

# IMS Synapse Notification Management

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## Notification Management

## Introduction

Synapse provides tools to monitor, control and configure the seismic system. The notification system sends out real-time alerts when important events occur. The following notifications are available:

Event Notifications: Notifications are e-mailed when an automatically processed event occurs that meet the specified criteria.
Issue Notifications: Notifications are e-mailed when new issues are raised by the Synapse system.

## Adding Notifications

### Step 1: Configuring the Outgoing Mail (SMTP) Server

The notification e-mails will be sent from the Synapse server. A valid outgoing e-mail server must be available.

To edit the settings for the outgoing mail server:

- 1. In the tree, expand the Synapse server node  $\rightarrow$  network node  $\rightarrow$  System Settings node
- 2. Select the Server E-mail Settings node
  - 1. If the node is not available, right click on the **System Settings** node, select the **Add Settings** option and select **Server E-mail Settings** from the list.
- 3. Specify the smtp server host, port and reply-to address. If this is an authenticating smtp server, fill in the authentication details

### Step 2: Adding a User

To receive notifications, a user must be added for each recipient. Please refer to the Synapse Users document for information on how to add new users to the system:

http://software.imseismology.org/documents/SynapseUsers.pdf

### Step 3: Adding a Notification

To add a new notification:

- 1. In the tree, expand the Synapse server node  $\rightarrow$  network node  $\rightarrow$  System Settings node
- 2. Expand the Synapse Notifications node



- 3. Right click on either the **Event Notifications** node or **Issue Notifications** node and select **Create New Event/Issue Notification**
- 4. Enter the name of the notification when prompted

#### **Event Notifications**

1. Expand the newly created event notification node (in our example called Large Events)



2. Select the **Conditions** node to set up the notification criteria (minimum number of triggers and magnitude range).

Please note that notifications are only available for automatically processed events. If notifications for manually processed events are required, please contact our services department for more information.

- 3. Right click on the Recipients node to add new recipients
- 4. Follow the wizard to add a new recipient from the list of available users added in step 1

#### **Issue Notifications**

1. Expand the newly created issue notification node (in our example called **System Warnings**)



- 2. Right click on the **Conditions** node to add a new condition
  - 1. Select Add Condition
  - 2. Follow the wizard steps
  - 3. Click on an issue to display a short issue description
  - 4. Repeat steps 1-3 to add multiple conditions

| Select Issue  |   |
|---|---|
| No channel allocations specified for this netADC sensor   | A |
| 📃 🔺 No coordinates defined for this site  |   |
| 🔲 📤 Pairing not allowed - max composite sampling rate exceeded  |   |
| 🔲 📤 Power failure detected for the UPS  |   |
| 🔲 📤 Sensor orientation outdated   |   |
| 🔲 📤 Sensors with duplicate serials found  | V |
| The coordinates are not defined for this site. This issue can be resolved by specifying the coordinates (via the Resolve Issue button). |   |

- 3. Right click on the Recipients node to add new recipients
- 4. Follow the wizard to add a new recipient from the list of available users added in step 1

## **Editing Notifications**

- 1. Ensure the Properties Window is open: **Window** → **Properties**. The properties window can be dragged to the bottom-left corner
- 2. Expand the Event/Issue Notifications node in the tree
- 3. Expand the selected notification node and click on a node to edit the various notification criteria
- 4. Conditions and recipients can be removed by selecting **Remove** from the right click menu

## Available Notifications

#### **General Synapse Notifications**

- 1. Sites present in Synapse, but not included in reports
- 2. Sites included in reports but not present in Synapse
- 3. An update is available for this Synapse server
- 4. Reporting sites not operational
- 5. Reporting sites not operational for group
- 6. Group Association not configured correctly
- 7. Synapse server license about to expire
- 8. Synapse server not licensed for this network id
- 9. Synapse server not licensed to receive data
- 10. Low disk space home partition
- 11. Low disk space data partition
- 12. All dependency modules are not available or valid for this update

#### **NetSP Related Notifications**

- 1. netSP auto configured
- 2. Duplicate netSPs defined for this serial
- 3. Multiple preferred netSPs defined for netADC
- 4. Updates available for this netSP
- 5. AC power failure detected by the UPS
- 6. Sites with duplicate sensor serials found

#### **NetADC Related Notifications**

- 1. netADC did not receive the last ATU
- 2. Pre-Amp defined for netADC not detected by netSP
- 3. Site not defined for sensor
- 4. Site not defined for sensor and not associated with a network
- 5. netADC auto configured
- 6. netADC not defined and not associated with a network
- 7. netADC with incorrect default time counter period found
- 8. Sensors with duplicate serials found
- 9. Duplicate netADC's defined for this serial
- 10. No channel allocations specified for this netADC sensor
- 11. Updates available for this netADC

#### **Site Related Notifications**

- 1. Device not registered
- 2. Container missing for site(s)
- 3. Container not defined for site(s)
- 4. No coordinates defined for this site
- 5. Site not licensed
- 6. X component polarity flipped for this sensor
- 7. Z component polarity flipped for this sensor
- 8. Y component polarity flipped for this sensor
- 9. Sensor orientation outdated (not yet implemented)

A wider range of notifications are available to customers using the IMS processing/system-administration service, where notifications are generated based on data that IMS has received over the Internet from the customer site.