

# **Alarm Manager**

### Alarm Management Made Smarter

February 2024



### **About Alarm Manager**

The Alarm Manager application, part of the MPA suite of applications, is designed to address the critical need for the design and implementation of effective alarm management in industrial processes as outlined in the ISA 18.2 standard. With the aim of improving operational safety, reducing equipment failures and enhancing overall plant performance, Alarm Manager provides a comprehensive solution for organisations facing challenges in alarm handling and compliance with industry standards. By following the principles outlined in ISA 18.2, industries can enhance safety, streamline operations and minimise the potential for human error in managing alarm systems.

#### **Alarm Handling and Compliance**

Designed to align with the recommendations outlined in the ISA 18.2 standard, Alarm Manager offers robust features to streamline the entire lifecycle of alarms. It goes beyond mere reporting and extends its capabilities to encompass the management and analysis of alarms from design through to operational monitoring and assessment.

#### **Compliance and Collaboration**

One of the key strengths of Alarm Manager is its ability to facilitate compliance and promote consistent alarm handling practices. By adhering to the ISA 18.2 guidelines, organisations can ensure that alarms are reported in a standardised manner across different systems and departments. This standardisation not only improves overall operational efficiency but also enhances communication and collaboration among plant personnel.

#### **Centralised Alarm Database**

Furthermore, Alarm Manager introduces a master alarm database, serving as a centralised repository for all alarm-related information. This database enables organisations to efficiently track and manage alarms, providing a holistic view of alarm settings such as alarm type, severity, setpoints and operator actions. With this enhanced visibility, teams can rationalise alarms to ensure alignment with the operations alarm philosophy.

#### **Control Your Alarm Systems**

By deploying Alarm Manager, organisations can establish a solid foundation for effective alarm management, enabling them to meet industry standards, improve operational safety, reduce equipment failures and optimise plant performance. With its user-friendly interface, comprehensive features and alignment with ISA 18.2 recommendations, Alarm Manager empowers organisations to take control of their alarm systems and drive efficiency and safety in their industrial processes.

### **Features and benefits**



#### **Alarm Reporting and Tracking**

Alarm Manager allows organisations to report alarms according to the ISA 18.2 recommendations, ensuring standardisation and consistency in alarm handling practices.



### Integration with Existing Control Systems

Alarm Manager seamlessly integrates with various control systems commonly used in industrial processes, ensuring compatibility and smooth implementation without major disruptions.



#### Master Alarm Database Management

The application introduces a central repository for all alarm-related information, enabling organisations to efficiently track and manage alarms throughout their lifecycle.



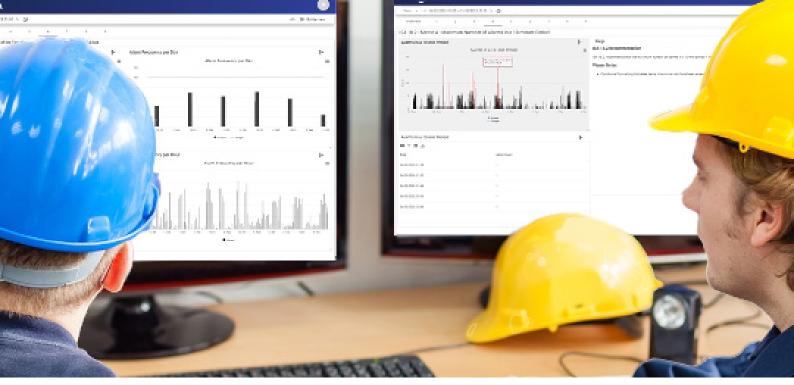
#### **Alarm Analytics and Reporting**

Alarm Manager provides advanced alarm analysis and reporting capabilities, empowering teams to identify patterns, trends, and recurring issues for continuous improvement.

#### **Team Collaboration**

The Alarm Manager application allows teams to collaborate through annotations and comments.

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### Why choose Alarm Manager?



#### **Enhanced Operational Safety**

The Alarm Manager application helps organisations prioritise and respond to alarms effectively, reducing the risk of critical safety or environmental incidents.

By adhering to industry standards and best practices, it ensures that alarms are properly managed and operators can take appropriate actions in a timely and controlled manner.

#### **Streamlined Alarm Rationalisation**

The application offers a centralised repository for alarm information. The master alarm information allows teams to collaborate on the prioritisation of alarm rationalisation to reduce alarm floods, stale and disabled alarms.

Operational and situational awareness is improved as teams rationalise alarms. In addition, with the application's alarm lifecycle management capabilities, organisations can address alarm-related issues proactively.

#### Improved Compliance

The Alarm Manager application aligns with the ISA 18.2 standard, providing organisations with a framework to meet regulatory requirements and industry guidelines for alarm management.

It helps organisations establish consistent alarm handling practices and reporting mechanisms, facilitating compliance audits and demonstrating adherence to industry standards.

The application ensures sustained compliance through continuous monitoring and reporting, preventing alarm systems from drifting back to a non-compliant state.



#### **Minimise Unplanned Downtime**

As operators gain more situational awareness through reduced alarm noise, the risk of missing critical alarms is reduced and teams can identify and rectify potential equipment or process issues, minimising downtime and improving overall plant reliability.



#### Advanced Alarm Analysis

By leveraging the data captured from alarms, the Alarm Manager application allows organisations to perform in-depth analysis and gain insights into alarm performance.

This analysis helps identify alarm patterns, recurring issues, and opportunities for process optimisation, enabling organisations to proactively address underlying causes and drive continuous improvement.



#### **Integration with Existing Systems**

The Alarm Manager application seamlessly integrates with your existing control system and alarm database. This integration ensures compatibility with the organisation's existing infrastructure, enabling a smooth implementation and minimising disruption to operations.

### Increased Collaboration and Communication

The Alarm Manager application promotes collaboration among plant personnel by providing a standardised platform for alarm handling.

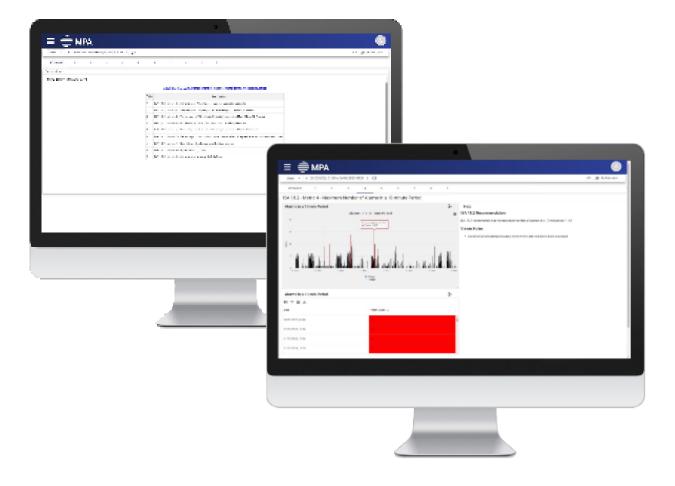
It facilitates communication between operators, engineers, and management, enabling effective coordination and decision-making to address alarms promptly and efficiently.

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#### **Improved Decision-Making**

With its comprehensive reporting and analytics capabilities, the Alarm Manager application empowers organisations to make informed decisions based on realtime alarm data.

The availability of accurate and up-todate information enables management to identify areas for improvement, allocate resources effectively, and drive operational excellence.



### Did you know? Alarm Manager FAQs

### Where is Alarm Manager information stored?

Alarm Manager leverages your existing control system alarm information, meaning the data is kept at its source. We will establish a new master alarm database which can be stored locally to the MPA server or in an existing SQL Server.

### What's included with the Alarm Manager application?

The Alarm Manager application, part of the MPA suite of applications, offers a comprehensive solution for effective alarm management in industrial processes. It includes the following key features and functionalities:

Alarm Reporting and Tracking: Alarm Manager allows organisations to report alarms according to the ISA 18.2 recommendations, ensuring standardisation and consistency in alarm handling practices.

**Master Alarm Database Management**: The application introduces a central repository for all alarm-related information, enabling organisations to efficiently track and manage alarms throughout their lifecycle.

Alarm Analytics and Reporting: Alarm Manager provides advanced alarm analysis and reporting capabilities, empowering organisations to identify patterns, trends, and recurring issues for continuous improvement.

Integration with Existing Control Systems: Alarm Manager seamlessly integrates with various control systems commonly used in industrial processes, ensuring compatibility and smooth implementation without major disruptions.

#### What support is provided?

We understand that different customers have different support needs, which is why we offer two levels of support. Our standard support package is designed for customers who need basic support, while our premium support package is ideal for customers with more complex needs or customised solutions.

**Standard support** provides access to our knowledgeable support team for assistance with any software-related issues you may encounter. Standard support covers typical software application issues such as bugs and incidents. Standard support will be available during normal Brisbane business hours.

**Premium support** offers access to expertise for complex issues that may require specialised knowledge supporting application or infrastructure problems. Premium support can be tailored to the size and complexity of the installed system and the desired response timeframes. Premium support also provides access to application specialists for minor additions or improvements.

#### How long does it take to implement?

Our solutions can be implemented in as little as two weeks.

The implementation timeframe of our solutions can vary depending on several factors such as whether there is existing infrastructure in place and if you require any site specific reports.

If an out the box Alarm Management application is required, such as connecting to an existing historical alarm database, and setup of a Master Alarm Database, the implementation can take anywhere from 2-4 weeks once the base system is set up. Our solutions can be implemented within this time frame, but it's important to note that the exact duration will depend on the specific requirements of each project.

### Did you know? Alarm Manager FAQs

#### What's required to get it up and running?

If you don't already have an MPA Server installed, we would require a virtual or physical server, ideally with Windows Server 2019. We would require administrator access to the server to install the pre-requisite software and configure MPA for connection to your plant data.

We would then need access to connect MPA to your existing control system alarm database.

#### What is ISA 18.2?

ISA 18.2 is a standard developed by the International Society of Automation (ISA) that provides recommendations for designing, implementing, and managing alarm systems in industrial processes. It aims to improve the way alarms are used in various industries such as manufacturing, chemical processing, and energy production.

The standard covers aspects such as alarm prioritisation, documentation, design principles, alarm response procedures, and monitoring. It encourages companies to focus on essential alarms and reduce unnecessary ones, ensuring that operators can respond promptly and accurately to critical situations.

By following the principles outlined in ISA 18.2, industries can enhance safety, streamline operations, and minimise the potential for human error in managing alarm systems.

### How does Alarm Manager help us meet the requirements of ISA 18.2?

The alarm manager application provides insights into your alarm system and how they compare to recommended benchmarks set by ISA 18.2. You can expect reports for alarm rates, alarm flood events, most frequent alarms, chattering and fleeting alarms, and priority distribution.

In addition to the analysis of alarms, the Alarm Manager application allows you to centralise your master alarm database and manage change which is an essential step in alarm rationalisation. You can document alarm design information and updated as part of assessment and auditing of alarms.

The application supports teams in continuous monitoring of alarms in operations ensuring any improvements are maintained.

- Advanced Process Control
- Industrial Automation
- Industrial Software Solutions
- Data Visualisation and Analytics
- S Electrical and Instrumentation
- Process Optimisation
- Cybersecurity
- Operations Support and Procurement
- Industry 4.0 Consulting

## **About Mipac**

Built by miners for miners. Global leaders in operational technology, control systems and engineering services, Mipac is the perfect partner in driving your operational performance.

From control systems with robust software and engineering foundations to the latest innovative advancements in digital technology, Mipac delivers high-quality, intelligent solutions to drive performance.

We understand the complex challenges operations face through our depth of onsite experience and have developed a reputation for solving complex problems.

Operating globally, we provide an extensive range of services to realise the total value of your mining operation and have developed a suite of products that will help you increase productivity, reduce costs and optimise operational performance.

From solid software and engineering foundations to the latest innovative advancements in digital technology, Mipac are your trusted advisors for all aspects of your mining operation.

### Our solutions

We work across various industries to realise the total value of your operation and recommend solutions and services that produce optimal outcomes and increased performance.



Building new operations

Operating and optimising existing operations



Modernising existing operations



Main Automation Contractor



We believe in working together with our clients and partners to achieve their goals.

At Mipac, we go



With more than

730

projects delivered worldwide

over the past



decades, we've worked in

more than

55

countries around the globe

for more than

clients across the globe

with a team of

125

experts dedicated to projects like yours.

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