AlarmManager

WATER RESOURCES MANAGEMENT

Total Overview at Any Time: with Intelligent Event Control.

FLOODS

AlarmManager is the central KISTERS application for information and message management in exceptional situations. It handles incoming event messages, classifies them, and reacts accordingly. Alarm messages are created based on templates, then filled with additional information, and are distributed to recipients via several media types.

The key features of AlarmManager:

- Event messages from different sources are imported
- Messages are classified by type, time series value and status
- Basic data are imported from WISKI, BelVis, SODA, Hydstra or from other applications
- Alarm messages can be exported via SMS, fax, E-Mail, printer, screen pop up, voice message or sound alert
- A web based user interface is available
- The application is accessible from any workstation connected to the network
- The program functions in connection to a database (Oracle, MvSOL)
- The program provides all relevant system information
- Archiving of all data for later use

Alarm handling

The AlarmManager offers two types of alarm handling.

Case 1:

- SODA calls the stations to get measurements values "station poll"
- The data are converted into a ZRXP format
- The AlarmManager imports the data and classifies it regarding to the alarm levels
- If the configured threshold values are exceeded, the message distributor sends alarm messages to the recipients

Case 2:

- An external system sends an event message in XML
- The AlarmManager imports the message and classifies it regarding to the reported status
- If there is a reaction for this status the message distributor sends alarm messages to the recipients

Importing event messages

The AlarmManager imports event messages from several sources. The interfaces between the external systems and the Alarm-Manager are directories that are watched by the AlarmManager via FTP import services. Each type of source has its own



AlarmManager

WATER RESOURCES MANAGEMENT

associated parser. With this modular system it is easy to enhance the import system with new event sources. Current event sources include:

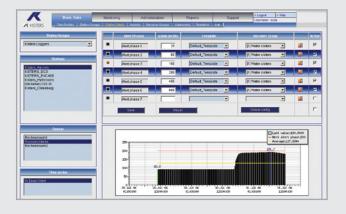
- Dial in / data polling from station
- Observer messages
- Event messages from the SODA logger poll
- Results from the WISKI calculation server
- SDS (System Diagnostic Service)
- External systems

Classification

AlarmManager offers two classification types for incoming events. When it concerns information about time series values, the application checks if the value exceeds the threshold value of the associated station. If it does exceed the threshold value, Alarm-Manager appoints the proper alarm status to the time series. Event messages without time series values are classified by event types. The event type is defined by the transmitter and the media type by the event message.

Reactions

It is possible to configure single reactions that are based on the classification of an event. A reaction describes which recipients or recipient groups should get an alarm message when a specific type of event messages is received or when the alarm state of a time series changes.



Templates

The messages that are sent to the recipients can be preconfigured in templates. All important variables relating to the event, such as station number, parameter, measured value, threshold, and the time of the event, will then be automatically inserted into the appropriate place in the template. The user can create the templates with Microsoft Word and store them as XML files. AlarmManager is capable of accessing the locally edited templates via its own interface.

Recipients

A weekly calendar can be configured for each recipient, which specifies when this recipient is available and which communication pathways can be used to access it. Therefore it is possible to e-mail the user during working hours and, in addition to that, to send a text message during his standby period after work or during the weekend. A selection of receivers can be grouped so that a large number of groups can be notified in the event of an alarm. In addition to configuration with the weekly calendar, the standby service can be configured with an annual calendar.

Remote call system SODA

A special form of recipient is the remote call system SODA. The incoming event then triggers a preconfigured remote call a "task" in SODA. For example, this can be used where a precipitation event at one measurement site will lead to the whole catchment area being polled.

Monitoring

AlarmManager allows you to comprehend the processing of incoming event messages due to a powerful monitor.

Additionally the AlarmManager stores information about all user and server actions in the application log. This way detailed information about all activities running in the AlarmManager is made available.

Better success and progress in water management:

With AlarmManager and the competence of pioneers.

