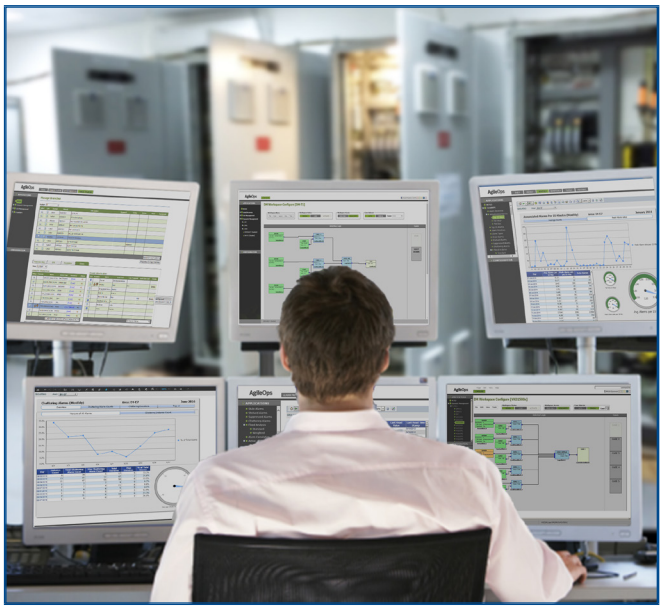
AgileOps™

- Your complete alarm management solution including
  - Master Alarm Database
  - Advanced Alarm Shelving
  - Dynamic Alarming
  - Alarm Metrics
  - Safety Instrumented Functions
- Compliant with API RP1167, IEC 62682 and ISA 18.2 standards
- Compatible with multiple control systems



Product Description

Emerson's AgileOps software is a complete alarm management solution that provides consistency and reliability to the control system by keeping it optimally configured for the process state. Several modules make up the AgileOps solution. The functions of the AgileOps modules are listed as follows:

- **Master Control System Database (MCSD)** – Central repository for viewing, configuring and managing all alarm data. AutoDiscovery automatically browses the control system and populates the database, then periodically scans for new or deleted items. Generates discrepancy reports and alarm enforcement can be enabled.
- **Dynamic Management (DM)** – Enables alarm configuration changes based on dynamic logic of the operating state and process conditions. Ensures smooth alarm transitions from one operating state to another using case logic.
- **List Management (LM)** – Enables management of malfunctioning alarms, broken instrumentation or stale alarms. Reduces nuisance alarms, minimizes length of alarm summary and auto re-enables alarms.
- **EventKPI (EKPI)** – Enterprise level, web based, automatic alarm / event reporting tool. Includes development environment for fully customized reports and dashboards. Generates and emails reports on scheduled basis or event triggered.
- **Safety Instrumented Function Tracker** – Monitors the integrity of the safety system. Degraded components can be easily identified and repaired before the SIF operation becomes unsafe. Generates and emails reports on scheduled basis or event triggered.

AgileOps is compliant with API RP1167, IEC 62682 and ISA 18.2 standards and is designed to help you meet these standards when coupled with Emerson's alarm rationalization services.

AgileOps is compatible with multiple control systems including Emerson DeltaV® and Ovation™ Honeywell Experion® and TDC®, Siemens PCS7®, ABB 800xA, DOW's MOD 5, and Invensys Foxboro®, thus delivering a complete alarm management system for an entire site with one or multiple control system manufacturers.

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Master Control System Database (MCSD)

The Master Control System Database (MCSD) module provides a central source for pre-approved, approved and historical control system parameter settings including alarm system design (rationalization) results. The MCSD greatly enhances your ability to audit, rationalize and control by giving you a unified view of all control system settings.

Features

- On-line database
- Automatically detects changes on the production DCS database and populates the database through AutoDiscovery
- View accessible control system settings
- Indicate approved values and suggested revisions
- View configuration of all AgileOps modules on a per point basis
- Configure boundaries for each point
- Enforce alarm properties (priority, enable/disable, and alarm limits)
- Rationalize alarm settings
- Capture causes, consequences and actions and other alarm data
- Operations view of alarm data

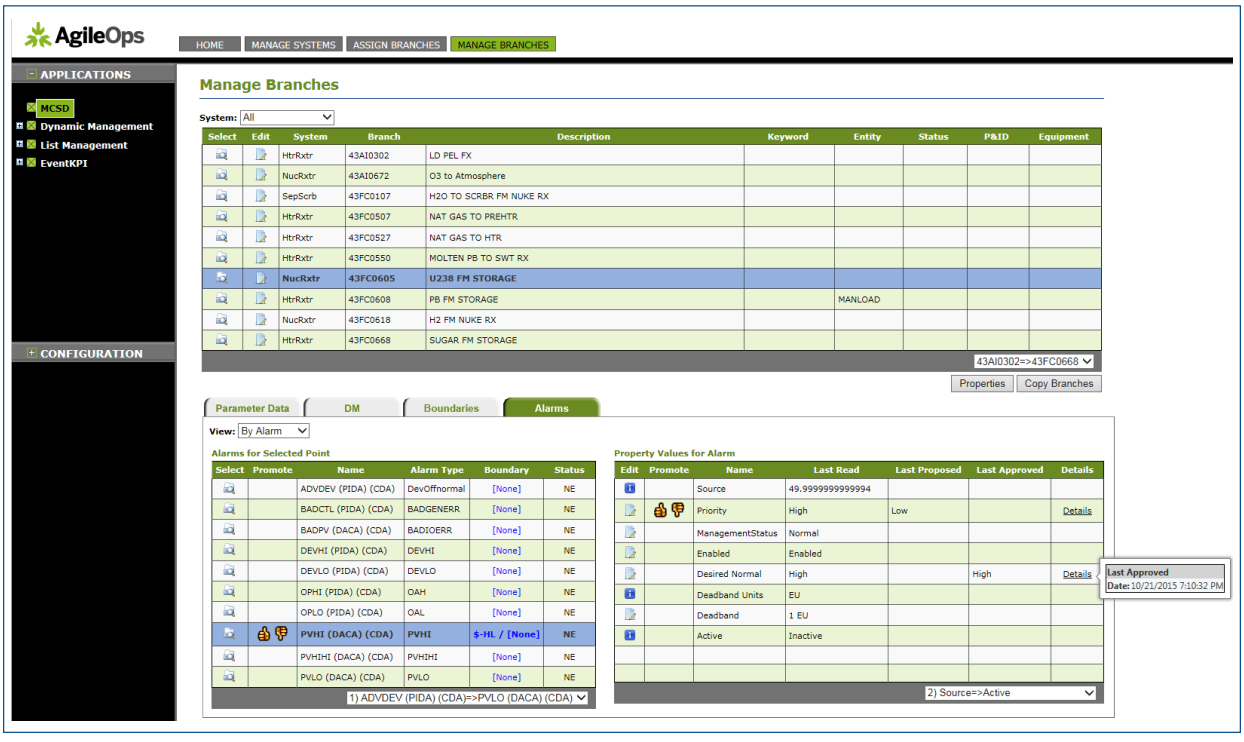
AutoDiscovery

AutoDiscovery automatically browses the control system and brings all of the alarm configuration information into AgileOps. After the initial sync with the control system, AutoDiscovery can be set to run on a periodic basis in order to verify that points have been added or deleted.

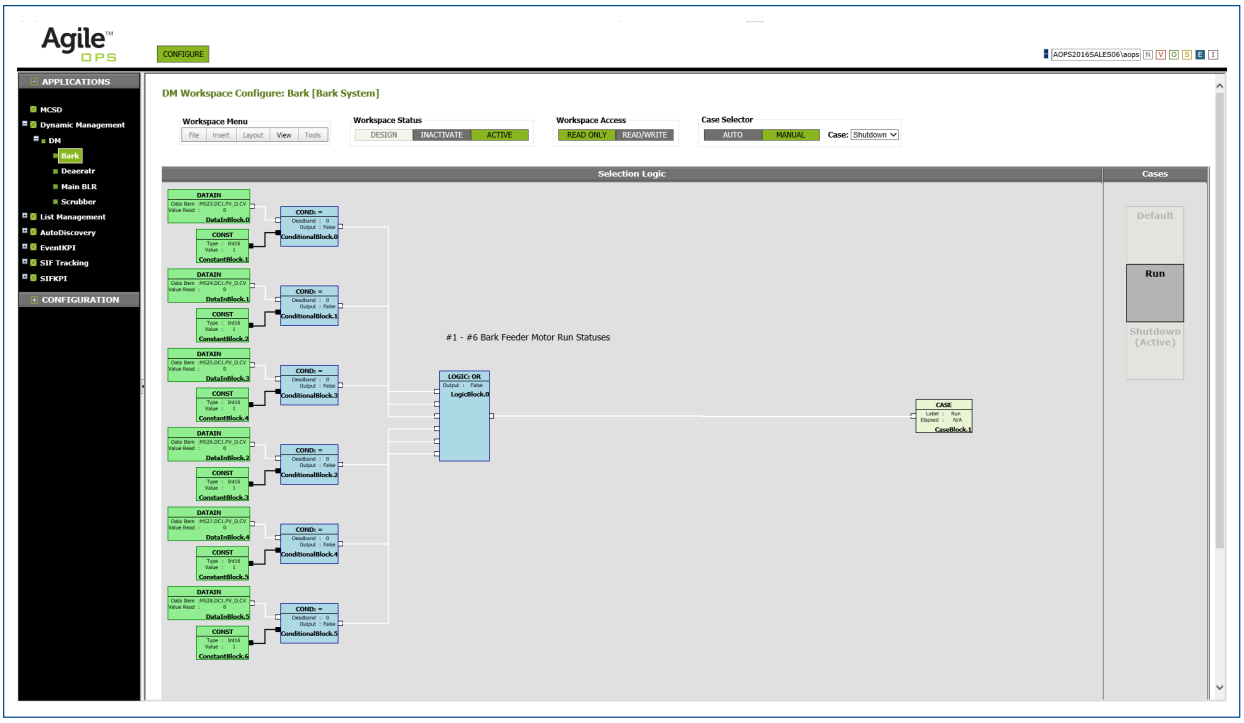
Branch and Boundary Management

After gathering all of the tags from the control system, AgileOps offers a user-friendly interface that allows you to view and manage each tag and edit any of its parameters.

While configuring each branch, the respective boundaries can also be defined. Each branch in MCSD can also be assigned to a system. These systems are usually designed around pieces of equipment that operate together such as a furnace, a compressor or a pair of towers that run in tandem. These systems can then be dynamically managed individually through the Dynamic Management (DM) module.



AgileOps Alarm Settings View



AgileOps Dynamic Logic Workspace

Dynamic Management Module (DM)

The Dynamic Management (DM) module provides the capability to manage the states and state transition of control system settings according to any set of logic. DM is a powerful process management tool that allows the alarm configuration to change as the operating state changes. Therefore, it can effectively eliminate alarm floods during upset conditions and operators can focus on stabilizing the plant rather than responding to unnecessary alarms.

Features

- Easy, drag and drop interface to develop state logic for rapid deployment
- Automatically changes alarm settings, such as alarm priority and trip point, based on operational state of the plant
- Built-in transition management allows for easy state transition without generating alarm floods
- Integrated, user-friendly operator interface
- No need for custom displays or programming for dynamic logic

List Management Software (LM)

The List Management (LM) module is more advanced than any other shelving tool on the market. It not only allows operators to shelve nuisance alarms, but also can shelve stale, standing alarms automatically. LM offers the ability to restrict critical alarms from being shelved and can be set to re-enable after a set period or if the alarm is inactive.

Features

- Easy to use, integrated operator interface for advanced alarm shelving
- Automatic or operator-based shelving
- Unshelving based on timer or alarm active status
- Configurable shelving lists based on role and type
- Individual alarms on a tag can be shelved
  - Shelve the PVLO alarm, leave PVHI enabled
- Built-in integration between alarm shelving and dynamic management module
- Can exclude individual alarms from being shelved
- an alarm being inactive or using a fixed un-shelve timer
- State-based shelving

LM can be used by multiple users with different control system responsibilities. Each type of user can have a different set of authorized privileges.

EventKPI (EKPI)

EventKPI (EKPI) allows the measurement, tracking and reporting of key performance indicators for events occurring in your facility. EKPI reports alarm metrics as a result of data analysis which it collects automatically from one or more control systems. Metrics can be analyzed by the minute, hourly, daily, weekly, monthly or on a yearly basis. EKPI is designed as an enterprise application that provides the necessary detailed information from local unit personnel up through complex-wide and cross facility views for the enterprise.

Features

- Provides alarm system monitoring and metrics reporting
- Enterprise dashboards
- Interactive analysis reports
- Audit control system settings against MCSD values
- Publishes reports on demand, scheduled or triggered by an event
- Provides metrics per ISA 18.2 / IEC 62682 standards
- User can create custom dashboards and reports

In addition to the standard dashboards and reports, Analyst users can create ad-hoc reports, generate new reports and publish them to all users. Reporter users can trigger reports to be run automatically and emailed to them if certain criteria are met or on a preset schedule.

EKPI provides the metrics in line with the following guidelines, standards and regulations: EEMUA 191, ISA 8.2, IEC 62682, API RP1167, 49CFR192.631 and 49CFR195.446.

AgileOps Average Alarm Report

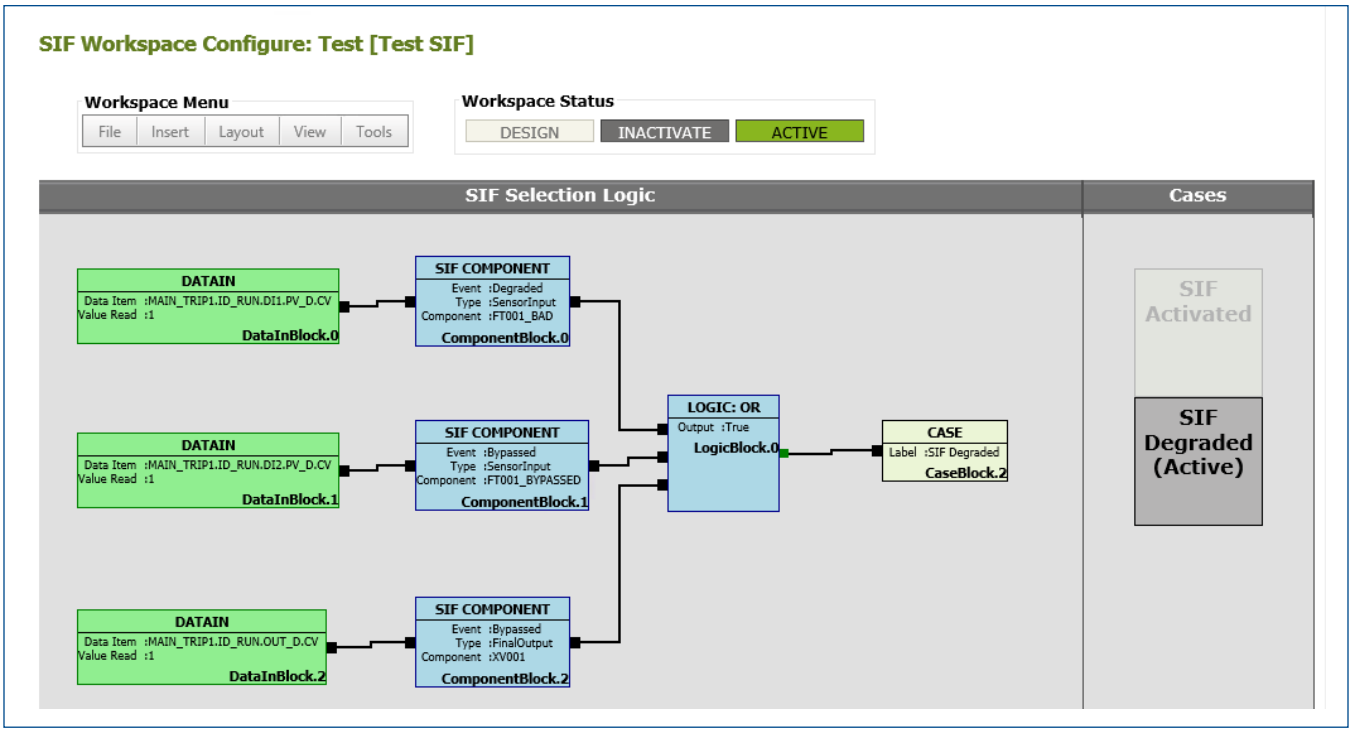
Safety Instrumented Function (SIF) Tracker

Safety Instrumented Function (SIF) Tracker monitors the performance of a safety system and monitors if that system is operating normally, operating in a degraded state or if a safety interlock function is active. The results of this monitoring can then be viewed by users in reports presented in EventKPI.
The detection of whether a safety system is in a degraded state or if a safety interlock function is active are defined as SIF KPI cases. Each case contains selection logic that the user builds to define what constitutes an activation trigger of the safety system or a degraded operating mode as well as individual contributors to an overall degraded mode of operation (such as active interlock bypasses or bad inputs from field instruments).

Features

- Monitors the integrity of your safety system automatically
- Records performance over time to be utilized
- Frequently degraded components can be easily identified and resolved before SIF operation is compromised
- Time in bypass is minimized
- Publishes reports on demand, scheduled or triggered by an event

The benefit of applying SIF KPI is to be able to track integrity of safety systems at a facility or site. Any safety system in a degraded state can easily be identified and issues resolved before operation of the equipment becomes unsafe.
The application is useful for operators as it allows them to verify the integrity of the safety systems, they are responsible for and help prioritize work orders with maintenance to restore integrity of safety systems if issues are identified. It also allows operations to verify that bypasses are cleared on safety systems so that those safety systems can perform safely.



AgileOps Average Alarm Report

Guardian Support

Guardian™ Support for AgileOps™ is a service designed to optimize the reliability and performance of your AgileOps System. Guardian provides unlimited expert technical support through service calls and delivers online resources and tools through the website and mobile app.

Licensing and Ordering Information

The AgileOps Suite includes 5 software modules, each licensed separately. For details on ordering, see AgileOps™ Licensing and Ordering Information Product Data Sheet. Below are a few example Product ID and Descriptions.

Part no.	Description
COP-AO-MCSD-1000	AgileOps Master Control System Database - 1000 points
COP-AO-DM-1	AgileOps Dynamic Management - 1 area
COP-AO-LM-1	AgileOps List Management - 1 area
COP-AO-EKPIBASE-SRV	AgileOps EKPI Server Base License
COP-AO-EKPICOLL-DLTV	AgileOps EKPI Connector - DeltaV
COP-AO-EKPICOLL-OV	AgileOps EKPI Connector - Ovation
COP-AO-EKPIUSER-ANL	AgileOps EKPI User - Analyst
COP-AO-SIF-5	AgileOps SIF KPI - 5 workspaces

Related Products

- DeltaV Alarm Help
- DeltaV Alarm Mosaic
- DeltaV Mobile
- Ovation

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