

CSS – Alarm Displays

EPICS Meeting – Control System Studio SIG

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Overview

- Schema of DESY alarm system
- Alarm Configuration System
- Alarm Displays
- Alarm Tree

Alarm System

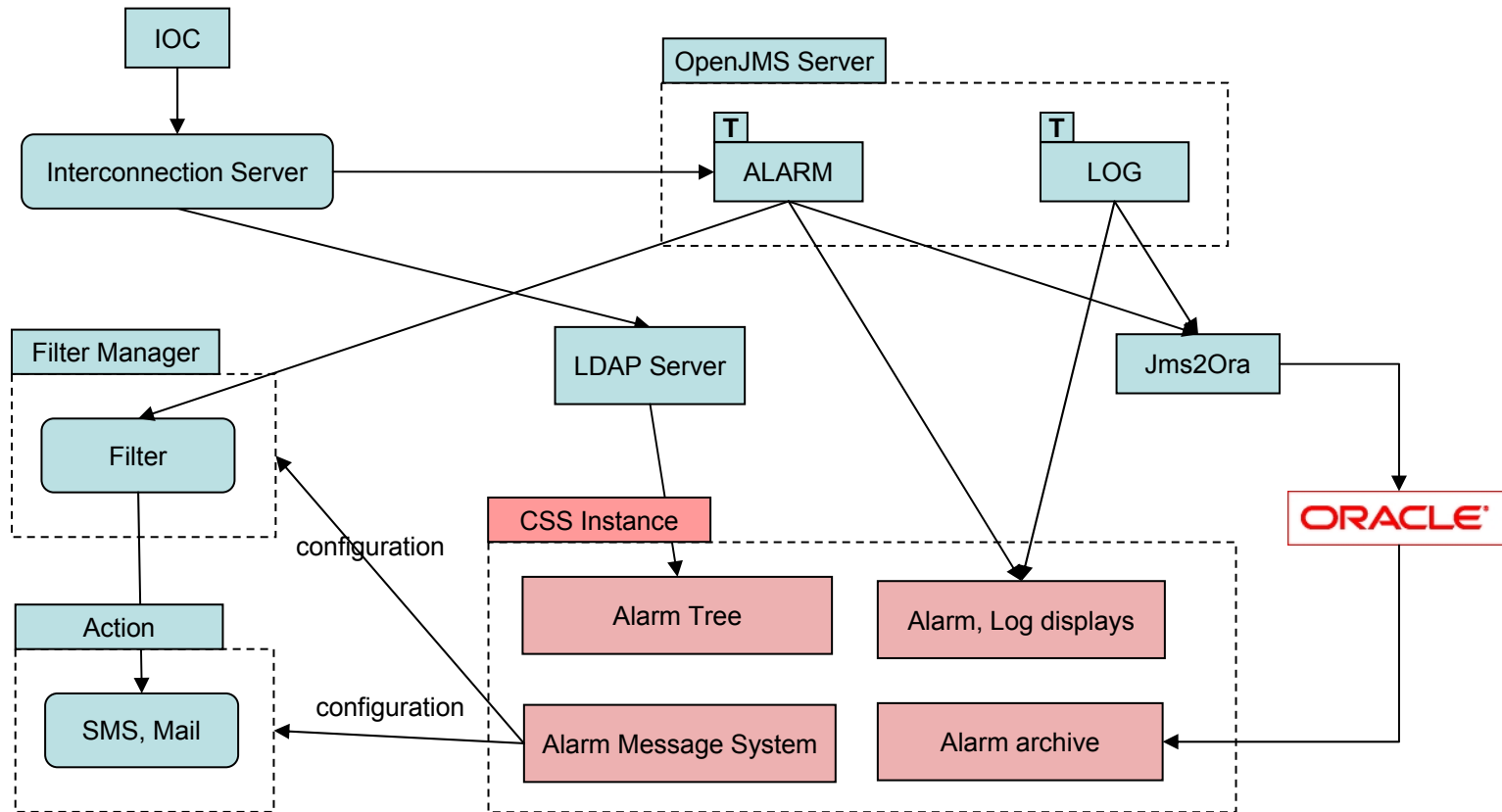
Configuration of the alarm system

- Filter alarm messages according to record name, value, ...
- Define Filters for group or person
- Actions informs responsible persons by SMS, Mail, ...
- The way to forward the message is dependent on conditions, e. g. time of day, ...

Display of the alarm status

- View for the status of each record
- Chronological view of all alarm messages
- Acknowledgement of alarm messages

Structure of the Alarm Displays and Configuration



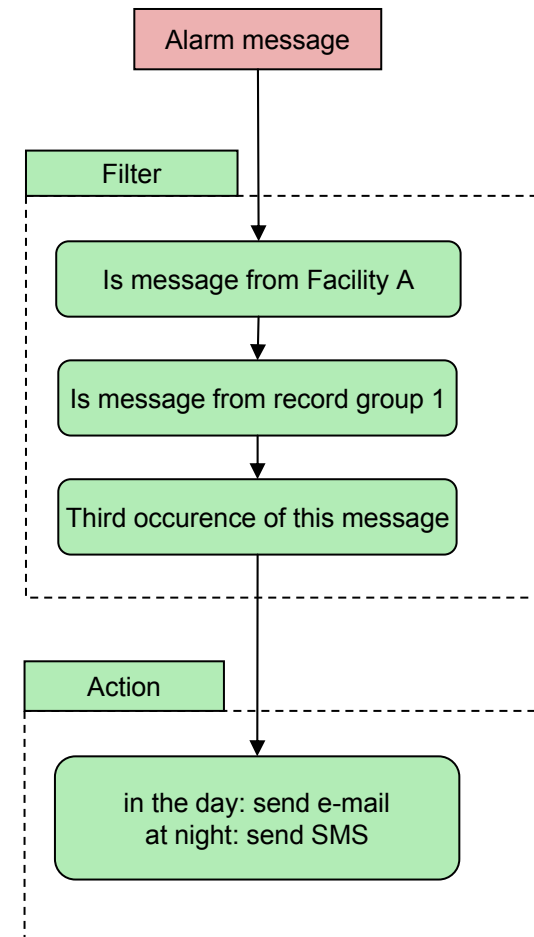
Alarm Message System

Filter for alarm messages

- A filter is a set of conditions
- Every user can configure conditions and built his own filters
- Extensibility: It is possible to add new conditions types

Actions (distribution of alarm messages)

- The user can set his preferred way to get messages
- Users are arranged in groups ordered by priority
- Users have to acknowledge messages



Alarm Displays

Features of alarm displays

- Message properties are configurable
- Names for severity are configurable
- Same data model for all display types
- Object contribution and DnD integration

Log view

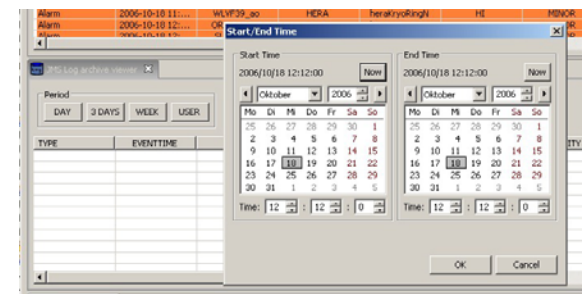
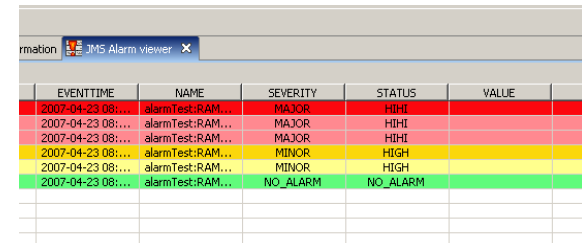
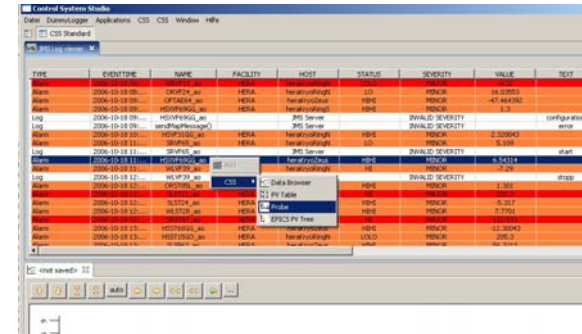
- For all messages (alarm, log, ...)
- New messages on top of the table

Alarm view

- For alarm messages
- First sort criteria is 'Severity' second 'Eventtime'

Archive view

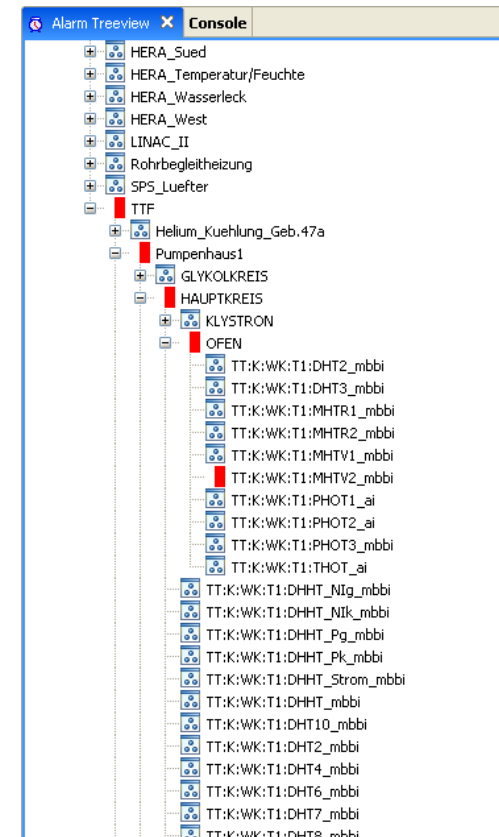
- For messages archived in DB



Alarm Tree View

The AlarmTreeView represents the persistent store of the alarm status

- In EpicsControls all records of the system are ordered by plant and IOC
- An Alarm status of a record is indicated by a colored flag and propagated to the tree root
- In EpicsAlarmcfg the records are ordered by special subject (e. g. all records related to power supply)
- The user can define his own subset of records



Outlook

Alarm message system

- Redundancy

Alarm displays and Alarm Tree

- Acknowledgement of alarm messages
- Support object contribution and DnD functionality
- Show history for alarm status of a Record
- Change alarm properties on an IOC