

## Sentinel - Forecourt Service Management



### Overview

Sentinel is a centralised alarm monitoring application from Postec which works together with the PCC4. Sentinel remotely monitors a network of forecourts, either retail or commercial, and dispatches alarm information electronically to site technicians.

By creating action plans for your sites, you control the response to any alarms raised. The action plan specifies what action should be taken, based on the type of alarm received. Dispatch your personnel quickly, and ensure you meet any Service Level Agreements in place.

Actions can consist of an email, a fax or an SMS text message sent to a particular technician. Alarm status can be tracked and managed manually, either by the central dispatch desk staff or by the technician through a web interface, or the alarm can be closed automatically by Sentinel once processed.

Sentinel also provides a graphical GIS viewer for displaying site location information, with region specific maps available. Sites are displayed on the map with alarm status shown graphically, so staff can quickly identify sites with an open alarm.

### Who is it for?

Sentinel provides centralised forecourt monitoring and service management for the following.

- Independent service providers
- Fuel distributors
- Independent site operators
- National network operators
- Oil Companies

Sentinel significantly improves resource management and response times for all operators of site technicians for the oil industry.

## Key features

### *Proven technology*

Sentinel works in conjunction with the Postec Communications Controller (PCC4). With over 9,000 units deployed already, Postec has a proven track record of reliable and robust product development over the past 20+ years.

### *Configurable action plans*

Sentinel alarm response is based around a highly configurable action plan. Each site in Sentinel contains information on the appropriate action to be taken for each alarm that is raised.

### *Flexible alarm response actions*

Sentinel is able to raise alarms to field technicians in a number of ways. Emails, Faxes and SMS text messages can be sent as part of an action plan, with the body of each message fully configurable and able to contain contextual alarm information.

### *GIS Views*

Dispatch bureau staff monitors the status of each site in the network on a map for the region. Each site on the network is displayed on the map according to its physical location, and the site's alarm status is shown by the site color, ensuring staff can respond to an alarm quickly.

### *Web interface*

After an alarm has been handled and the problem resolved, site technicians can remotely log into Sentinel through a web interface and close the job.

### *Scalable*

Sentinel can be installed on a single server, or with a dedicated database server using the inbuilt Interbase client/server SQL database. This allows Sentinel to scale for even the largest site networks.

## Benefits to your business

### *Improve resource control*

Gain greater control of your service technicians, and ensure that they are allocated to the appropriate sites, with the use of Sentinel Actions Plans.

### *Reduce your costs*

Automatic dispatch allows you to optimize the number of central bureau staff and spend your money where it will improve your bottom line – on frontline technicians.

### *Improve Service Level Agreements*

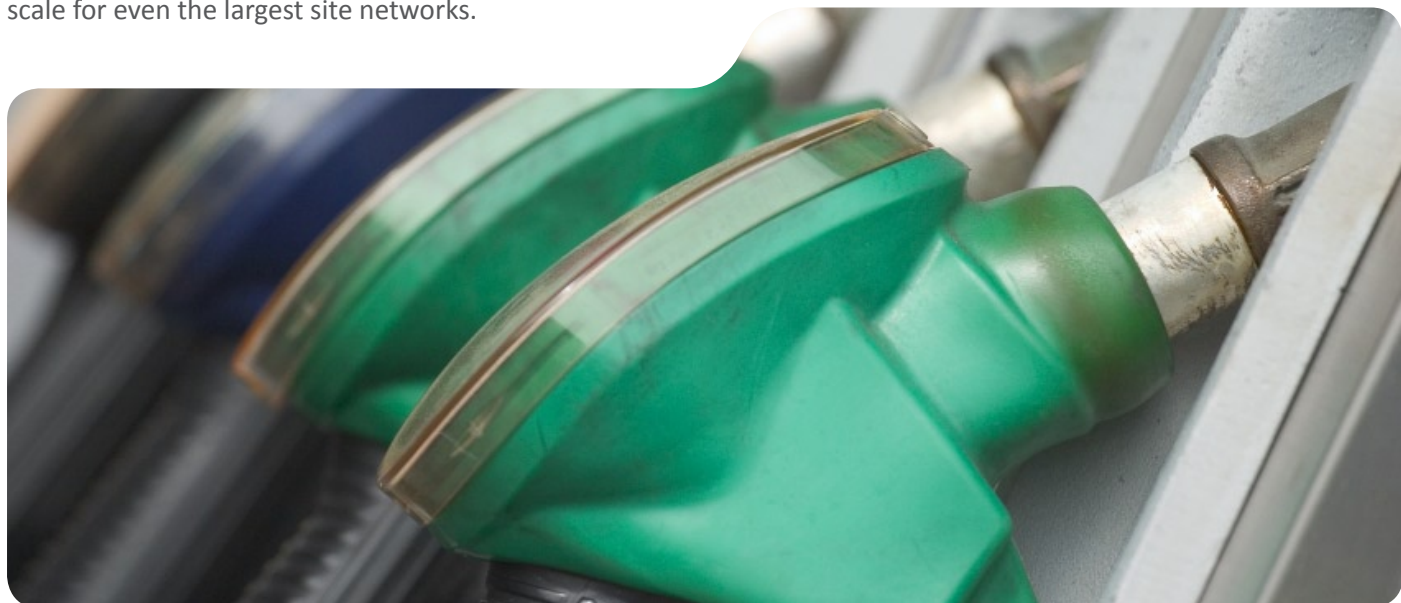
With SMS messages direct to your technicians phone, and other online notification methods, you ensure fast response to alarms. By automating the personnel dispatch you can lower your SLA provide an improved service to site with confidence.

### *Improve offering to your customer*

With Sentinel you can improve the support offering to your customers. Provide fast response times, improve efficiency by using the best technician available for the site in question, and ensure the technician has the latest alarm details.

### *Reduce risk*

Sentinel keeps valuable information in your organisation, and not just in the heads of your service technicians. Reduce your risk of key people by using automated knowledge management.



# What it does

## Site Configuration and Action Plans

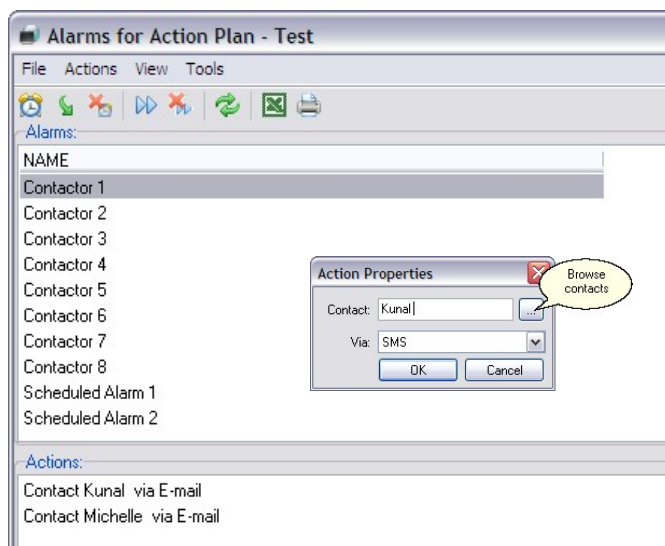
Sentinel provides the Sentinel Manager Central application to configure technicians, sites and actions plans. A client/server SQL database stores this information and uses it to action alarms as they come into Sentinel.



Site configuration is used to store relevant details on the site, such as the site name, contact details for the site in case a phone call is required, and longitude and latitude information for the physical location of the site.

Elements can be group together to simplify the user interface for large networks, or where several networks are operated by a single service provider. For example, sites could be grouped into geographic regions for large networks.

An action plan is a plan for how to respond to each alarm that can occur at site. It consists of one or more actions to be carried out when an alarm is raised to Sentinel. Each alarm can contain its own unique series of actions, or several alarms can simply be configured with the same actions.



## Alarm Monitoring and Processing

Users configure alarms to be monitored in the PCC4 using the Postec 4COM Head Office. Alarms include:

- Contact alarms from input boards
- Timed alarms – users can setup alarms to automatically be triggered at various times of the day and days of the year
- Pump offline
- Tank high and low levels
- Tank water levels
- Fuel delivery detected

See the Sentinel Whitepaper for a full list of available alarms.

Once the PCC4 detects an alarm condition, this alarm and any associated data or files are pushed up to the Sentinel alarm software. Alternatively, Sentinel can be configured to poll sites and pull alarm information.

Sentinel contains a service that continuously monitors alarms from site. Once an alarm is received, Sentinel looks up the site to determine the Action Plan, checks the actions for the type of alarm received, then carries out each action listed. Once the action plan has been completed, the alarm can be automatically closed or remain open until it is manually closed.

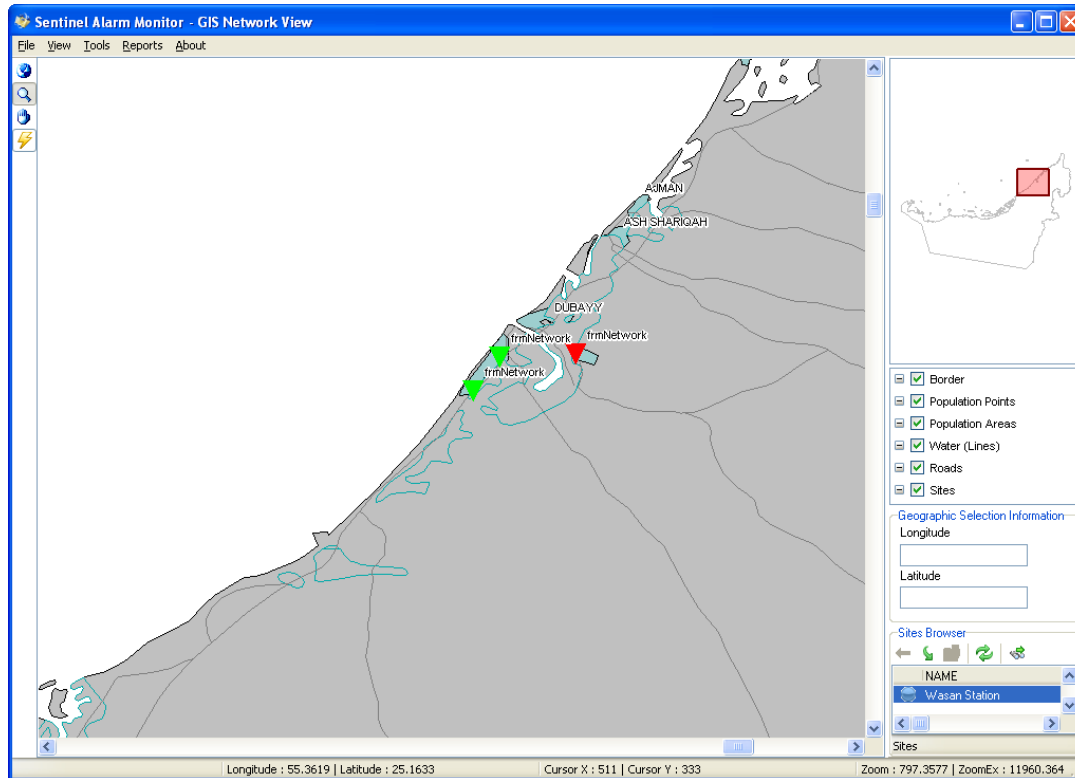
## Technician Notification

Each technician is configured with a Fax number, Mobile phone number and email address. Optionally they can be given a user name and password for web access, in order to manually close an action.



When creating an action plan for a site alarm, you may choose to dispatch the alarm to any technician, and choose the method for notification. Details of the message sent is fully configurable. A graphical editor is provided to fully configure which details are sent, for example the site location, alarm reference number, or whatever information is considered important.

## GIS View and Alarm Monitoring



GIS, or Geographic Information Systems, refers to systems that show information in a geographical context. The GIS Network View window in Sentinel allows the site network to be viewed on a graphical mapping interface, with maps for a variety of regions available from Postec.

Sites are represented on the map by a triangular icon. Sites with no open alarms are shown in green, while sites currently with open alarms are shown in red.

GIS views provide a benefit to your central service staff by allowing them to see relevant information in real time, quickly and easily.

Answers to questions such as, what large population centres are nearest to the site? What other sites are closest? Are there any patterns to the alarms based on physical location? What are the GPS coordinates of the site so they can be provided to the service technician? All of this information is available at a glance using the GIS view.

## Other products

### *Postec Communications Controller (PCC4)*

The Postec Communications Controller, the PCC, is a highly reliable and scalable embedded device for connecting to a wide variety of devices used in the petroleum industry.

With over 9,000 units deployed already, the PCC product has been proven over the past 20+ years. Operating 24 hours a day, 365 days a year, the PCC operates unmanned and in retail environments all around the world, and has been installed in some of the harshest environmental conditions that exist in the petroleum industry.

The PCC's modular hardware and software architecture facilitates a vast range of optional application add-ons including: Automatic Tank Gauging, Price Sign, Vending machines, Automatic Car Wash, Card Readers in Dispensers, Automatic Vehicle Identification, Attendant Tagging, Alarm Monitoring and Remote Communications.

