The Challenge
Maintaining a constant watch on the conditional behavior and performance of your assets is time-consuming, unsustainable, and unreliable.

Events that have a significant impact on your operations can go unnoticed, and unattended. Early identification of events is essential to management and operational efficiency. Events to monitor include: process bottlenecks, operating excursions, materials imbalance, model mismatches, environmental excursions, and critical-function testing. The challenge is to implement full-time monitoring, providing pro-active and responsive actions.

The Solution
P2 Sentinel's intelligent real-time Complex Event Processing (CEP) engine is designed to rapidly access and analyze vast amounts of data, from disparate sources, and provide immediate notification when required, as well as detailed statistical and analytical reports.

P2 Sentinel provides end-users with a set of intuitive, web based interfaces allowing them to simply define rules and event detection logic leading to actions when attention needs to be brought to an event. As a background surveillance activity Sentinel will monitor all configured detection rules, initiating the appropriate user action, or business process. Leveraging the P2 Data Dictionary, event processing rules can be applied to all assets of a common type (e.g. Pumps), allowing for reuse of common asset surveillance rules, correlation of associated events, and responsive actions.

Sentinel Processes
P2 Sentinel uses Processes to implement its testing and evaluations. Processes are selected for the various tests, according to what is most appropriate for the particular asset under surveillance.

P2 Sentinel provides a ‘plug and play’ framework for a rich library of Processes. Our supplementary P2 Sentinel Process Brochures contain further information regarding each specific process.
Key Features

- User-configurable rules, conditions, and triggers, to create custom monitors designed around data from your business assets.
- P2 Sentinel interfaces to the P2 Server data dictionary, utilizing P2 Server hierarchies and templates.
- Rapid response and notifications for events.
- Event data and comments stored in a SQL Server Database. For use in Sentinel reports and statistics, and available as tags in P2 Explorer pages.
- Facility to add comments to the monitor components.

Solution Benefits

- Configure monitors specifically for your business environment and needs, utilizing the extensive library of Sentinel processes, and Sentinel’s user-configurable rules, conditions, and triggers.
- Functionality rich library of ‘plug and play’ processes allows you to decide what is necessary for your business, with the facility to add new processes as required.
- Leverage structure and data source integration via P2 Server.
- Rapid configuration based on existing templates.
- Notification actions ensure that designated personnel receive prioritized notice of events.
- Historical monitor execution.
- Monitors perform recovery execution when normal operations are interrupted.
- Reports, charts, and event logs show event history and timelines statistics. Add comments to events, to assist with summation and analysis.
- Change management to regulate any adjustments made to monitors.
- Easy to access anywhere on the corporate intranet, presented in simple tabbed pages.

Technology Vitals

Leveraging a Service Oriented Architecture (SOA) P2 Sentinel is a web based application that can be easily accessed via Microsoft® Internet Explorer®, by users with appropriate security permissions. P2 Sentinel has a three-tier structure comprising of the Client platform utilizing Silverlight 4, a Server platform using Windows Server 2008 R2, and .NET 4 to provide interoperability and processing. P2 Sentinel event data is stored in a Microsoft SQL Server database, and P2 Server is used for P2 Sentinel to retrieve data from disparate data sources.

Contact P2 Energy Solutions, enquiries@p2energysolutions.com, for more information or for a demonstration.

EMPOWERING THE PEOPLE WHO POWER THE WORLD