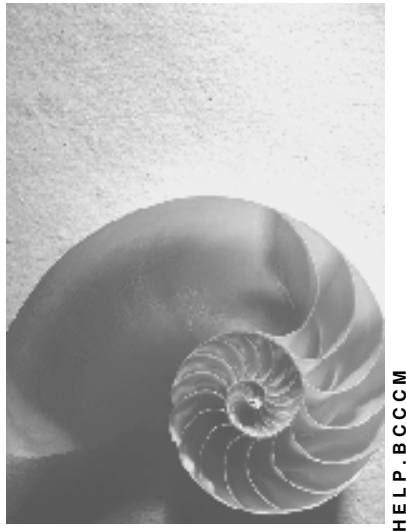


Forwarding Alerts to Alert Management (ALM) - Configuration Example



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Icons in Body Text

Icon	Meaning
	Caution
	Example
	Note
	Recommendation
	Syntax

Additional icons are used in SAP Library documentation to help you identify different types of information at a glance. For more information, see *Help on Help* → *General Information Classes and Information Classes for Business Information Warehouse* on the first page of any version of *SAP Library*.

Typographic Conventions

Type Style	Description
<i>Example text</i>	Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options. Cross-references to other documentation.
Example text	Emphasized words or phrases in body text, graphic titles, and table titles.
EXAMPLE TEXT	Technical names of system objects. These include report names, program names, transaction codes, table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE.
Example text	Output on the screen. This includes file and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools.
Example text	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
<Example text>	Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.
EXAMPLE TEXT	Keys on the keyboard, for example, F2 or ENTER.

Forwarding Alerts to Alert Management (ALM)MERGEFORMAT 5
Example Configuration: Forwarding Alerts to the ALMMERGEFORMAT 5



Forwarding Alerts to Alert Management (ALM)

Conditions for critical situations are predefined in the [Alert Management \[External\]](#) (ALM) Framework. If an alert is triggered in ALM that meets these conditions, those responsible or interested are identified and are informed about the situation by the immediate sending of alerts. The alerts are displayed to the recipient in one of the following programs:

- In the Universal Work List (UWL of the Enterprise Portal) as of SAP NetWeaver '04
- In an application that accesses the alerts using an API
- In the Alert Inbox. The Alert Inbox is an application based on Business Server Pages (BSP), which can be called using the transaction ALRTINBOX or the corresponding URL (<http://<host>:<port>/sap/bc/bsp/sap/alertinbox>).

There are also a number of external communication methods available. You can configure these in SAPconnect (transaction SCOT) and use them in addition to inform the recipient of an alert about the problem: Internet mail, SMS, and fax.

The auto-reaction method *CCMS_Send_Alert_to_ALM*, which forwards alerts for assigned monitoring architecture nodes to the ALM, is available in the alert monitor. This method is therefore used in a similar way to the auto-reaction method *CCMS_OnAlert_Email*, with which you can define an automatic alert notification. A difference is that when you are forwarding alerts to the ALM, you no longer need to specify the sender and recipient in the method definition, and recipients can also be defined using authorizations and roles. More communication methods and additional Alert Management functions, such as escalations or confirming the alert, are also available.

Prerequisites

- Central system dispatching must be activated in client 0 of the central monitoring system (CEN). To activate central system dispatching, choose *Technical Infrastructure* → *Configure Central System* → *Activate Central System Dispatching* in transaction RZ21.
- Background dispatching must be activated in client 0 of all monitored systems and in CEN. To activate background system dispatching, choose *Technical Infrastructure* → *Configure Local Method Execution* → *Activate Background Dispatching* in transaction RZ21.
- To be able to display alerts in the Alert Inbox (transaction ALRTINBOX or URL), which is based on BSPs, you must activate the corresponding BSP service. To do this choose *Default_host* → *sap* → *bc* → *bsp* → *sap* → *alert inbox* in transaction SICF. Open the context menu for *alert inbox* and choose *Activate*.



Example Configuration: Forwarding Alerts to the ALM

This example demonstrates which configuration steps you must perform to forward CCMS alerts to Alert Management (ALM) and to display them in the Alert Inbox. In this example, you want to assign different alert categories to three monitoring areas:

- An alert category **CCMS CPU** is to be created in the ALM for alerts in nodes that belong to the monitoring object *CPU*.
- An alert category **CCMS DIALOG** is to be created in the ALM for alerts of the MTE class *R3DialogResponseTime* (average response time of the dialog service).
- An alert category **CCMS SYSLOG** is to be created in the ALM for alerts of the MTE class *R3SyslogBasisSystem*.

Since the alert category is transferred as a parameter of the method definition for the auto-reaction method *CCMS_Send_Alert_to_ALM*, you must therefore create three different method definitions from the template, which you can then assign to the relevant nodes.

Procedure

Proceed as follows to display CCMS alerts in the Alert Inbox using ALM. CEN stands for the central monitoring system.

Creating an RFC Connection Between the CCMS and the ALM


1. You require a user for the RFC connection between client 0 of the central monitoring system (CEN) and the work client of the ALM system.



You require this RFC destination even if CEN and ALM are in the same system.

To provide this, start user maintenance in the work client of the ALM system by calling transaction **SU01**.

2. Create a user **ALERT**, and enter the following parameters:

Tab Page	Entry
<i>Address</i>	Enter any last name.
<i>E-Mail</i>	Optional: If you want to be notified by e-mail and have set up the corresponding node in SAPconnect, enter an e-mail address here. This is to be the sender's address of the e-mails with which you are informed of inbound alerts by the ALM.
<i>Logon Data</i>	Enter any initial password, and repeat your entry.
<i>Roles/Profiles</i>	Enter the role SAP_BC_ALM_ADMIN and the profiles SAP_ALL and SAP_NEW .  The use of the profiles SAP_ALL and SAP_NEW is only intended as a temporary solution and should not be given to customers in this form. As of SP 9, the role SAP_BC_ALM_ALERT_USER will be specially delivered for the user ALERT . If there is sufficient time, you can create the corresponding role in the training system. The authorization objects for sending alerts are S_OC_SEND and S_RFC .

3. Save your entries.
4. In client 0 of the central monitoring system (CEN), create the RFC connection to the work client of the ALM system. To do this, start *Display and Maintain RFC Destinations* by calling transaction **SM59**.
5. Choose the *Create* button, and enter the following parameters:



Input Field	Entry
<i>RFC Destination</i>	Enter any name for the RFC destination.
<i>Connection Type</i>	Enter 3 for <i>Connection to SAP R/3 System</i> .
<i>Description</i>	Enter any description for the RFC destination; confirm your entries up to now by choosing <i>Enter</i> (✔).
<i>Technical Settings</i>	Specify the desired server or the desired logon group of the ALM system.
<i>Logon/Security</i>	Specify the logon data of the ALERT user created above. Ensure that you specify the client in which you created the user.

6. Check the RFC destination by choosing *Remote Login*. If the RFC destination is correctly configured, you will have logged onto the ALM system.
7. Save your entries.

8. Make this RFC destination known as the RFC destination of the Alert Management Systems in client 0 of CEN. To do this, start transaction **SALRT1**, and enter the destination created above in the input field *RFC Dest.of Alert Server*.


Configuring Alert Management

You want to forward alerts from the areas *Dialog*, *CPU*, and *Syslog* to the ALM in the context of monitoring. Since each area is overseen by different employees, you require different alert categories in the ALM. You want to specify a fixed user as the recipient for both categories. In addition, an escalation user is to be informed after a few minutes.

1. Change the alert categories, by calling transaction **ALRTCATDEF** in the work client of the ALM system.
2. Switch to change mode by choosing the *Display/Change button* .
3. You are on the *Change Alert Categories* screen. Since all alerts from the monitoring infrastructure have the alert classification *CCMS ALERTS* in the ALM, choose the classification by double-clicking it.
4. To create a new alert category, select the existing category *CCMS TEMPLATE* as a template in the table in the upper right, and choose *Copy Alert Category* . Enter **CCMS CPU** as the name of the new category. Create the categories **CCMS DIALOG** and **CCMS Syslog** in the same way.
5. The new alert categories are now displayed in the list of existing categories. To start the method, choose the node by double clicking it. Activate the indicator *Escalation Active* for the new categories in the *Properties* group box and enter any *Escalation Recipient* and a *Tolerance Time in Minutes*. The alert is then sent to the escalation recipient if it is not confirmed within a certain time.



The report **RSALERTPROC** must be scheduled as a job for the relevant classifications and categories so that escalation can be performed. The *Escalate* option must be selected in the report for this. If the report is not executed as an escalation job, the escalation option is available for selection on the *Properties* tab page in the configuration transaction **ALRTCATDEF**, but the alert is not escalated.

6. To set fixed recipients for the selected category, choose the *Fixed Recipients*  button, and then choose *New Entries* on the screen that appears after this, *Change "Fixed Alert Recipients": Overview*. Specify fixed recipients for all of the new categories.
7. Ensure that the *Dynamic Text* indicator is activated in the *Properties* of the alert categories, since the text for the alert is determined not in the ALM, but rather in the CCMS.
8. Save your entries.
9. In Alert Management, you can determine the times at which you want to be informed about an alert, and whether external communication methods (mail, SMS, fax) are also to be used. This is done in a [BSP application \[External\]](#), which you can call using transaction **ALRTINBOX** → *Personalization* or with the following URL:


```
<Prot>://<Hostname>:<Port>/sap/bc/bsp/sap/alertinbox
```

 Example:


```
http://myServer.sap-ag.de:1080/sap/bc/bsp/sap/alertinbox
```
10. A screen on which you can specify the desired delivery method depending on the time appears. By default, alerts that occur are sent to the recipient, irrespective of time, in the UWL, application, or Alert Inbox and are also sent by e-mail, if this external communication method is configured. You also have the following options:
 - Choose the *time-independent delivery* radio button and, if applicable, the additional external delivery types (*Mail, SMS, Fax*).



External communication methods must be configured in SAPconnect. The communication data, such as e-mail addresses, must also be maintained in the user settings for the recipient and the RFC user in transaction SU01.

- Choose the *time-dependent delivery* radio button and, if applicable, the additional external delivery types (*Mail, SMS, Fax*). You can specify a factory calendar and the type of delivery with the corresponding time periods.
11. You can also specify a substitute.
 12. Save your entries.

Optional: Configuring SAPconnect

If alerts are to be sent to users using the external communication methods e-mail, SMS, and fax, these must be configured in SAPconnect. To do this, a mail server must be available. The communication data, such as e-mail addresses, must also be maintained in the user settings for the recipients and the RFC user in transaction SU01.

The configuration for SAPconnect is performed in the work client of the ALM system. For information about this, see

http://help.sap.com/saphelp_erp2004/helpdata/en/2b/d925bf4b8a11d1894c0000e8323c4f/frameset.htm.

Tailoring the Auto-Reaction Method

Adjust the auto-reaction method *CCMS_Send_Alert_to_ALM* to your requirements in the work client of CEN, and assign the method to the desired nodes as a local or central auto-reaction method.

Since you want to assign three different alert categories to different nodes, first copy the original method *CCMS_Send_Alert_to_ALM* three times, so that you can then set the *CATEGORY* parameter of the three copies to the values *CCMS_CPU*, *CCMS_DIALOG*, and *CCMS_Syslog*.

1. In the work client of CEN, start the Customizing transaction for the monitoring architecture by starting transaction **RZ21**.
2. In the *Methods* group box, select *Method Definitions* and choose *Display Overview*.
3. Select the method *CCMS_Send_Alert_to_ALM* and choose *Copy* (📄). Specify **ZCCMS_Send_Alert_to_ALM_CPU** as the name. Create another two copies in the same way, with the names **ZCCMS_Send_Alert_to_ALM_DIALOG** and **ZCCMS_Send_Alert_to_ALM_Syslog**.
4. In the list, select the new method definition **ZCCMS_Send_Alert_to_ALM_CPU**, and choose the *Edit Data* button (✎). Switch to change mode by choosing the *Display ↔ Change* (↔) pushbutton.
5. Switch to the *Execution* tab page. Ensure that the *Any Server* radio button is activated in the *Execute Method* group box for nodes that are supplied with values by the CCMS agent SAPCCMSR.
6. Switch to the *Parameters* tab page. Specify the parameter value **CCMS_CPU** for the parameter *CATEGORY*.
7. Switch to the *Release* tab page, and release the method as an auto-reaction method. Save your entries.
8. Adjust the method definitions **ZCCMS_Send_Alert_to_ALM_DIALOG** and **ZCCMS_Send_Alert_to_ALM_Syslog** in the same way; choose the parameter value **CCMS_DIALOG** and **CCMS_Syslog** for the *CATEGORY* parameters here. Save your entries.

Assigning the Method as a Local Auto-Reaction Method

In this example, you want to assign the created method definitions to the monitoring object *CPU* and the MTE classes *R3DialogResponseTime* and *R3SyslogBasisSystem*.

1. In the work client of CEN, start the Alert Monitor by calling transaction **RZ20**.
2. In the monitor list, expand the *SAP CCMS Monitor Templates* monitor set, and start the *Entire System* monitor by double-clicking it.
3. Expand the subtree of any application server and select the subtree *Operating System → CPU* there. Choose *Properties*. In this way, you set properties for the monitoring object *CPU*, which are inherited by all monitoring attributes of this object that do not have their own method assignment.
4. The *Monitoring: Properties and Methods* screen appears. Select the name of the MTE Class (*CPU*) in the header data of the screen by double-clicking it. In this way, you change the properties of the MTE class *CPU*, not just the properties of the subtree of the selected server.
5. The *Monitoring: Methods* screen appears. Switch to change mode by choosing the *Display ↔ Change* (🔧) pushbutton.
6. In the *Auto-Reaction Method* group box, choose the *Method Name* radio button and enter **ZCCMS_Send_Alert_to_ALM_CPU** in the associated field. Save your entries.
7. Set the method assignment for the MTE class *R3DialogResponseTime*, to which you assign the auto-reaction method **ZCCMS_Send_Alert_to_ALM_DIALOG**, in the same way. There are nodes of this MTE class in every subtree of an application server under *R3Services → Dialog → Response Time*.
8. Set the method assignment for the MTE class *R3SyslogBasisSystem*, to which you assign the auto-reaction method **ZCCMS_Send_Alert_to_ALM_Syslog**, in the same way. You can find nodes of this MTE class in every subtree of an application server under *R3Syslog → BasisSystem*.

Result

You have set up the forwarding of selected alerts (CPU, dialog response time, and syslog) to Alert Management. If an alert occurs in one of the assigned nodes of the alert monitor, the specified recipients are immediately informed in the Alert Inbox (transaction ALRTINBOX) using the ALM. If escalation is activated and the alerts are not confirmed within a defined period of time, the escalation users receive the alerts.

To trigger an alert for the CPU and dialog response time, you will need to change the threshold values. For the syslog node *BasisSystem*, you only need to deactivate and reactivate the update (transaction SM13 → *Administration → Deactivate*) to trigger an alert. Do not forget to activate the update again immediately, however.