4NG

SMARTset ALARMS & CONTROLS

INFINITELY FLEXIBLE ALARMS & CONTROLS

The SMARTset Alarms & Controls module provides the user with the ability to define control algorithms for SCADA type operations, and create sophisticated alarm conditions. Unlike SCADA systems, SMARTset provides a simple, yet powerful drag 'n' drop visual programming environment inspired by MIT Scratch, therefore even complicated scenarios can be modelled by operators with limited or no experience.

All alarms are enunciated on the screen in real-time and are distributable via SMS, email and virtual file system. Alarms are also accessible using the SMARTset integration module's SNMP service. This also allows the addition of traps so that your NOC can be kept informed of alarms automatically, as and when they occur.

Alarms can be set to require acknowledgement and optionally an escalation distribution list can be defined so that alarms that remain unacknowledged can be sent for further attention.

Whilst the user can define alarm conditions, but the system itself is constantly checking to see that it is running optimally and whenever a problem starts to occur, will send alarms indicating the nature of the problem.
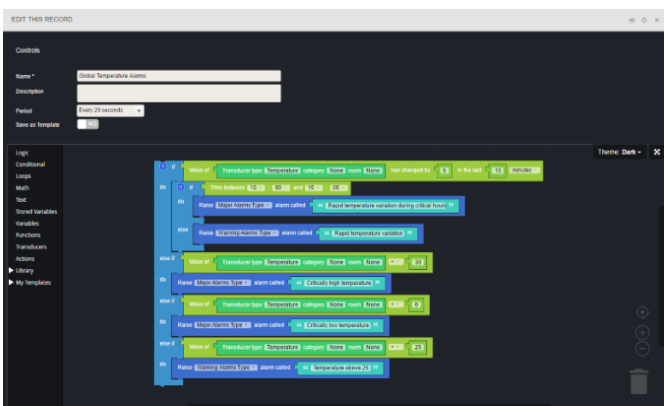

SMARTset ALARMS & CONTROLS FEATURES:

- Get alarms from anywhere in the system including pre-set system alarms.

- Create your own rules and thresholds for alarming or controlling devices, based on a user friendly visual rules editor environment, giving you maximum flexibility and control.

- Rules can use historical data and sophisticated matrix/linear algebra to detect trends and help predict future failure.

- Manage and track activity on all raised alarms - who has seen the alarm and what actions have been carried out.

- Define the behaviour of your alarms by setting up highly customisable alarm definitions, and configuring escalations and notification distribution.

- Send alarm notifications, for initial alarms or escalations, through multiple channels, including email, SMS and virtual file system (ftp/sftp/webDAV).

- Analyse and visualise where your alarms are coming from, what is the root cause and detect if a pattern is emerging.

- Verify, real time, which sensors are currently matching an alarm condition or if an alarm is no longer occurring.

- View the alarms on the room plan element, as they are occurring, with a severity appropriate colour scheme.

- Configure access to alarm management and/or alarm viewing per user.

- Customise and/or create alarm reports to meet your specific needs.

CREATE YOUR OWN ALARMS & CONTROLS

• Get alarms from anywhere in the system including pre-set system alarms.

• Through a user-friendly visual rules designer, you can create and modify your own rules set and outcomes. Drop into place conditions, loops, variables and functions, to achieve complex rules systems to generate alarms or control devices such as adjusting thermostat set-points or switching on fans. These actions can be raised in response to a single condition or a combination of conditions being met depending on the circumstances.

• Edit/copy from any of the range of out-of-the-box controls such as High Temp etc. to meet your individual needs.
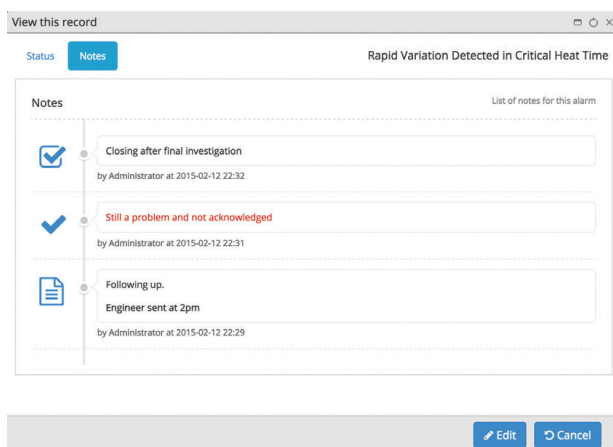

ALARM 'TYPES' TO DETERMINE COMMON ACTIONS

• Creating your own alarm type enables you to specify how an alarm is handled, simplifying the configuration required to raise alarms in the rules designer. You can also associate each alarm type with its own distinctive icon, making it easy to identify the more serious issues.

• When creating an alarm type you can specify that an alarm must be acknowledged, and automatically escalate the alarm if this does not happen within a specified timeframe. You can define the severity by choosing between the built in severities, critical, major, warning or info, and send alarm notifications for both initial notification and escalation messages, making sure the appropriate people are informed.

DISTRIBUTING ALARM NOTIFICATIONS

• Alarm notifications can be distributed by email and SMS text message or placed in a known location in a file system. Creating distribution lists is an effective way of managing contact details and any list changes updates the distribution requirements for each alarm using it.

ALARM NOTIFICATIONS PROVIDING THE INFORMATION YOU NEED

• You can use the in-built alarm reports or create your own using the report generator, providing key information to resolve issues.

FOLLOW-UP AND NEVER BE SURPRISED

• Never miss an alarm, by accessing them from every screen via the quick access list and also view them in the dashboard in the alarms widget or room plan. The alarm widget has a categorised list and aggregated information on open alarms and recent activity tracking. On the room plan view all alarms related to each element as they occur.

• You can identify which sensors are matching alarm conditions or if the alarms are still occurring, making it easy to gradually improve rules and never miss out on problems thereby minimising false positives.

HISTORY OF ALARMS AND RESPONSES

• View a full history of interactions for open or closed alarms including when the alarm was raised, its severity, who acknowledged it and when, and any actions that were taken. Never forget what was done and reuse solutions.

TECHNICAL DETAILS

• Visual programming with drag 'n' drop designer
• Sophisticated linear algebra capability for prediction
• Historical data analysis to enable trend detection
• Alarm source analytics to spot root & common cause

Supported distribution channels:

SMS, eMail, eMail with link
Virtual File System (FTP(S), SFTP, SMB, webDAV etc.)