

Predefined Auto-Reaction Methods of the Alert Monitor



HELP.BCCM

as of SAP Web AS 620



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Symbols

Symbol	Meaning
	Caution
	Example
	Note
	Recommendation
	Syntax

Typographic Conventions

Format	Description
<i>Example text</i>	Words or characters that appear on the screen. These include field names, screen titles, pushbuttons as well as menu names, paths, and options. Cross-references to other documentation.
Example text	Emphasized words or phrases in body text, titles of graphics, and tables.
EXAMPLE TEXT	Names of elements in the system. These include report names, program names, transaction codes, table names, and individual key words of a programming language, when surrounded by body text, for example, SELECT and INCLUDE.
Example text	Screen output. This includes file and directory names and their paths, messages, source code, names of variables and parameters as well as 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. Pointed brackets indicate that you replace these words and characters with appropriate entries before you enter them in the system.
EXAMPLE TEXT	Keys on the keyboard, for example, function keys such as F2 or the ENTER key

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Auto-Reaction Methods

You can assign methods to individual monitoring attributes or MTE classes of the Alert Monitor. A method can be a report, a function module, an SAP transaction, or a URL.

Auto-reaction methods start automatically when an alert is triggered in the Alert Monitor. Very few assignments have been made in the standard SAP system; however, there are several predefined auto-reaction methods in the monitoring architecture that you can assign to any MTE classes:

- **Automatic Alert Notification**

If an alert occurs in the assigned MTE classes, you are informed about it by e-mail, fax, or page, even if you are not working in the Alert Monitor.

- **Execute Operating System Command**

You can execute any operating system command as an auto-reaction to an alert in the monitoring architecture. For security reasons, this does, however, apply only for commands that have previously been defined in the *External Operating System Commands* transaction.

By default, auto-reaction methods with which you can limit the memory requirements of alerts in the monitoring segment (see [Automatically Complete Alerts \[page 17\]](#)) and in the alert database (see [Reorganizing Completed Alerts \[page 18\]](#)) are also already assigned to two MTE classes.

Using the Pre-Defined Auto-Reaction Methods

To use these auto-reaction methods, follow the procedure below:

1. Create a copy of the desired method. In this way, you can continue to use the original as a template, without influencing methods that are already active and assigned to other MTE classes (see [Copy Method Definitions \[page 5\]](#)).
2. In the copy, customize the method parameters to your requirements (depending on the desired method, see [Define Automatic Alert Notification \[page 7\]](#) or [Execute Operating System Commands Automatically \[page 9\]](#)).
3. Release the method copy again as an auto-reaction method. If necessary, you can also transport method definitions to other systems (see [Release and Transport Method Definitions \[page 6\]](#)).
4. Assign the method definition that you have changed to the desired node (see [Assigning Methods to MTE Classes or Individual MTEs \[page 6\]](#)).



You can execute all auto-reaction methods either locally or in the central monitoring system (see [Setting Up Central Auto-Reaction Methods \[page 12\]](#)).

Copy Method Definitions

We recommend that you leave the delivered original methods unchanged and use them only as templates for your own methods.

1. Choose *CCMS* → *Configuration* → *Alert Monitor*, or call transaction RZ21.
2. In the *Methods* group box, choose *Method Definitions* and choose *Display Overview*. The two predefined method definitions have the following names:

Method	Name of the Method Definition
Execute operating system command	CCMS_AUTO_REACT_OP_COMMAND
Automatic alert notification	CCMS_OnAlert_Email

3. Select the desired method and choose *Copy* (.
4. Enter a name of your choice for the copy.

Release and Transport Method Definitions

When you copy a method, the system resets the release of the copy. To be able to use the copy as an auto-reaction method, you must therefore explicitly release it as an auto-reaction method. You can also transport the method definition to other SAP systems.



The methods created by SAP already exist in all systems with the same SAP Basis release status. This means that you only need to transport your own changed method definitions.

1. Choose *CCMS* → *Configuration* → *Alert Monitor*, or call transaction RZ21.
2. In the *Methods* group box, choose *Method Definitions* and choose *Display Overview*.
3. Choose the desired method by double clicking it.
4. The system displays the *Monitoring: Methods* screen. Choose change mode with the *Display* ↔ *Change* () pushbutton. Choose the *Release* tab page, and select *Auto-Reaction Method* in the *Execute method as* group box.
5. To transport a method definition, choose the *Transport* pushbutton() and specify a transport request to the desired system.
6. Save your entries.

Assigning Methods to MTE Classes or Individual MTEs

After you have customized an auto-reaction method to your circumstances, you can assign the method to the desired MTE class or individual node.



As of SAP Basis 4.6A, you can also assign [monitoring properties variants \[external\]](#) to methods that have been assigned to MTE classes. This has the advantage that you can execute different methods in different properties variants, increasing your flexibility when monitoring your SAP R/3 System.



In this way, you can create two monitoring properties variants that are assigned to the operation modes for day and night operation. By changing the method parameters (such as for the automatic alert notification), you can create different method definitions that you can assign to the properties variants. In this way, you can inform different recipients for day and night operation.

You can make the assignment both directly in the alert monitoring tree using transaction RZ20, and in the Customizing transaction of the Alert Monitor (RZ21).

Assign Method In Alert Monitoring Tree

1. Start the Alert Monitor by calling transaction RZ20, or choose *CCMS* → *Control/Monitoring* → *Alert Monitor*.
2. Start the desired monitor from the monitor list by double clicking it.
3. Select the desired node, and choose *Properties*.
4. The system displays the *Monitoring: Properties and Methods* screen. The rest of the procedure depends on whether you want to assign the method to only this specific MTE or to the whole MTE class:

Assign Auto-Reaction Method to Only this MTE

5. Choose the *Methods* tab page, and then choose the *Method Assignment* pushbutton.
6. The system displays the *Monitoring: Methods* screen. Choose change mode with the *Display* ↔ *Change* pushbutton () , and choose the *Auto-reaction* tab page.
7. In the *Method Allocation* group box, choose the *Method Name* radio button and enter the name of the desired method definition in the associated field.
8. Save your entries.

Assign Auto-Reaction Method to the Selected MTE Class

5. In the header data of the screen, choose the name of the MTE class by double clicking it, and choose change mode with the *Display* ↔ *Change* pushbutton ().
6. In the *Auto-reaction method* group box, choose the *Method name* radio button and enter the name of the desired method definition in the associated field.
7. Save your entries.

Assign the Method in Transaction RZ21

1. Choose *CCMS* → *Configuration* → *Alert Monitor*, or call transaction RZ21.
2. If you want to assign the method to an MTE class, select the *Methods assigned to MTE classes* radio button in the *Methods* group box, and choose the *Display Overview* pushbutton.
3. If you want to assign the method to a single MTE, select *Methods assigned to specific MTEs* in the *Methods* group box, and choose the *Display Overview* pushbutton.
4. The system displays the *Monitoring: Properties and Methods* screen. Choose the desired MTE or MTE class by double clicking it. When doing so, note the column *Values for Variant*. You can change the method assignment for every properties variant, not only for the currently active variant.
5. The system displays the *Monitoring: Methods* screen. Choose change mode using the *Display* ↔ *Change* pushbutton (). In the *Auto-reaction method* group box, choose the *Method name* radio button and enter the name of the desired method definition in the associated field.
6. Save your entries.

Define Automatic Alert Notification

As of SAP Basis 4.6A, you can assign the method *CCMS_OnAlert_Email* to the MTE classes in your system. If an alert occurs in these MTE classes, you are informed by e-mail, fax, or pager, even if you are not working in the Alert Monitor.

CCMS_OnAlert_Email can automatically dial a pager, or send an e-mail or a fax to the following recipients:

- A Business Workplace user in client 000
- A distribution list or an external e-mail address

The auto-reaction method for sending the e-mail is started at most five minutes after the alert occurs. However, there can be a delay before the e-mail is sent to external e-mail addresses (that is, addresses of users that are not defined in client 000 of the same SAP R/3 System), depending on the settings in [SAPconnect \[external\]](#). You should therefore set the period for the [send processes \[external\]](#) to less than an hour.

The message text of the e-mail contains the same information that is displayed in the Alert Monitor:

- What is the problem?
- Where and when did it occur?
- What severity and what color does the alert have?

Prerequisites

To dial multiple pages, or to send an e-mails or a faxes to multiple users (external recipients or recipients in client 000), you must first [create distribution lists \[external\]](#) in client 000 that contains the required data for the recipients (pager numbers, names, e-mail addresses, fax numbers).



SAPconnect must be configured in client 000, if the message is to be sent to an external address.

Procedure

1. First copy the method definition, as described in [Copy Method Definitions \[page 5\]](#).
2. The system displays the *Monitoring: Methods* screen, showing the copied method definition. Choose change mode using the *Display ↔ Change* pushbutton () , and choose the *Parameters* tab page.
3. Fill out the fields as follows:

Parameter	Description
SENDER	SAP user name of the person in whose name the e-mail is sent
RECIPIENT	SAP user name of the e-mail recipient, distribution list, or external e-mail address; to automatically send an e-mail to multiple external e-mail addresses, you must create a distribution list in client 000 that contains these external addresses. If the user is not defined in client 000, you must specify the system and client in which the user exists (such as C11:003:PARKERJ)
RECIPIENT-TYPE ID	Indicator for the address type [external]



Users that are defined in the SAP R/3 System in clients other than 000 cannot be specified directly as sender or recipient in the Business Warehouse; they are regarded as external recipients. You should therefore specify the address type **R** (remote address) in the *Parameters* tab page for client-specific senders and recipients.

4. Save your entries.
5. Release the method definition that you have changed, as described under [Release and Transport Method Definitions \[page 6\]](#).
6. Assign the changed method definition to the desired node, as described under [Assigning Methods to MTE Classes or Individual MTEs \[page 6\]](#).

Execute Operating System Commands Automatically

You can execute any operating system command as an auto-reaction to a monitoring architecture alert. The auto-reaction method `CCMS_AUTO_REACT_OP_COMMAND` is available to you for this purpose. For security reasons, this does, however, apply only for those commands that have previously been defined in *External Operating System Commands* (transaction SM69).

The key feature of this auto-reaction method is that you can transfer details about the alert to the operating system command as parameters. Use method parameters to do this, which can contain arguments that are in turn replaced by the relevant alert data at runtime.

In detail, the auto-reaction method has the following method parameters:

Method Parameter	Description
<code>COMMAND</code>	Logical command that is to be executed in the case of an alert
<code>PARAMETERS</code>	Static parameter to which you transfer the logical command
<code>REACT_ON_ALERTS</code>	Alert color at which the auto-reaction method is to be started YELLOW: Only start the method for yellow alerts RED: Only start the method for red alerts <anything else>: Start the method for all alerts
<code>MTENAME</code>	<code>SID/SEGMENT/CONTEXT/OBJECT/ATTRIBUTE</code> ; if an alert occurs, the arguments are filled with the relevant values (see below)
<code>PARAMLIST_1</code>	Additional parameters that are transferred to the operating system command; these can contain arguments in addition to normal text (see below)
<code>PARAMLIST_2</code>	
<code>PARAMLIST_3</code>	
<code>PARAMLIST_4</code>	



The `COMMAND` parameter is required, all other parameters are optional.

The following arguments in the method parameters `MTENAME` and `PARAMLIST_<n>` are replaced by the relevant values at runtime:

Argument	Description
<code>SID</code>	System ID of the system in which the alert occurred
<code>CONTEXT</code>	Monitoring context of the MTE
<code>OBJECT</code>	Monitoring object of the MTE
<code>ATTRIBUTE</code>	Monitoring attribute of the MTE
<code>SEGMENT</code>	Monitoring segment of the MTE
<code>COLOR</code>	Color of the alert (YELLOW or RED)
<code>SEVERITY</code>	Severity of the alert
<code>DATE TIME</code>	Date and time of the alert (system date and system time)
<code>CLIENT</code>	Client of the user under which the alert was generated
<code>USER</code>	User under which the alert was generated (this information is not always available)
<code>REPORTER</code>	Function or C source that is responsible for the creation of the alert
<code>CLASS</code>	Message class (such as <code>SAP-SYSLOG</code> or <code>SAP-T100</code>)

Argument	Description
ID	Class and number of the message (such as A04)
ARG1 ARG2 ARG3 ARG4	Arguments of the message
TXT	Text of the message without arguments (in system language)
MSG	Expanded message with arguments (in system language)
MSCGL	global external line ID



Note that parameters that are transferred to operating system commands must be separated by spaces. The following parts of the parameters, which may contain spaces, are therefore enclosed in single quotation marks (') for UNIX and quotation marks (") for Microsoft Windows:

- All arguments that were specified under **MTENAME**
- The argument **MSG**
- The argument **TXT**

In this way, all parts of the MTE name and the arguments **MSG** and **TXT** are each identified as one parameter.

Separate all other arguments in the method parameters by space, if these are to be recognized as independent parameters. A space is automatically inserted between the arguments of **MTENAME** and **PARAMLIST_<n>** (see also the example below).

Prerequisites

You must define the desired operating system command in the *External Operating System Commands* transaction. To do this, follow the procedure below:

1. Choose **CCMS** → *Configuration* → *External Commands*, or call transaction SM69.
2. Choose change mode with the *Display* ↔ *Change* (🔧) pushbutton, and choose *Create* (📄).
3. Now enter details about the desired operating system command, ensure that the *Additional Parameters Allowed* indicator is activated, and save your entries.



- Note that during the definition of the auto-reaction method, you must no longer enter the name of the operating system command, but rather the name of the (logical) command.
- If you are using operating system for the application servers in your monitoring system, create a logical command with the same name but different operating system for each operating system. You can specify different scripts or executables when doing so.
- Ensure that the script or executable can be called by user **<SID>adm** from all hosts. You can perform this test using transaction SM49.

The optional static parameter, which you defined in the input field *Parameter for Operating System Command* in transaction SM69, is first transferred to the operating system command. Which other parameters that are additionally transferred to the command depends on the configuration of the corresponding auto-reaction method.

For information about defining the command, see [External Operating System Commands: Content \[Extern\]](#).

Procedure

1. First copy the method definition, as described under [Copy Method Definitions \[page 5\]](#).
2. The system displays the *Monitoring: Methods* screen, and shows the copied monitor definition. Choose change mode with the *Display ↔ Change* pushbutton () and choose the *Parameters* tab page.
3. Set the logical command to be executed and the other method parameters (see above).
4. Save your entries.
5. Release your changed monitor definition, as described under [Release and Transport Method Definitions \[page 6\]](#).
6. Assign the changed method definition to the desired node, as described under [Assigning Methods to MTE Classes or Individual MTEs \[page 6\]](#).



By default, the operating system command is executed on the local server of the MTE that generated the alert. If the command is to be executed on a different server, change the execution location on the *Execution* tab page in the *Execute Method On* group box.

Result

If an alert is triggered for one of the MTEs to which you have assigned this auto-reaction method, the monitoring architecture will automatically execute the corresponding logical command.

Example

Alerts are to be logged. To do this, a file with the name `alert_<date>_<time>.txt` is to be created, which contains information about the alert, such as:

```
yellow alert from 'PDR/SAP_CCMS_pdrhost_PRD_00/prdhost_PRD_00
/R3Syslog/BasisSystem' A04 'Load format of SAPLQDIS abload1 0413
invalid.'
```

1. Use the method `CCMS_AUTO_REACT_OP_COMMAND` as a template for your own method. The parameters `MTENAME` and `PARAMLIST_1` are already filled by default. Add the command `Z_TEST` and the parameter `ID` under `PARAMLIST_2`:

Parameter	Parameter Value
<code>COMMAND</code>	<code>Z_TEST</code>
<code>PARAMETERS</code>	
<code>REACT_ON_ALERTS</code>	
<code>MTENAME</code>	<code>SID/SEGMENT/CONTEXT/OBJECT/ATTRIBUTE</code>
<code>PARAMLIST_1</code>	<code>COLOR DATE_TIME MSG</code>
<code>PARAMLIST_2</code>	<code>ID</code>
<code>PARAMLIST_3</code>	
<code>PARAMLIST_4</code>	

2. In transaction SM69, define the logical command `Z_TEST` for the *Linux* operating system; specify the Linux script `test.sh` in it (it must be possible for user `<SID>adm` to execute this script)

3. In transaction SM69, define the logical command **z_TEST** for the *Windows NT* operating system; specify the Microsoft Windows script `test.cmd` in it.



Allow additional parameters for both logical commands.

With the settings that you have just adjusted, the following command is executed if an alert occurs:

- o Linux:

```
test.sh '<SID>/<SEGMENT>/<CONTEXT>/<OBJECT>/<ATTRIBUTE>'
<COLOR> <DATE>_<TIME> '<MSG>' <ID>
```

- o Microsoft Windows:

```
test.cmd '<SID>/<SEGMENT>/<CONTEXT>/<OBJECT>/<ATTRIBUTE>'
<COLOR>
```

```
<DATE>_<TIME> '<MSG>' <ID>
```

4. Create a script that generates a file with the name `alert_<date>_<time>.txt`:

- o Linux script `test.sh`:

```
#!/usr/bin/sh
echo $2 alert from $1 Message $5 $4 > alert_$3.txt
```

- o Microsoft Windows script `test.cmd`:

```
echo %2 alert from %1 Message %5 %4 > alert_%3.txt
```

If you are not using absolute path specifications, the file is stored in the `DIR_HOME` directory.

Setting Up Central Auto-Reaction Methods

In the monitoring architecture, you can react automatically to an alert using auto-reaction methods. These methods are automatically started in the case of an alert and by default are executed in the system in which the alert occurs.

As of SAP Web Application Server 6.10, you can define central auto-reaction methods in the monitoring architecture in the context of the central monitoring of mySAP.com components. The auto-reaction methods are not started in the system, in which the alert occurs, but rather in the central monitoring system. In this way, it is possible for reactions to events that occur in monitored components to be performed immediately in a central location.

Prerequisites

- The central monitoring system (abbreviated to CEN in the following) has a release status of at least SAP Web Application Server 6.10, Support Package SAPKB61026.
- The monitored mySAP.com components with SAP Basis have at least the following kernel versions:
 - o 4.0B patchno 937
 - o 4.5B patchno 815
 - o 4.6B/C/D: as of 46D AKK 4.6D patchno 1192
 - o 6.10 patchno 582
 - o 6.20 patchno 193
- The monitored mySAP.com components with SAP Basis are connected to CEN using one of the [CCMS Agents \[external\]](#), SAPCCM4X.
- The agent has at least the following patch versions (see SAP note 202591)

- 4.6D patchno 1192 (patch 10 in ccmagent.info)
- 6.10 patchno 582 (patch 6 in ccmagent.info)
- 6.20 patchno 193 (patch 4 in ccmagent.info)

The agents are downward-compatible for the monitored SAP Basis release but depend on the operating system release. You can determine the version of the CCMS agent by calling it with the option `-v` (such as: `sapccm4x -v`).



Monitored mySAP.com components with SAP Basis 3.1 and systems and components that are centrally linked using the SAPCCMSR agent formally belong to CEN (see [Monitoring SAP R/3 3.x Systems \[external\]](#)). Therefore, auto-reaction methods can always be started centrally here. You can therefore find the relevant MTE classes in the list of the MTE classes of CEN.

Constraints

You cannot assign any central auto-reaction methods to the MTE classes that belong to the application servers of CEN as described below. In this case, use the conventional assignment using a local auto-reaction method.

Structure of the *Maintain Central Auto-Reactions* Screen

System ID of the systems to which you can assign a central auto-reaction.

MTE classes of the local system; you can add the classes of other systems

Defined central auto-reaction methods, you can also create additional new methods in this subwindow. You can also edit, copy, or delete existing methods

System-ID	MTE-Klasse	Zugeordnete Zentrale Autoreaktion...
BCE	R3DialogResponseTime	MAIL_AN_DIRK
BCE	R3UsersLoggedIn	MAIL_AN_MICH
BC0	R3AbapShortdumps	This_Tool_Does_Not_Exist
BD2	AddText	ZZ_TEST_CENTRAL_AUTOREAC...
BD2	Additional	CCMS_BUFFER_COLLECT
BD3	R3SyslogDatabase	TEST_CENTRAL_AUTOREACTION
N40	CsmTaskR3Instance.Status	Z_Julian_test
N45	R3DeveloperTrace	Z_KETTSCHAU_TEST

This subwindow shows **assignments of central auto-reactions** to selected MTE classes and system Ids; you can also delete the assignments here.

Procedure

Perform all configuration steps for the central auto-reaction method only in CEN.

1. Choose *CCMS* → *Configuration* → *Alert Monitor*, or call transaction RZ21.
2. The *Monitoring: Properties and Methods* screen appears. Choose *Technical Infrastructure* → (*Configure Central System* →) *Assign Central Auto-Reactions*.
3. The system displays the *Maintain Central Auto-Reactions* screen. On this screen, you can perform all work steps to define, assign, and edit central auto-reaction methods. A normal first step is to create a central auto-reaction method from an existing (local) auto-reaction method and to then assign this to the desired MTE class in the desired system. You can make the following settings:

Creating, Editing, or Deleting a Central Auto-Reaction Method

You can execute any auto-reaction method centrally that is defined as an auto-reaction method in the central system. The method does not need to be known in the monitored system.

You can also use the predefined auto-reaction methods of the monitoring architecture for this. These are, for example:

- [Automatic Alert Notification \[page 7\]](#)
- [Automatic Execution of Operating System Commands \[page 9\]](#)

To have an existing auto-reaction method executed centrally, follow the procedure below:

1. In the subwindow *Defined Central Auto-Reactions*, choose *Create* (). On the following dialog screen, enter the desired auto-reaction method in the input field next to the *Create with Template* pushbutton, or use the input help, which provides a list of all released auto-reaction methods. Choose *Create with Template*.



You can also use an existing central auto-reaction method as a template for a new auto-reaction method. To do this, select the desired method in the *Defined Central Auto-Reaction* subscreen and choose *Copy* ().

2. The *Monitoring: Methods* screen appears. The settings are copied from the template, with the exception that the indicator *Only in central system, triggered by CCMS agent* is activated in the *Execute Method* group box of the *Control* tab page. Therefore, you do not usually need to change the settings, other than to enter a name for the central auto-reaction method.
3. Save your entries. The system then displays the method immediately in the *Defined Central Auto-Reactions* subscreen.

To edit a central auto-reaction method, follow the procedure below:

1. In the *Defined Central Auto-Reaction Methods* subscreen, select the desired method and choose *Edit*.
2. The *Monitoring: Methods* screen appears. Make the desired changes to the method definition and ensure that the selection field *Only in central system, triggered by CCMS agent* is activated.
3. Save your changes.

To delete a central auto-reaction method, follow the procedure below:

1. In the *Defined Central Auto-Reaction Methods* subscreen, select the desired method and choose *Delete* ().
2. Confirm that you want to delete the method. If the method is used in an assignment, the system will also inform you of this, and ask whether you want to delete the method and all of its assignments.

Assigning a Central Auto-Reaction Method

Enter the MTE classes and system to which you want to assign a central auto-reaction method. The system checks the assignment regularly.

1. In the *System ID* subscreen, select the desired systems, and the desired MTE classes in the *MTE Class* subscreen, to which you want to assign a central auto-reaction method. You can always select multiple systems and MTE classes.



Different systems usually have different MTE classes. After calling the function, the MTE classes of the local system are displayed first. To include the MTE classes of other systems in the list, select the desired systems and choose *MTE Classes of System* . The system then displays the MTE classes of the selected system in the list of MTE classes.

2. In the *Defined Central Auto-Reactions* subscreen, select the desired method that you want to assign to the selected MTE classes of the selected systems.
3. Choose *Assign Central Auto-Reaction Method* . The system then immediately displays the corresponding assignments in the lower subscreen.

Perform these steps for all desired central auto-reaction methods.

Assigning a Central Auto-Reaction Method from the Alert Monitor

In practice, of the procedures described here, you will use the assignment of MTE classes to a central auto-reaction method most frequently. To make this procedure simpler, you can also call it directly from the Alert Monitor (transaction RZ20).

1. Start the Alert Monitor by calling transaction RZ20.
2. Activate maintenance functions by choosing *Extras* → *Activate Maintenance Functions*.
3. Expand the monitor set that contains the monitor that you require, and choose *Load Monitor*, or double click the desired monitor.
4. Select the MTEs to whose MTE classes you want to assign a central auto-reaction method, and choose *Edit* → *Node(MTE)* → *Assignment* → *Central Auto-Reaction Method*.



In this way, you can also very quickly assign a central auto-reaction to all MTE classes of performance attributes in a monitor. To do this, select all nodes by choosing *Edit* → *Selections* → *Select* → *All nodes (MTE)*, before switching to the administration of central auto-reactions.

5. The *Central Auto-Reactions* screen appears. The desired systems and MTE classes are selected, meaning that you now only need to select the desired method.
6. Choose *Assign Central Auto-Reaction Method* . The system then immediately displays the corresponding assignments in the lower subscreen.

Deleting an Assignment of a Central Auto-Reaction Method

In the lower subscreen, the system displays the existing assignments of central auto-reaction methods. To delete assignments, select one or more rows of this table and choose *Delete Assignment* .



The central auto-reaction methods are always started under the user in the client that activated the central method dispatcher (to do this, choose *Technical Infrastructure* → *Method Execution* → *Activate Central System Dispatching* or as of SAP Web AS 640 *Technical Infrastructure* → *Configure Central System* → *Activate Central System Dispatching* in transaction RZ21). As the client is also of great importance for automatic alert notification, ensure that you are in the client from which the mails are to be sent when you activate the central system dispatching.

If you have activated the central system dispatching using the wrong user or in the wrong client, first deactivate it by deleting the job SAP_CCMS_CENSYS_DISPATCHER in transaction SM37. The job is controlled by the event SAP_CSM_TRIGGER_CENSYS_DISPATCH. Then reactivate the central system dispatching using the correct user in the desired client.

Result

Alerts in the assigned MTE classes of the monitored systems now trigger an auto-reaction in the central monitoring system.

Questions and Answers

Can I see whether a central auto-reaction method is assigned to an MTE in the monitored system?

Yes. In the Alert Monitor, select the desired MTE and choose *Display Details* (). The system displays the *Monitoring Attributes - Detail Data* screen. In the *General Details* list, look for the *Definition Status* column. For a central auto-reaction method, AL_TD_DEF_CEN_CHECKED is entered here. Use the [Technical View: Status Autore-action \[external\]](#), to find out whether a local or central auto-reaction method is set for the nodes of a monitor, and if so, which method is set.

If I assign an auto-reaction centrally and then also enter an auto-reaction method locally in the monitored system, what happens?

CEN will reconcile the data through the agent connection after an hour at most. The locally assigned method is overwritten by the centrally assigned method.

Can I see in CEN whether alerts are waiting for central processing?

Yes. The alert data is stored in the table CSMCENTOOL until it is processed.

Automatically Complete Alerts

Use

Alerts are first stored in the monitoring segment of the shared memory. When you are [completing alerts \[external\]](#), the alerts are deleted from the monitoring segment and stored in the alert database. In this way, you can ensure that there is always enough place in the monitoring segment. This is especially true for complex IT landscapes with a large number of monitoring tree elements (MTEs). In the *Space* subtree of the [CCMS Selfmonitoring Monitor for Instance-Specific Data \[external\]](#), you can check whether there is still enough free space in the monitoring segment.

To simplify this task, you can automatically complete alerts. You can select the conditions under which alerts should be automatically completed:

- You can automatically complete alerts which are older than a certain number of days.
- You can automatically complete alerts when the free storage space in the monitoring segment falls below the threshold value for a yellow alert. Beginning with the oldest alerts, the system completes the required number of alerts so that the performance attribute for the free storage space is assigned the color green again. You can find the attribute (*FreeAlertSlots*) in the *Space* subtree of the CCMS Selfmonitoring monitor.



You can also ensure that there is enough free storage space in the monitoring segment by reducing the number of reported alerts for each MTE (see [General Properties of Monitoring Tree Elements \[external\]](#)).

Procedure

To automatically complete alerts, you must set the parameters of the *CCMS_Space_Collect* method. This method is responsible for determining the free storage space in the monitoring segment. Follow the procedure below:

1. Choose *CCMS* → *Configuration* → *Alert Monitor*, or call transaction RZ21.
2. The system displays the *Monitoring: Properties and Methods* screen. In the *Methods* group box, select *Method Definitions* and choose *Display Overview*.
3. The system displays a list of method definitions. Choose the method *CCMS_Segment_Space_Collect*.
4. The system displays the *Monitoring: Methods* screen. Choose the *Parameters* tab page. The parameters have the following meaning:

Parameter	Possible Values	Description
<i>CMPL_ALERT_AFTER_DAY</i>	<Number>	If a value higher than zero is entered here, alerts that are older than <number> days are automatically completed.
<i>CMPL_ALERT_IF_QUOTA</i>	<space> or x	If the value x is entered here, alerts are completed if the free storage space in the monitoring segment falls below the threshold value for a yellow alert.

5. Choose change mode using the *Display* → *Change* () pushbutton. Enter the desired parameter values and save your entries.

Result

From now on, alerts are automatically completed in accordance with your settings.

Reorganizing Completed Alerts

Use

When you complete an alert, the Alert Monitor saves it in the alert database. You can call up completed alerts by showing the alert history. To avoid the completed alerts occupying too much space in the database, the Alert Monitor monitors the occupied space. If threshold values are exceeded, the Alert Monitor triggers an alert. The relevant object is called *AlertsInDB* and is in the *SAP CCMS Technical Expert Monitors* monitor set, in the [CCMS Selfmonitoring Monitor for System-Wide Data \[external\]](#).

By default, the following methods are assigned to the object *AlertsInDB* :

Method Name	Function
Analysis method <i>CCMS_ALERTDB_REORG</i>	The method opens a screen in which you can enter the time point up to which the completed alerts are to be deleted.
Auto-reaction method <i>CCMS_REORG_COMPLETED_ALERTS</i>	If an alert occurs, the method deletes all completed alerts that are older than a certain number of days (the value is specified by the parameter <i>ALERTS_OLDER_THAN</i> ; the default is 60).

Procedure

Delete Completed Alerts Manually

You can reorganize the completed alerts using the analysis method for *AlertsInDB*. The method deletes older alerts that match your specifications and reduced the space occupied in the database. To do this, proceed as follows:

1. Choose *CCMS* → *Control/Monitoring* → *Alert Monitor*, or call transaction RZ20.
2. Expand the *SAP CCMS Technical Expert Monitors* monitor set, place the cursor on the *CCMS Selfmonitoring* monitor, and choose *Start Monitor*.
3. Expand the alert monitoring tree. You will find the monitoring object for which you are looking under *CCMS_Selfmonitoring* → *Runtime* → *AlertsInDB*. Select the object and choose *Start Analysis Method*.
4. Specify the date and time from which completed alerts are to be deleted.

Automatically Delete Completed Alerts if an Alert Occurs

By default, the auto-reaction method for *AlertsInDB* is already active and deletes all alerts that are older than 60 days old if an alert occurs in this attribute. You can now change the threshold values for the completed alerts in the alert database; in doing so, you change the conditions for **when** completed alerts are deleted. You can, however, also change the parameter *ALERTS_OLDER_THAN*; in doing so, you change the conditions for **which** completed alerts are deleted. To change the parameter, follow the procedure below:

1. Choose *CCMS* → *Configuration* → *Alert Monitor*, or call transaction RZ21.
2. The system displays the *Monitoring: Properties and Methods*. In the *Methods* group box, select the *Method definitions* radio button and choose *Display Overview*.
3. The system displays a list of method definitions. Select the method *CCMS_REORG_COMPLETED_ALERTS*.
4. The system displays the *Monitoring: Methods* screen. Choose change mode with the *Display* ↔ *Change* pushbutton (). Then choose the *Parameters* tab page. For the parameter *ALERTS_OLDER_THAN*, enter the age in days as of which completed alerts are to be deleted. Save your entries.

Additional Information

SAP Library

This document contains objects from the SAP Library (SAP Web Application Server 6.20), which you can access at the address <http://help.sap.com>. You can also call the SAP Library from every SAP system by choosing *Help* → *SAP Library*; the SAP Library displayed then has the same release status as the SAP System from which it was called.

Links

There are two types of links in this document:

- **Links with page numbers** (such as [Copy Method Definitions \[page 5\]](#)) refer to a section of this document.
- **Links without page numbers** (such as [CCMS Agents \[external\]](#)) always refer to an object from the SAP Library (SAP Web Application Server 6.20). The link is always the same as the title of the object.

These objects contain additional information that goes beyond the immediate topic of this document. If you require this additional information, start the SAP Library and choose *Find*. Enter the name of the link as your search term. Among the search results, you will find only one object of which the title matches the search term. Open this object.