Configuration of System Monitoring in SAP Solution Manager 7.1

Active Global Support
2011
SAP Solution Manager 7.1 – System Monitoring

Overview

The System Monitoring setup

- Configures the Monitoring and Alerting Infrastructure
- Configures managed systems for use with System Monitoring

![SAP Solution Manager Configuration: Technical Monitoring - System Monitoring](image-url)
Prerequisite for the System Monitoring Setup is a successful execution of the System Preparation which consists of the following steps:

- Create Users
- Check Installation
- Implement SAP Note
- Configure ABAP
- Configure Web Service
- Prepare Landscape
- Complete
Prerequisite for the System Monitoring Setup is a successful execution of the Basic Configuration which consists of the following steps:

- Specify Project
- Specify User & Connectivity Data
- Specify Landscape Data
- Configure Manually
- Configure Automatically
- Complete
Check Prerequisites
Managed System Configuration for SAP Solution Manager

Prerequisite for the System Monitoring Setup is a successful execution of the Managed System Configuration of the Solution Manager system itself.

⚠️ In case the SAP Solution Manager system is not set as “Diagnostics Relevant” parts of the Monitoring & Alerting Infrastructure will not work.
Check Prerequisites
Managed System Configuration of managed system

Prerequisite for the System Monitoring Setup of a managed system is a successful execution of its Managed System Configuration.
The System Monitoring Setup is integrated in transaction SOLMAN_SETUP

- Choose the section **Technical Monitoring**
- Choose the monitoring use case **System Monitoring**
- Follow the guided procedure
This step provides you with a rating if the monitoring & alerting infrastructure is already setup, or if you yet need to perform the infrastructure configuration.

Check / perform step 2

Continue with step 3
To setup the system monitoring for a managed system first the Monitoring Infrastructure needs to be configured. Therefore all sub-steps have to be executed. This needs to be done only once and not per managed system. This step provides you an overview of the Configure Infrastructure sub-steps.
The prerequisite check ensures that the parts of SAP Solution Manager which are needed for monitoring are setup correctly.

- Checks if the Basic Configuration is done successfully
- Checks if the BI setup requirements are fulfilled
- In case of errors or warnings check the “Details” for further information
In this step some manual activities are performed. The activities

- Agent Framework
- Extractor Framework
- Alerting Framework

are optional. By default they don’t need to be executed. For an advanced configuration they guide you to the related administration UIs which can also be found in the Solution Manager Administration workcenter.

Optional Steps. The navigation links guide to the related administration UI

The “Execution Status” needs to be set manually to “Performed” to get a green status for the activity.
The Content Customization activity allows you to change the content send in the different types of notifications.

1. Select the notification type to be changed
2. Select content to be shown
3. Press the “Save” button to persist the changes
In this step some automatic activities are performed by SAP Solution Manager. They need to be executed successfully. In case of errors or warnings check the log details for further information.
The Monitoring and Alerting Infrastructure provides three configuration levels to allow a fast straight forward configuration without loosing the flexibility to configure special use cases. It is applicable for:

- Incidents
- Notifications
- Third-Party Components
- Workmodes

### Global Settings
- Configured in **Infrastructure Configuration**
- Used as default if there are no Template or Alert specific settings

### Template Settings
- Configured on template level in **Template Maintenance**
- Overwrites the Global Settings

### Alert Settings
- Configured on template level in **Template Maintenance**
- Overwrites the Global Settings and Template Settings
In this step the global setting are done for:

- Incidents
- Notifications
- Third-Party Components

The summary tab provides an overview which functionality is enabled. The details for each functionality are configured on the related tabs.
On the incident tab the incident specific global setting are done.

- **Define if the confirmation of an incident automatically closes the related alert in the alert inbox**
- **Switch Auto-Incidents on or off**
- **Define the default support component**
- **Define the default CRM transaction type**
On the notification tab the notification specific global setting are done. You define if notification are send automatically in case of an alert and define who should receive a notification. Further notification setting (e.g. maintenance of SMS server) can be done in the Technical Administration workcenter → Notification Management.

Add / delete entries from the list of recipients. An entry is either a single recipient or a recipient list.

Switch Auto-Notifications on or off.

Configure your own settings when you want to be notified via email or SMS.

Maintenance of notification settings for global recipients.
On this tab you can configure the usage for third-party connectors (e.g. HP OpenView). Before a third-party connector can consume events from the Monitoring & Alerting Infrastructure a third-party specific BAdI implementation needs to be done.
System Monitoring
Reporting Settings

In this step the Monitoring specific BI content gets activated. The BI based Reporting Health Checks needs to have a green status before the BI Content Activation can be started.

The Start button schedules the batch job CCMS_BI_SETUP which does the BI content activation in background. While the job is running the status icon shows a running icon.
In case of an BI health check error the result tree is automatically opened and shows the errors. The Long text info button opens a detailed error description and a procedure how to solve the problem. Once the problem is solved the related check needs to be re-executed to get a green health check status. Otherwise the BI Content activation cannot be started.

Re-execute the check after the problem is solved
In this step you can configure the settings for the monitoring related BI housekeeping and the Monitoring & Alerting Infrastructure housekeeping.

- **Monitoring related BI housekeeping settings**
- **Monitoring & Alerting Infrastructure housekeeping settings**

**Configures when alerts get automatically closed**

<table>
<thead>
<tr>
<th>Lifetime of data in BI for each granularity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minutes: 8 days</td>
</tr>
<tr>
<td>Hours: 31 days</td>
</tr>
<tr>
<td>Days: 100 days</td>
</tr>
<tr>
<td>Weeks: 52 weeks</td>
</tr>
<tr>
<td>Months: 47 months</td>
</tr>
</tbody>
</table>

**Options for Housekeeping**

- **Alert Store Housekeeping**
  - Auto-close alert instance older than [ ] days (max: 100)
  - Auto-close alert groups older than [ ] days (max: 100)
- **Event Store Housekeeping**
  - Number of days to store logs: 5
  - Number of hours to store metrics: 1
  - Number of days to store traces: 5

**Log with 0 Messages**

- Export
- Refresh
- Filter Settings
This step allows to configure the global setting for which workmode the monitoring is enabled / disabled. Workmodes for systems can be scheduled in the Technical Administration workcenter → Work Mode Management
System Monitoring
Update Content

This step download the latest content updates from the SAP Service Marketplace (using the SAP-OSS connection). You can perform this either via download from the SMP automatically

1. Choose Update Content
2. Check Log

Or in the expert mode

1. Upload File
2. Apply desired Version

Check the log
In this step you see the monitoring content delivered by SAP in the SAP Templates. SAP Templates cannot be modified but copied to Custom Templates. The Custom Templates can be adapted to the customer needs.
To create a custom template you need to:

1. Select a SAP Template and press **Create Custom Template**
2. Provide a name for the custom template
3. Press the save button
4. Provide a package name in case you want to transport the custom template. Otherwise, set the Local Object flag to keep it as a local object.
System Monitoring

Template Maintenance – define the default templates

In step 6 Setup Monitoring default templates will be assigned to the managed objects of the systems in scope to simplify the setup procedure. Initially the SAP Template is the default template. To use a custom template as default template you first need to define it as the default.

1. Select a managed object type

2. For each product version you can select a specific default template
In a custom template you can configure on template level settings for:

- Incidents
- Notifications
- Third-Party Components (in expert mode)
- Workmodes

which overwrite the Global Settings done in the Configure Infrastructure step.
In a custom template you can also on alert level configure settings for:

- Incidents
- Notifications
- Third-Party Components (in expert mode)
- Workmodes

which overwrites the global and template level settings.
To change the threshold of a metric you need to have a custom template. Threshold cannot be changed in the SAP Templates.

1. Select the metric you want to change on the metric tab and press the Change Settings button

2. Now the threshold values can be changed

The Modified flag indicates that original settings derived from the SAP template have changed
In this step you have to select the technical system for which you want to setup the system monitoring.

Reflects the managed system setup status. A successful execution is prerequisite for the monitoring setup.

Status of previous System Monitoring setup

Use filter functionality to search for systems

Line multi-selection is possible via Strg + left mouse click

Show details provides more information about e.g. managed system setup with direct jump-in possibility
On the Technical Systems tab you can select one or multiple technical systems for the system monitoring setup.

On the Technical Scenarios tab you can create technical scenario of type System Monitoring to group systems together. When selecting a technical scenario all technical systems of the scenario will be taken into scope for the next steps.

On the Database tab you can select database to setup system monitoring for standalone databases.
In this step the system monitoring setup is done for the system selected in step 5 Define Scope:

1. Default templates (see Template Maintenance step) get assigned to the managed objects when entering the step and no template was assigned before.
2. Change the template assignment if required.
3. Press the **Apply and Activate** button to start the configuration.
4. When the configuration is finished check the logs for details.
1. To change the template assignment select a managed object press the **Assign Template** button

2. Per installed product one template can be selected via the drop-down box.
Sets the template assignment for the selected Managed Object back to the default as defined in the Template Maintenance step.

Refresh of the UI Press after you performed Managed Object specific change.

Opens new window to perform managed object specific configuration. E.g. change threshold only for the select managed object.

Opens new window with the directory browser where you can check the currently active configuration used for system monitoring.

Indicates if a managed object specific configuration was done.
To get data in BW for the Interactive Reporting the data collection needs to be activated in this step. Procedure:

1. Select All
2. Press the **Activate** button

Systems of type JAVA cannot be selected as the data collection is already activated when the managed system setup is done.
In this step, the status of all steps of the *System Monitoring* setup. Now you can start using the monitoring applications.