
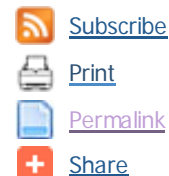


## Blogs

### Exception Broadcasting in SAP NetWeaver 2004s

[Kathleen Beavers](#)   
[Business Card](#)

Posted on Dec. 28, 2006 04:39 PM in [Business Intelligence \(BI\)](#), [Enterprise Portal \(EP\)](#), [SAP NetWeaver Platform](#)

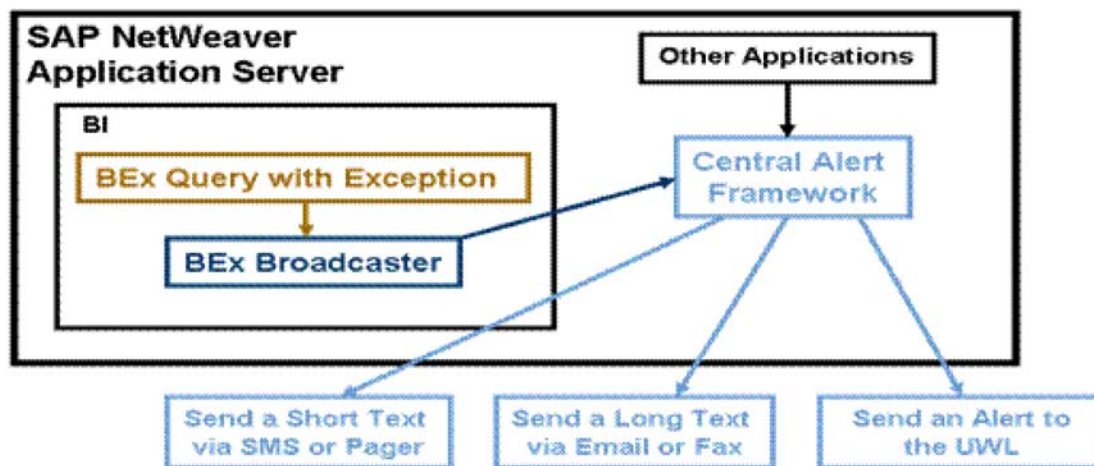


One of the new distribution types for Information Broadcasting in SAP NetWeaver 2004s is exception broadcasting. (For an overview of the new features, see the blog [Summary of New Features for Information Broadcasting in SAP NetWeaver 2004s](#).) With "Broadcast According to Exceptions", the system executes an exception query in the background. If an exception is found, the system generates the appropriate action (an alert, an e-mail, or a document exported to the portal) based on settings that the user selects in the SAP Business Explorer (BEx) Broadcaster. In this way, the interested party is notified automatically when a problem occurs or is imminent ("pushing" information) and is directed to the specific problem rather than having to "pull" the information by executing reports and searching for possible problem areas. Clearly, this is a much more efficient method of identifying areas that need attention and ultimately, we hope, resolving the underlying issues.

Exception broadcasting requires configuration in three different areas:

- BEx Query Designer
- Alert Management
- BEx Broadcaster

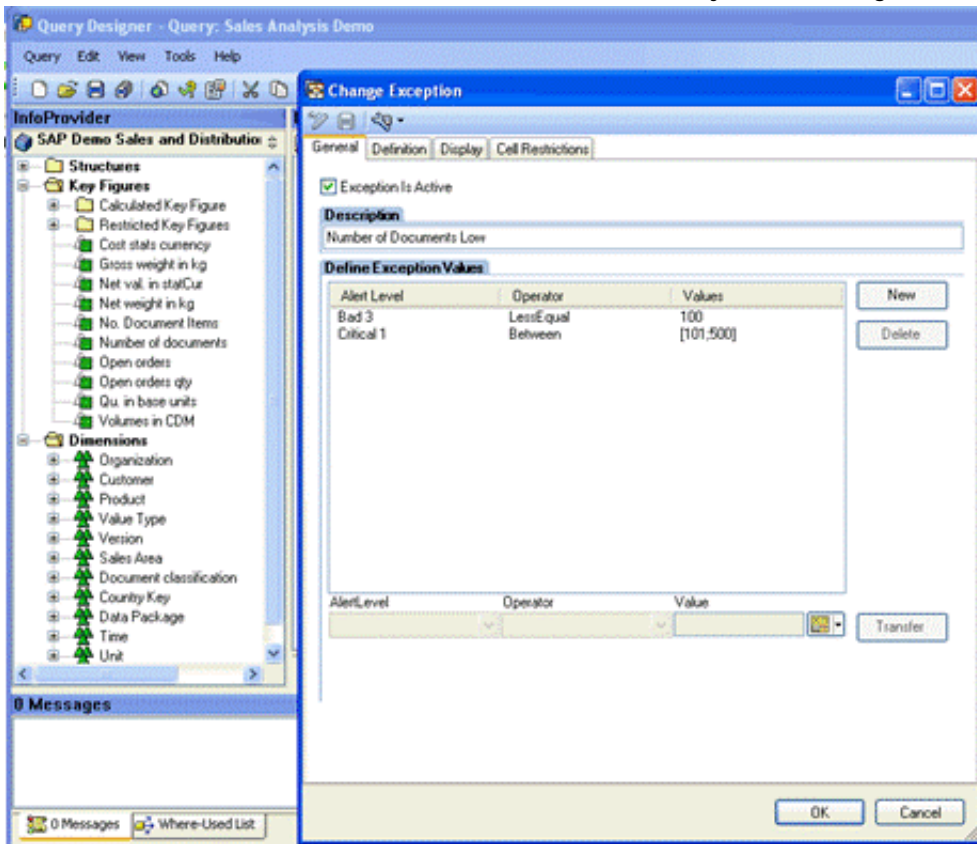
The following diagram illustrates the relationships among these functions:



The remaining sections of this blog describe the steps for implementing exception broadcasting.

#### Create an Exception Query

In the BEx Query Designer, you add an exception to your query as illustrated below. In the exception definition, you identify thresholds at which you want the query results highlighted when reached or exceeded. Exceptions can include multiple alert levels – you can highlight both favorable and unfavorable results and have several levels of severity. In this example, we have set two alert levels: critical, which are areas that require monitoring, and bad, which are areas that require immediate action.



For more information, see [Defining Exceptions](#) in the online help.

The figure below shows the resulting query, based on current information:

Sales Analysis Demo Last Data Update: 03.05.2005 08:29:38

New Analysis Open Save As... Display as Table Information Send Print Version Export to Excel Comments Filter Settings

Country	Distribution channel	Number of documents	Net val. in statCur	Open orders
			EUR	EUR
Australia	Direct Sales	170.000	19,026,038.00	1,975,084.00
	Final Customer Sales	162.000	24,853,590.00	1,925,880.00
	Service	174.000	28,081,112.00	2,135,484.00
	Sold for resale	168.000	30,172,560.00	2,377,982.00
	<b>Result</b>	<b>674.000</b>	<b>102,133,300.00</b>	<b>8,414,430.00</b>
Canada	Final Customer Sales	1,320.000	202,746,922.00	5,440,890.00
	Service	48.000	6,436,800.00	302,400.00
	Sold for resale	1,188.000	420,559,374.00	5,045,370.00
	<b>Result</b>	<b>2,556.000</b>	<b>629,743,096.00</b>	<b>10,788,660.00</b>
France	Final Customer Sales	6,848.000	471,690,232.46	51,077,893.92
	Sold for resale	6,240.000	501,041,929.10	75,559,112.44
	<b>Result</b>	<b>13,088.000</b>	<b>972,732,161.56</b>	<b>126,637,006.36</b>
Germany	Direct Sales	3,240.000	416,851,534.64	11,954,014.00
	Final Customer Sales	4,200.000	394,511,297.92	16,669,819.98
	Service	5,220.000	140,520,968.14	10,068,672.42
	Sold for resale	7,260.000	830,487,170.00	58,565,580.00
	<b>Result</b>	<b>19,920.000</b>	<b>1,782,170,970.70</b>	<b>97,258,086.40</b>

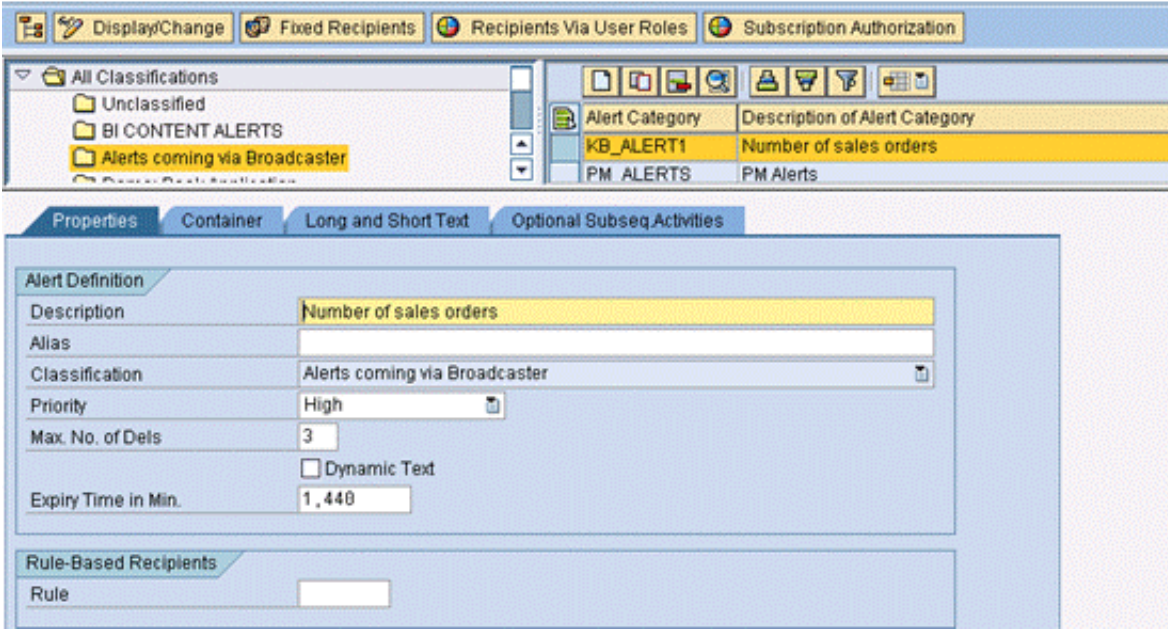
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### Configure Alert Management

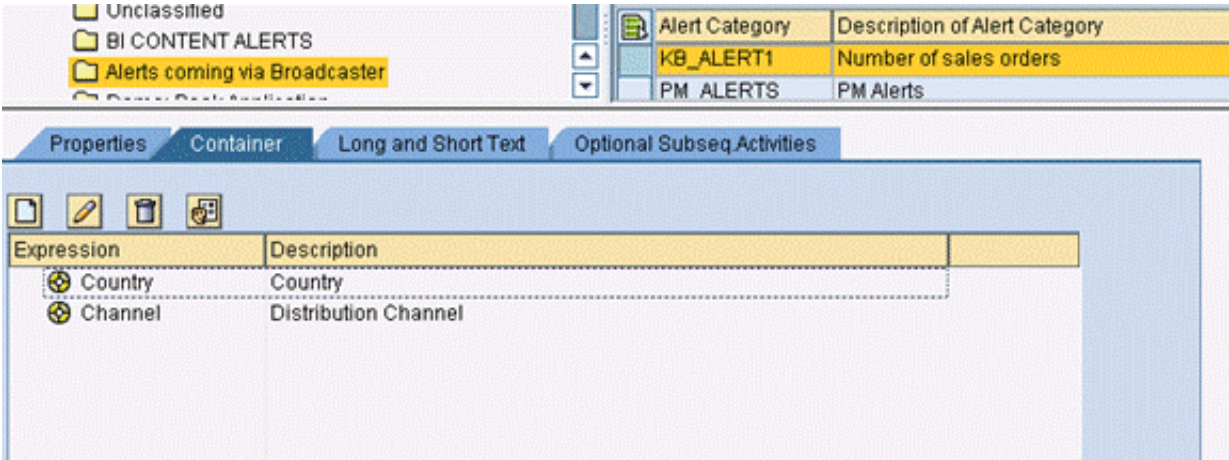
Alert management is a centralized function of the SAP NetWeaver Application Server. This tool allows you to manage all of your SAP alerts, not just BI alerts, in one place.

Transaction ALRTCATDEF accesses the screen for alert category definition. Below you can see the tabs for the different alert category settings. The buttons at the top allow you to set identify the recipients for the alert communication. You can establish fixed recipients, recipients via roles or recipients with the option to subscribe to the alert (also via roles).

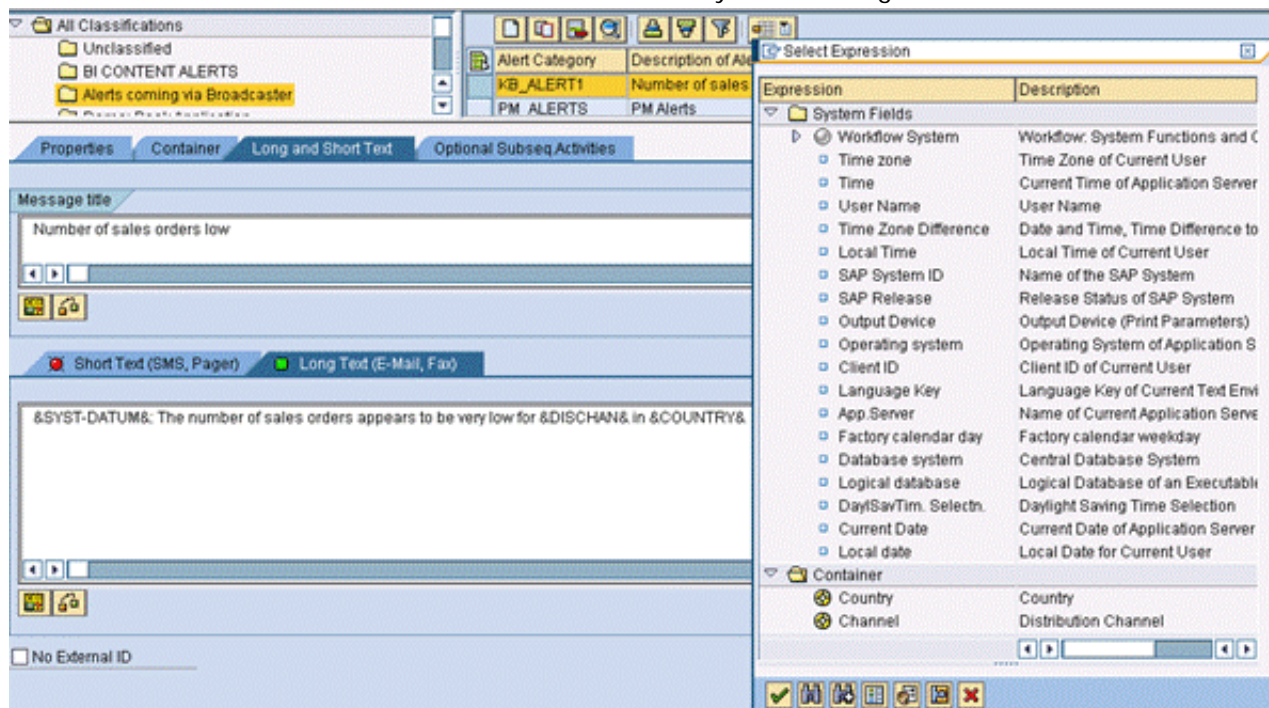
### Alert Categories Change (Central Alert Server)



In the "Container" tab, you create container elements for the parameters that you want to pass from BI to the alert message. In this example, we want to identify the country and distribution channel where the exception is occurring.



In the "Long and Short Text" tab, you define the text for the alert message, including text variables if desired. As well as some pre-defined system variables, the user has the option of including variables for the container items created on the previous tab. In this way, you can include the BI parameters in the text to identify the location of the problem to the user, without requiring them to execute the exception query to determine this information.

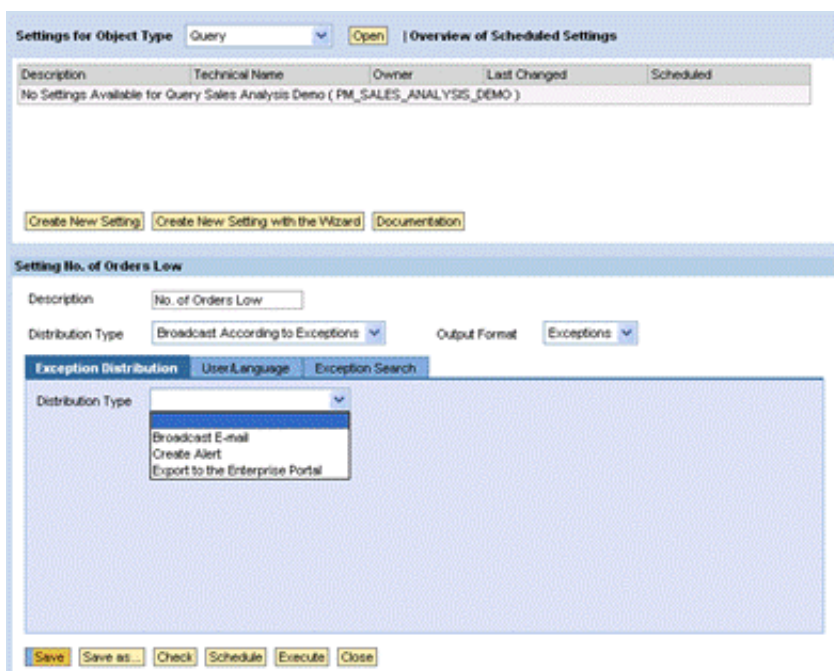


The alert communication will automatically include a link to the broadcast settings that generated the alert, as well as to the underlying exception query. You can optionally identify an additional URL, for additional research perhaps, in the “Optional Subseq. Activities” tab.

For more information, see [Alert Management](#) in the online help.

### Create a Broadcast Setting

In the BEx Broadcaster, you select the exception query and “Create New Setting”. This opens the Setting pane in the lower section of the window as shown below. The tabs that are displayed in the Settings pane are dependent on the distribution type and output format selections. Once you select “Broadcast According to Exceptions”, you will see a subordinate distribution type in the first tab. (The output format “Exceptions” is the only valid format for this distribution type and therefore is automatically selected.) The options for subordinate distribution type are shown below:

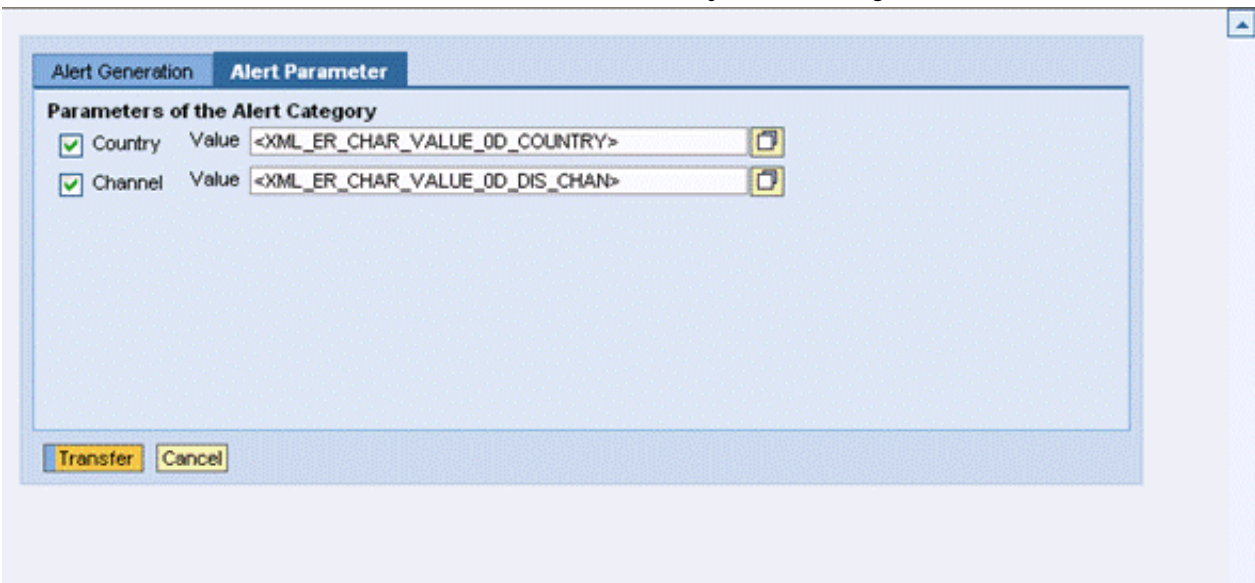


Choosing the subordinate distribution type (in this case, we are selecting “Create Alert”) generates another update to the display within the tab. Notice that one of the new fields is a second subordinate distribution type – you can create multiple distributions within the same setting.

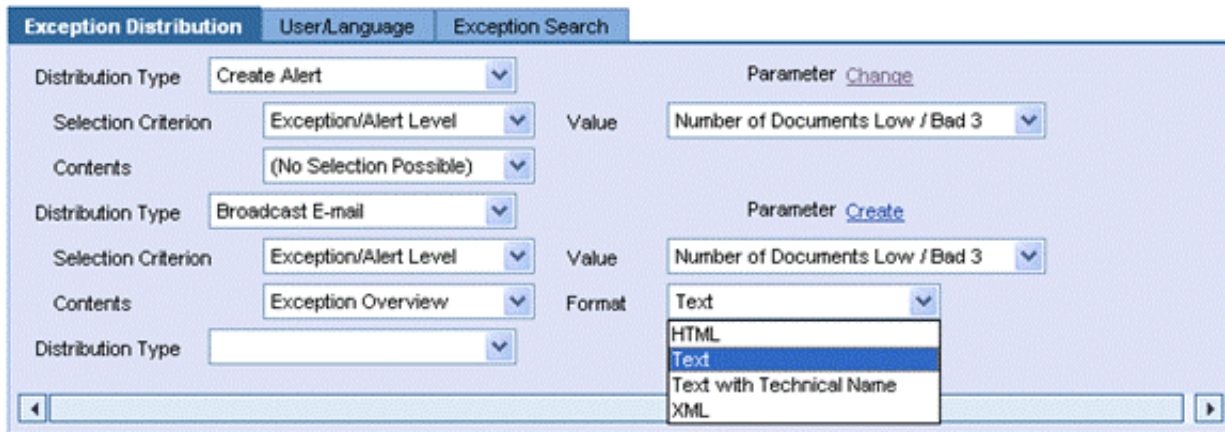
The selection criterion dropdown list allows you to choose between “Exception” and “Exception/Alert Level”. If you choose the first, then an alert will be sent when any exception threshold is met. In this case, we only want an alert to be created when immediate action is required, therefore, we only want to generate an alert if the alert level is “Bad 3” and will choose the second option. The value dropdown to the right of the selection criterion allows you then to choose the desired alert level.

Just above the value dropdown is a link ("Create") to additional parameters for this subordinate distribution type. Select this link to open a new window, as illustrated below. In the first tab, you select the alert category that you defined in Alert Management and have the option to send the alert to the recipients defined there or to different recipients, which you define here.

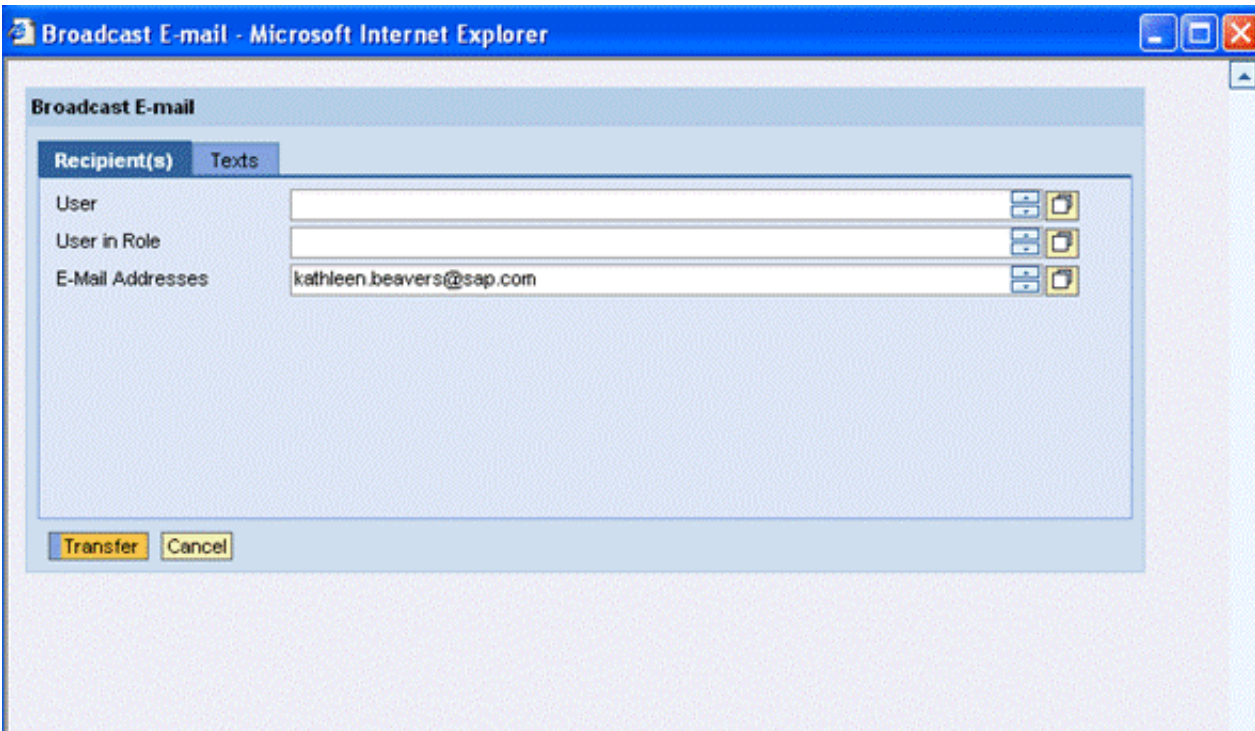
In the next tab of the parameters screen, you identify which of the parameters that you want to pass from Information Broadcasting to Alert Management. These options are automatically generated from the Container configuration that you performed for your alert category. From the associated dropdown list, you select the text variable used for each parameter. You have a choice of sending the description (e.g., Canada) or the ID (e.g., CA).



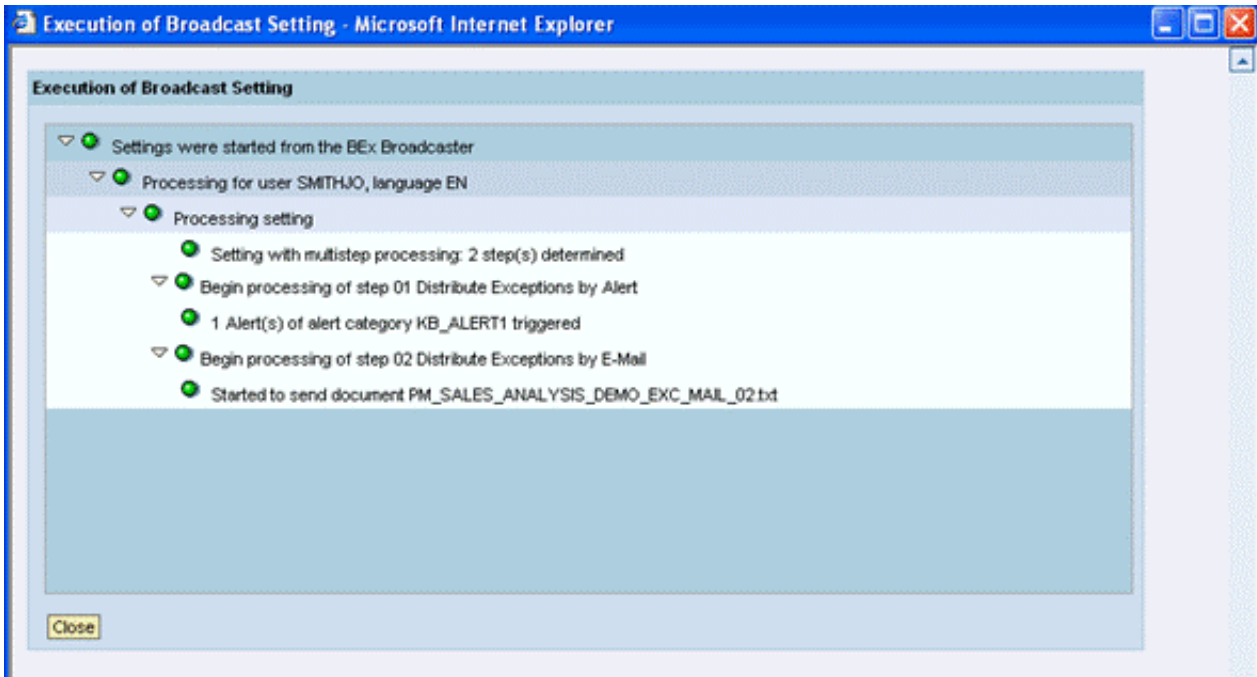
In this example, we select an additional distribution by e-mail. In the figure below, you can see that the selection criterion is the same. You can select between an "Exception Overview" and "Exception Details" document. For this output, you can choose among different formats.



Once again, you will set some additional parameters that are specific to this distribution type. Click on the "Create" link and the following window is displayed, where you can define recipients and text for the e-mail.

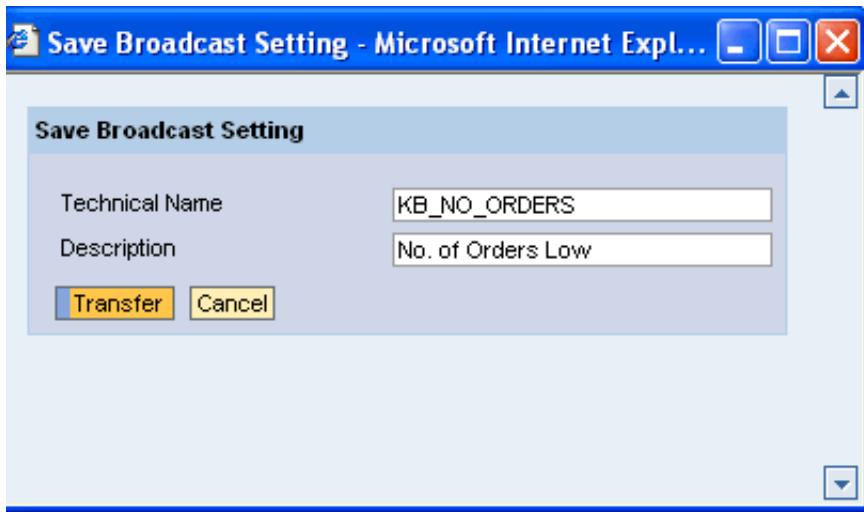


Now that the settings are complete, you can execute the broadcast ad hoc to test it. The example below reflects the expected results.

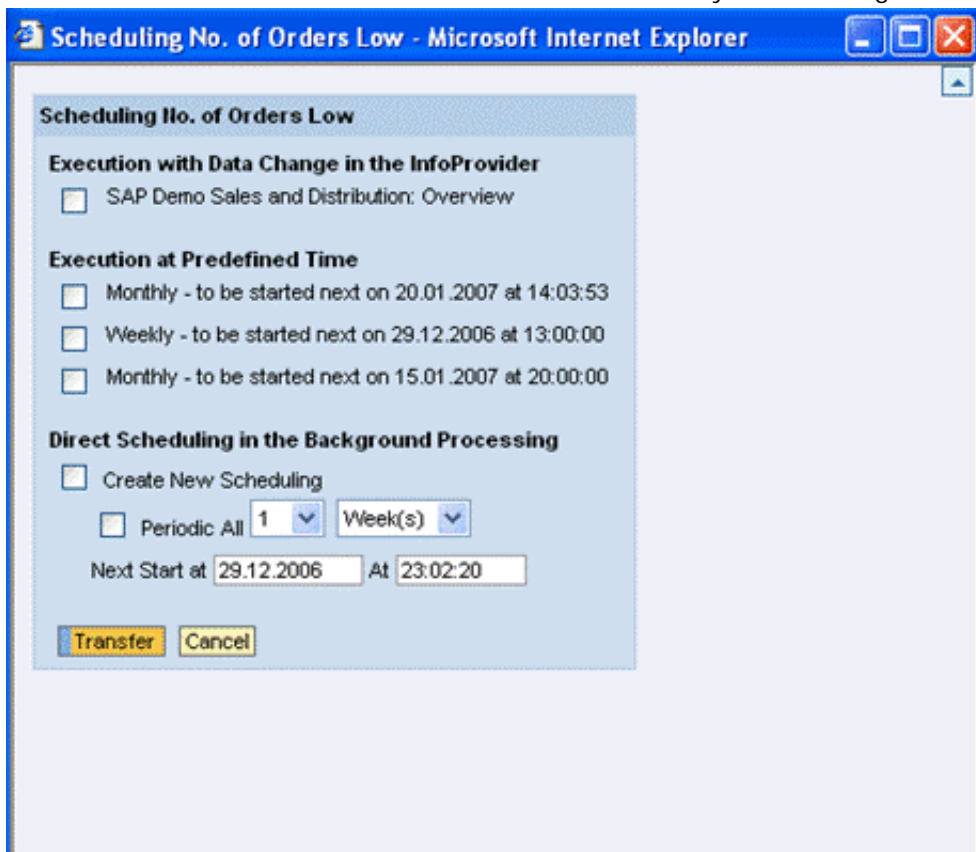


### Schedule a Broadcast Setting

For exception broadcasting, however, normally you will want to schedule the broadcast so that the exception report will be processed on a regular timeframe or based on an event, such as loading data to an InfoCube. Before you can schedule the broadcast, you must first save the setting.



The scheduling options are illustrated in the following figure.



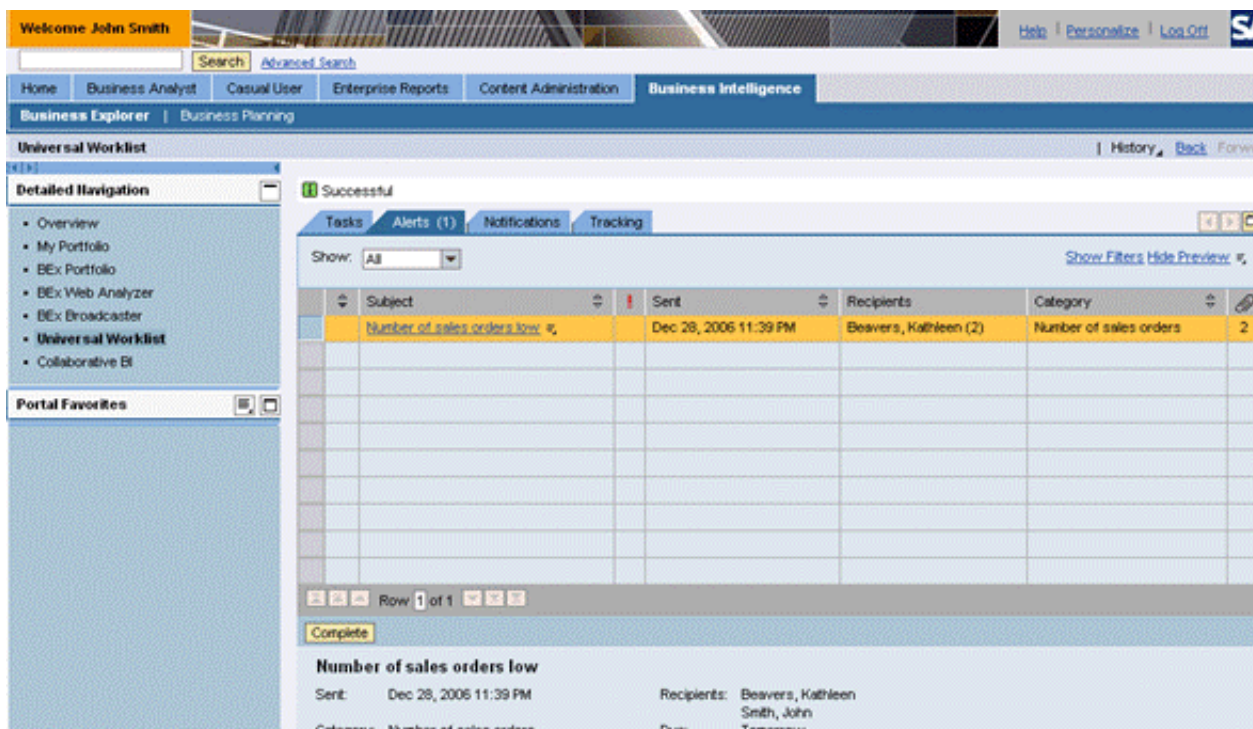
The first section reflects event-based scheduling – this option is available if system administration has included the “Trigger Event Data Change (for Broadcaster)” process type in a process change for the relevant BI object. For more information, see [Including Event Data Changes in Process Chains](#) in the online help.

The system administrator also performs configuration that determines the options available in the second session. Background jobs define the possible broadcasting times. For more information, see [Defining Times for Broadcast Scheduling](#) in the online help.

The final section allows the user to schedule a new broadcast time and frequency.

### Broadcasting Results

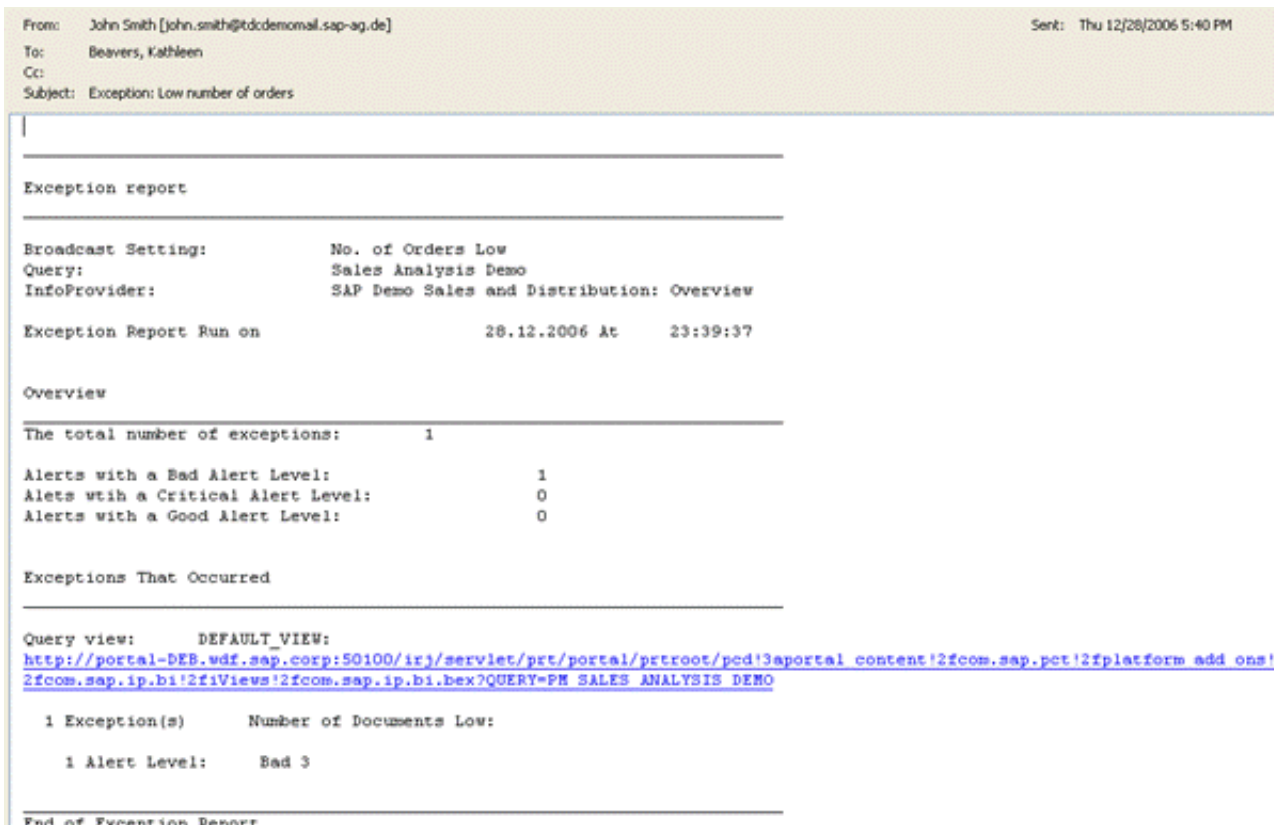
The “Create Alert” distribution type generates an alert to the Universal Worklist (UWL) of the recipient in the SAP NetWeaver Portal as illustrated below. (It can also be configured to generate messages via SMS, pager, e-mail or fax, as shown in the architecture figure at the beginning of this blog.) For more information on configuration of the UWL, see [Universal Worklist Configuration](#) in the online help.



Clicking on the alert item in the UWL opens a window with the alert details. In the example below, you can see the message, including the links to the underlying exception query and to the broadcast settings.



The "Broadcast E-mail" distribution type generates the following e-mail:



Additionally, although we did not choose this option in the scenario above, you can broadcast an exception document to Knowledge Management (KM) folders in the SAP NetWeaver Portal. The following is an example of the exception document in KM:

**Exception report**

---

Evaluated view: [DEFAULT VIEW](#)  
 Query: [Sales Analysis Demo](#)  
 InfoProvider: SAP Demo Sales and Distribution: Overview  
 Time of evaluation: 28.12.2006 23:52:38

**Exceptions That Occurred**

Country	Distribution channel	Key Figure	Value	Exception / alert level (threshold value)
Canada	Service	Number of documents (SAP DEMO)	48.000	Number of Documents Low / Bad 3 (lower or equal:100)

For additional information on exception broadcasting as well as general information about this process, see [Information Broadcasting](#) in the online help.

*[Kathleen Beavers](#) is a Product Manager for SAP NetWeaver specializing in the SAP Business Intelligence component, with a focus on the reporting and planning tools.*



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2009-03-15 10:01:31 Oscar Edgardo Diaz De La Torre [Business Card](#) [\[Reply\]](#)

Thank you ....it was very well explained and clear with the screens....its a not very common functionality of BEX but one of the most impressive issue to show....

Regards

- [Excellent!!](#)

2007-11-19 21:48:12 Anil Bavaraju [Business Card](#) [\[Reply\]](#)

Very Helpful Blog!!!....

It is mentioned that we can broadcast query to Fax as well, but i did not find any option as such. Can you please let me know where do i need to configure settings to Fax the report.

- [Excellent!!](#)

2007-12-10 14:35:03 Kathleen Beavers  [Business Card](#) [\[Reply\]](#)

Hi Anil,

You don't broadcast a query to Fax per se, but rather generate an alert via the central alert framework. Per the documentation on configuring alert processing: "If the alerts are sent from the central alert with external communication methods (e-mail, sms, or fax), the chosen external communication method must be correctly configured in SAPconnect." You can find the documentation on SAPconnect at [http://help.sap.com/saphelp\\_nw70/helpdata/en/2b/d925bf4b8a11d1894c0000e8323c4f/frameset.htm](http://help.sap.com/saphelp_nw70/helpdata/en/2b/d925bf4b8a11d1894c0000e8323c4f/frameset.htm).

Regards,  
Katie

- [Email recipients at runtime](#)

2007-10-03 03:30:13 Karthik R [Business Card](#) [\[Reply\]](#)

We have a scenario in exception reporting.

We generate report of all employees whose work permit expires in next 3 months.

We need to send alerts ONLY to those employees whose work permit expires. So, in this case, the email recipients are known only during runtime.

How do we achieve this ?

I have posted this in reporting forum in SDN, but, no answers. We need a solution for this scenario.

Please suggest.

Thanks,  
Karthik

- [Email recipients at runtime](#)

2007-10-10 12:08:19 Kathleen Beavers  [Business Card](#) [\[Reply\]](#)

Hi Karthik,

This isn't a question that I can answer. Please give me the link for your forum posting, and I will ask some of my colleagues in consulting to look at it.

Regards,  
Katie

- [Great Blog!](#)

2007-09-24 14:47:34 Naga Yadavalli [Business Card](#) [\[Reply\]](#)

Hi

This is really useful blog on broadcasting.

Regards  
Aditya

- [Need details on How to set Via SMS/Pager](#)

2007-05-14 11:19:42 ram gowda [Business Card](#) [\[Reply\]](#)

It would be nice to have a doc that gives details on how to set this up a Pager or SMS Messages....

- [Great blog!](#)

11/17/2010

SAP Community Network Blogs

2007-01-23 12:10:01 Ginger Gatling  [Business Card](#) [\[Reply\]](#)

Hi Katie,

This is a great blog - thanks for writing it up!

ginger

- [Nice Blog](#)

2006-12-28 16:59:29 Kamaljeet Kharbanda [Business Card](#) [\[Reply\]](#)

Nice Blog.

@KJ...

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Showing messages 1 through 9 of 9.

