price of orders. Select the Name tab and enter the following information:

__ a. KPI Name : **Total Price KPI**

__ b. Select the Definition tab and enter this information:

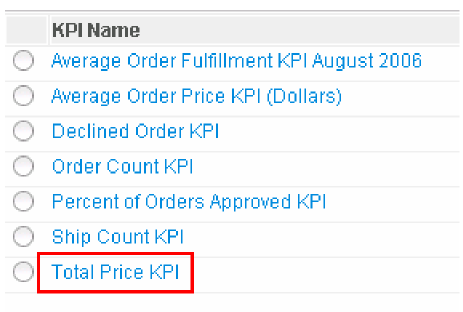
- Operator: Sum
- Metric: Browse to ClipsAndTacks MC > totalPrice



__ c. Take a look at the other tabs to see that you can enter target values, ranges, data filters, and many other preferences. You can also click the Preview tab to see how the KPI will look on the dashboard.

__ d. Click **OK**

__ e. The new KPI has been added to the list of KPI's, and now it can be displayed in the KPI view of your dashboard.



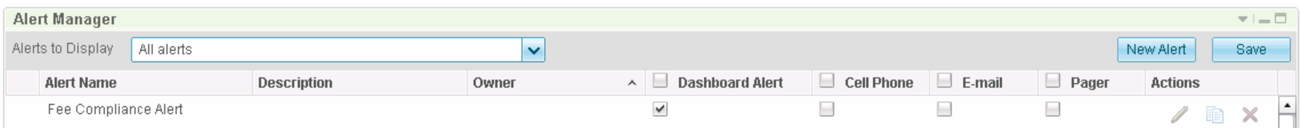
Part 12: Alert manager widget and subscriptions

Using the Alert Manager dashboard widget, you can subscribe or unsubscribe to predefined alert notifications and have the notification sent to your dashboard, e-mail inbox, pager, or cell phone. From the Alert Manager, you can also create new alerts that other users can subscribe to.

____ 1. Add the alert manager to the dashboard

__ a. In Business Space, use the Add Widgets menu to drag the Alert Manager widget to the dashboard.

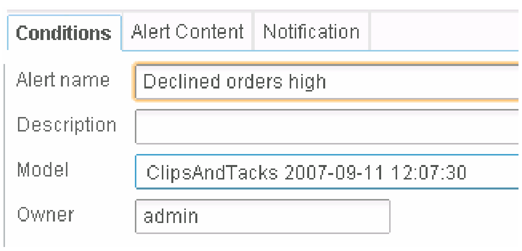
__ b. In this widget you will see existing alerts listed, so you can edit, copy or delete them. You can also change your subscription information or create new alerts.



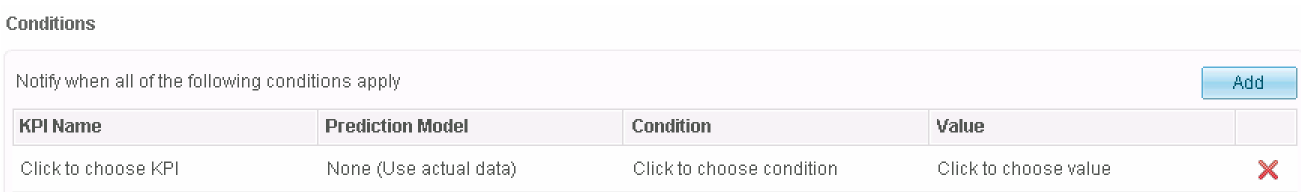
____ 2. Create a business user alert when the declined orders are in the high range.

__ a. Click the New Alert button.

__ b. Enter an alert name and optionally a description and select the Clips And Tacks model.



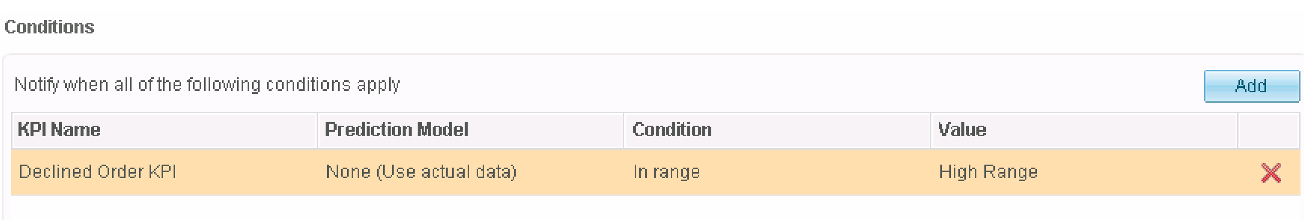
__ c. In the Conditions section, click Add, which will add a row to the conditions table.



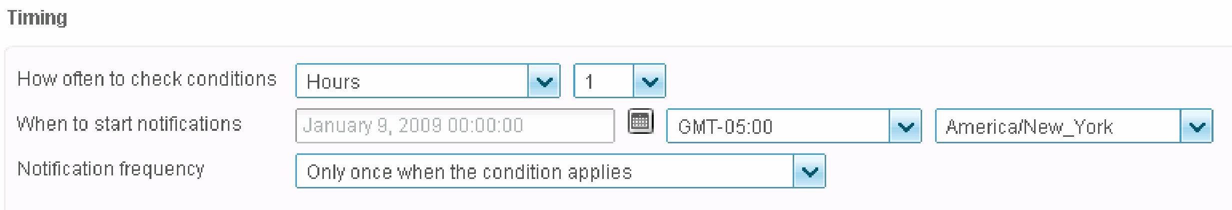
__ d. For KPI Name, click to choose Declined Order KPI.

__ e. For Condition, click to choose 'In range'.

__ f. For Value, click to choose range High.



__ g. In the timing section, set the timing to one hour, and set the notification frequency to 'Only once when the condition applies'. So this means that the condition will be checked every hour, but the alert will be created only once.



__ h. Click the Alert Content tab, and view the default message that is created.

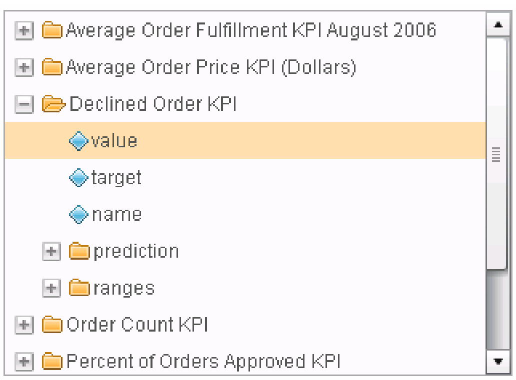
__ i. Update the body to include the KPI value.

1) Select 'Define your own content'

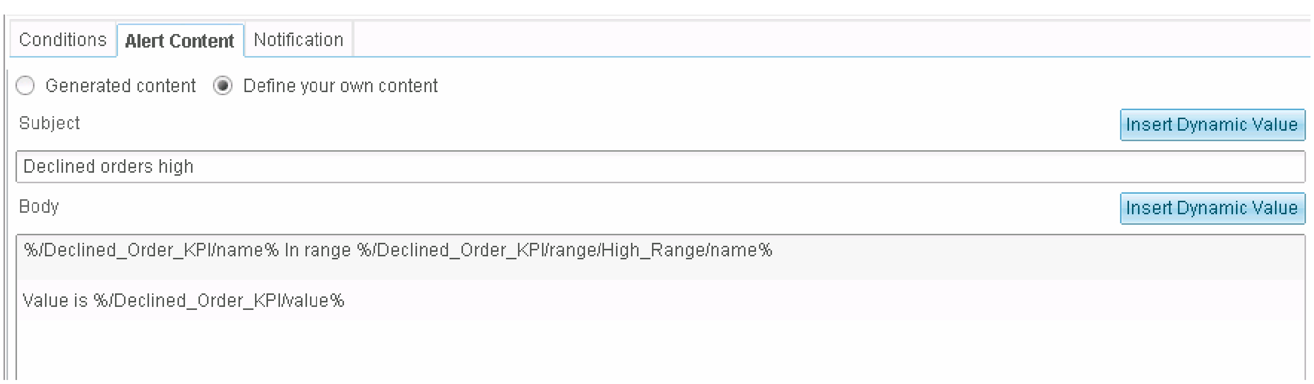
2) Add a blank line and put text 'Value is ' on the third line.

3) Click 'Insert dynamic value' in the body section

4) Navigate to Declined Order KPI > value

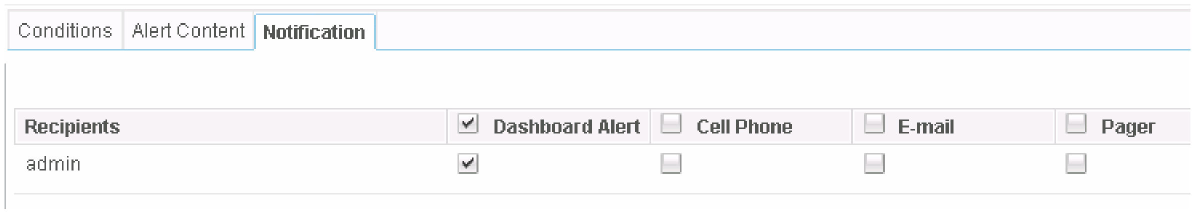


5) Click OK and you will see the dynamic value added to the body on the third line.



6) Click OK

__ j. Click the Notification tab, and you see that the user 'admin' is notified using a dashboard alert.



__ k. Click OK.

__ l. Click OK. You should see the new alert in the list.

____ 3. Subscribe to an alert

__ a. In the alert manager widget, you can select the check box next to the alerts you want to subscribe to and click **Save**. When new alerts are sent, you will be notified via the mechanism that you choose, either dashboard alert, cell phone, e-mail or pager. Phone, pager, and e-mail information is configured by the administrator using the administrative console pages for action services configuration in conjunction with user registry information. The pager and telephone fields typically reference an e-mail address for a phone and pager service that handles the routing of the messages.

What you did in this exercise

In the lab, you imported the ClipsAndTacks model to a new workspace and published it to the Monitor Test Environment

You used the supplied program to simulate the submission of events from the monitored application.

You created a new dashboard and added widgets to the dashboard and configured them.

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