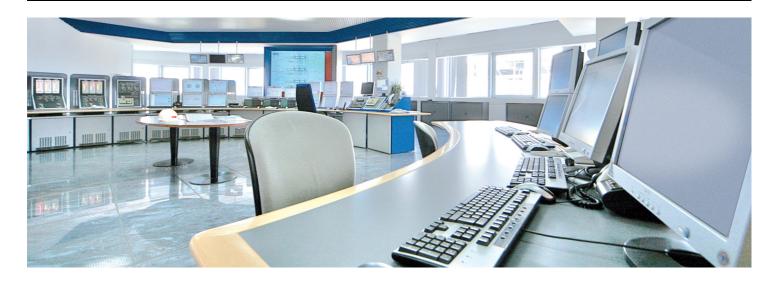
Power Generation

S+ Operations Alarm Management



S+ Operations' advanced alarm management functions provide truly integrated process condition information for timely and efficient alarm management.

Overview

Modern devices and systems generate a wealth of condition-based information. This can lead to all types of abnormal events, warnings and alarms being presented to operators. The volume and diversity of alarm situations can actually distract the operator from focusing on the event requiring the most immediate action. It can lead to "alarm fatigue." It can delay or extend the time it takes plant operators to complete required tasks to return to normal operations.

S+ Operations' advanced integrated alarm management system improves the operators' capability to detect and respond to abnormal situations, increasing their success rate in returning to a normal mode of operations.

Superior integrated alarm analysis system optimizes the plant's functions and its reliability and efficiency

Based on S+ Operations' integrated information management module, the EEMUA 191 and ISA SP 18.2-compliant alarm analysis and alarm management module can be used to analyze trends or abnormal situations based on process messages. The system offers an extensive array of analysis possibilities such as message filters in alarm/event list and frequency statistics for defined time ranges. This can lead to a higher incidence of control room operators detecting an abnormal situation prior to alarms even occurring.

EEMUA 191 and ISA SP 18.2-compliant alarm handling

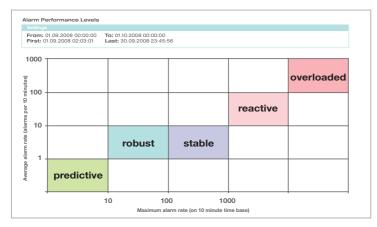
The EEMUA 191 and ISA SP 18.2-compliant alarm analysis and alarm module is an integrated part of S+ Operations. Industry-standard report types and statistics are already integrated and additional analysis is easily configurable.

Setting alarm priorities and presentation

S+ Operations supports the implementation of high performance alarm management strategies offering features such as alarm grouping, filtering, shelving, hiding and suppressing (inhibiting). Color identification of different message priorities gives the operator a clear condition-based overview. Groups are organized and viewed in hierarchical structures.

The view of messages can be set individually and customized at any time using menu-driven commands, allowing messages to be viewed in list format or in alarm page format.

S+ Operations is putting its Alarm Management solutions to work throughout the power generation industry. The sophisticated alarm management system helps operators handle the most demanding and critical situations, avoiding costly downtime.



Alarm performance level display

S+ Operations enables collaborative alarm management

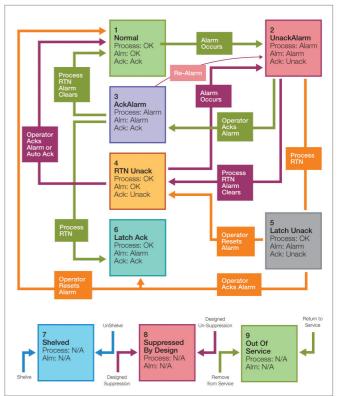
Direct information exchange with other Event Management users can take place by inserting manual messages, comparable to using a logbook. Additional information, user IDs and time-stamps are recorded automatically in the system.

Going beyond the effect of an alarm to understand its root cause

The direct call of the alarm system from the S+ Operations trend display makes quick analysis possible when an abnormal situation occurs. Statistical evaluations are integrated with the message client to improve the search for each cause of disturbance. All messages (plus additional information) are automatically stored in the long-term archive for historical trend analysis.

Key features and benefits

- EEMUA 191 and ISA SP 18.2-compliant alarm analysis and alarm management system
- Completely integrated and preconfigured. The alarm analysis and alarm management work "out of the box" with no additional engineering and maintenance required
- Integrated and preconfigured long term historian allows for detailed statistics and reports for every desired time frame and resolution without additional configuration or engineering
- Alarm analysis: statistics, reports and alarm simulation functions allow for the best alarm configuration and alarm handling possible. Standard statistics and reports (EEMUA 191 / ISA SP 18.2) are included and preconfigured
- The easy to use drag and drop interface makes even the most sophisticated statistical analytics and reports easy to configure
- 16 alarm priorities and 512 alarm groups allow for extensive alarm customization
- Sophisticated and state-of-the-art alarm management functions like alarm grouping, filtering, shelving, hiding and suppressing (inhibiting) allow for operator-friendly alarm handling
- Remote alarming enables alarming even in remote locations
- OPC AE server and client enable easy data exchange with foreign systems
- Alarm life cycle management service available



Alarm process flow

ABB Inc.

Power Generation

Wickliffe, Ohio, USA

Phone: +1 440 585 3087

E-Mail: powergeneration@us.abb.com

ABB AG

Power Generation

Mannheim, Germany

Phone: +49 621 381 3000

E-Mail: powergeneration@de.abb.com

ABB Pte. Ltd.

Power Generation

Singapore

Phone: +65 6776 5711

E-Mail: powergeneration@sg.abb.com

www.abb.com/powergeneration

©Copyright 2012 ABB

All rights reserved. Specifications subject to change without notice. Pictures, schematics and other graphics contained herein are published for illustration purposes only and do not represent product configurations or functionality. User documentations accompanying the product is the exclusive source for functionality. User documentation accompanying the product is the exclusive source for functionality descriptions.

Symphony is a registered or pending trademark of ABB S.p.A. All rights to other trademarks reside with their respective owners.

