SENSEFORCE

Notifications – let your data monitor itself

We proudly present a brand-new tool for your digitisation strategy: Trigger-based Notifications. Define the notification destination, the notification payload as well as the detailed notification trigger and simply relax while your data are monitoring your systems on their own.

Using our rich analytics and formula editor tools for trigger creation allows for one of the most advanced rule engines in our industry.

Notification creation workflow

In general, the Senseforce notification engine checks your analytics query for thresholds you can set. Therefore, the following workflow is sufficient to create great notifications.

- Create an Analytics Query which contains the parameters you want to trigger on. Most of the time it is also necessary to add a Timestamp and Thing column. For our tutorial, we will use a Timestamp, Thing and OIL_TEMPERATURE column.
 - (Please note: You don't need to filter the Analytics Query right now as you can conveniently set the filtering options in the Notifications screen).
- 2. <u>Create a new Notification</u>: Click on "System" --> "Scheduling" to enter the Notifications menu.
- 3. **Enter Name and (optional) Description** (see image below (1))
- 4. <u>Declare the time settings</u>: Define, how often the trigger condition of your notification should be checked. Please note, that this is a very important settings, as you most probably don't want to check every 10 minute for a trigger which is based on an "per hour"-query.

General Settings							
Name:		TestSmall					
Description:							
Tags:		Select Add new					
Time settings Define when and how often this Notification should be checked							
Interval Type:		Hourly					
Minute:		0 •					
Triggers Define the co 2 r when to execute this Notification (optional) + Add new Trigger 2							
Query	Column		Filter	•	MARLET		â
actual load ▼	Thing(S7Data) OIL_TEMPERATURE	•	>		MyMachine1		Û
actual load	Timestamp(S7Data)	•	Last X Minutes	•	60	÷	â
Payloads Define the attachments which are delivered to the destination (optional) Add new Payload Report Report Add new Payload Report Add new Payload Report Report Add new Payload Report Add new Payload Add new Payload							
Destinations Define where + Add new destination → E-Mail ×	re the Notification sho	ould be s	5	st Sch	nedule Cancel		Save

5. Add a trigger condition: (See (2)); You can add as many trigger conditions from as many queries as you like. So you are able to combine as many Analytics Queries as you like to one notification trigger.

<u>Best practices</u>: It is highly recommended to add a trigger condition for thing and timestamp, as this prevents unwanted notification trigger. In our example, we want to check for MyMachine1 if the OIL_TEMPERATURE rises above 90 degrees within the last hour. So we add triggers for:

- a. Thing: Equals "MyMachine1"
- b. Timestamp: "Last 60 Minutes"
- c. **OIL_TEMPERATURE**: Greater 90

Additionally, we set our time settings to "Hourly". Our Trigger is checked every hour, if the OIL_TEMPERATURE was greater than 90 somewhen within the last hour

- 6. Optional: Add a notification payload: (See (3)); You might add a Report to your Notification message. In our example we would create a Report which shows the oil temperature of the current day as line chart, the total amount of operations executed today as well as a table of alarms. As a result, the Notification-recipient gets enough content to know, why this Notification might occur.
- 7. **Add the notification Destination**: (See (4)); Set the E-Mail-Address(es) which are notified, if the set trigger is activated.
- 8. <u>Test your notification settings</u>: (See (5)); Clicking on "Test Schedule" will try to send the notification message with its payload to the defined destination. Please note, that the "Test Schedule"-button does not evaluate the trigger settings. The notification is sent as test-message, no matter if the trigger would activate or not.
- 9. <u>Save the notification</u>. Congratulations, you created your first Senseforce Notification

FAQs:

a. I get thousands of E-Mails after a Trigger was activated:

Answer: Make sure, to align the notification time setting with the trigger settings. Eg. if you set the time setting to 10 Minutes, make sure to also add a trigger for timestamp which is set to "Last 10 Minutes", to make sure, that a data message is only evaluated once.

b. I want to set my time settings below 10 minutes:

Answer: Fair enough! You will be able to enable settings below 10 minutes, however we need to evaluate how our users are using our tools to prevent too much traffic due to unwanted notifications. After this evaluation period is completed, we well allow settings below 10-minute intervals. From our perspective: The more you use our notifications feature, the sooner we have enough data to deliver this setting;-)