

ISA-18.2 COMPLIANCE WITH PROCESSVUE GUARDIAN & ANALYSER

ISA-18.2 outlines a ten-stage alarm management lifecycle framework to ensure consistency, safety, and performance in industrial operations.

ProcessVue Guardian delivers the governance, configuration control, and compliance management foundation.

ProcessVue Analyser provides real-time insight, analytics, and KPI monitoring that enable continuous improvement.

Together, they deliver complete lifecycle coverage, transforming compliance into **Alarm Intelligence**.

1. Define your Alarm Vision

Objective: Define alarm objectives, priorities, KPIs, and rules for consistent behaviour.

ProcessVue Support:

Guardian

- Digitally applies philosophy principles using **priority matrix calculations** that merge impact and severity to determine objective priorities.
- Includes **embedded guidance and decision logic**, ensuring consistency across engineers and assets.
- Establishes a standardized approach to prioritization, justification, and response expectations.

Analyser

- Tracks live performance against philosophy targets — including alarm rate, floods, and standing alarm levels.
 - ✓ **Outcome:** A living, enforceable philosophy consistently applied through the platform and verified through operational performance.
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2. Discover and Prioritize Events

Objective: Determine which process conditions truly require alarms.

ProcessVue Support:

Guardian

- Structured workflows capture alarm purpose, cause, consequence, and justification to support transparent decision-making.

Analyser

- Highlights operational trends and conditions where alarms may be missing, redundant, or overloaded.
- ✓ **Outcome:** Only necessary and meaningful alarms are introduced to the system.

3. Rationalize and Optimize

Objective: Review, justify, and approve alarms to ensure they are valid, unique, and actionable.

ProcessVue Support:

Guardian

- Provides structured, collaborative rationalization workflows with approval steps and metadata capture (cause, consequence, corrective action, response time, and auto-calculated priority)
- Enables **bulk edits** for fast updates to groups of alarms.
- Supports **template definitions** for consistent setup across similar assets.
- Allows **copy one-to-many** functionality to replicate approved settings to multiple tags, improving standardization and efficiency.
- Maintains full version control and complete audit trails for all rationalization decisions.

Analyser

- Supplies historical performance data to inform rationalization using real operational evidence.
 - Identifies nuisance alarms and provides priority distribution.
 - ✓ **Outcome:** A standardized, scalable, and auditable rationalization process that drives consistency and efficiency.
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4. Engineer and Configure Solutions

Objective: Define and validate detailed alarm parameters and configuration settings.

ProcessVue Support:

Guardian

- Imports configuration data from DCS/SCADA systems via **CSV files** for review and validation.
- **Stores all alarm configurations in a central, searchable database**, allowing engineers to quickly reference similar alarms for guidance and best practice.
- Displays **configuration metrics** such as total number of alarms and **priority distribution**, enabling design balance and benchmarking.

Analyser

- Monitors live alarm behaviour post-implementation to confirm design effectiveness and identify optimization opportunities.
- ✓ **Outcome:** Centralized configuration visibility and reference data ensure high-quality, consistent design decisions.

5. Deploy and Integrate

Objective: Deploy alarms and verify configuration accuracy within control systems.

ProcessVue Support:

Guardian

- Exports approved configurations for upload to control systems.
- Generates a **Change Report** showing all differences between imported control-system configurations and the approved master list — clearly listing what has changed (additions, modifications, or removals).
- Provides visibility for engineers to review and decide on required actions before implementation.
- Tracks approvals and sign-offs to ensure complete governance.

Analyser

- Validates alarm behaviour once deployed, ensuring live performance aligns with design expectations.
 - ✓ **Outcome:** Transparent, auditable implementation with full clarity of configuration differences.
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6. Operate and Observe

Objective: Ensure alarms support effective operator awareness and response.

ProcessVue Support:

Guardian

- Stores detailed alarm documentation and corrective actions to support operator understanding and training.

Analyser

- Provides real-time dashboards displaying alarm frequency, floods, operator workload, and response times.
- Highlights alarm overload and prioritization issues in daily operation.
- ✓ **Outcome:** Operators receive well-prioritized, actionable alarms with clear contextual information.

7. Maintain and Sustain

Objective: Maintain alarm integrity and configuration accuracy over time.

ProcessVue Support:

Guardian

- Tracks configuration drift via recurring imports and flags unauthorized changes for review.

Analyser

- Identifies nuisance, stale, or recurring alarms, providing trend data to guide maintenance activities.

- Worklists let you manage and tack alarm related activities.

✓ **Outcome:** Continuous alignment between configured alarms and actual system behaviour.

8. Analyze and Benchmark

Objective: Continuously measure alarm system performance.

ProcessVue Support:

Guardian

- Holds **configuration-based metrics**, such as the total number of configured alarms and **priority distribution** across sites or systems.

- Provides visibility into configuration balance and alarm density trends.

Analyser

- Delivers all **ISA-18.2 performance metrics**, including:

- Alarm rate per operator per hour
- Alarm flood frequency and duration
- Standing and stale alarms
- Operator response times and effectiveness
- Provides dashboards, automated reports, and KPI tracking over time.

✓ **Outcome:** Combined configuration and performance metrics give a complete view of system health and compliance.

9. Improve Alarms

Objective: Control, review, and document all alarm modifications.

ProcessVue Support:

Guardian

- Provides built-in MOC workflows capturing change details, approvals, and digital signatures.
- Ensures every configuration update is version-controlled and traceable.
- Provides alarm configuration templates ensuring consistent data entry.

Analyser

- Tracks performance impact after changes to confirm intended results.

✓ **Outcome:** Full governance and accountability across the alarm lifecycle.

10. Record and Audit

Objective: Verify compliance and drive continuous improvement.

ProcessVue Support:

Guardian

- Generates comprehensive audit reports summarizing rationalization history, configuration records, approvals, and configuration metrics.
- Provides structured, audit-ready evidence for ISA-18.2 and EEMUA 191 compliance.

Analyser

- Supplies KPI trend reports and performance insights to reinforce audit findings and improvement plans.

✓ **Outcome:** Demonstrable, data-driven compliance with complete traceability and actionable insights.



READY TO START YOUR ISA-18.2 JOURNEY?

Following ISA-18.2 doesn't need to be complex. With **ProcessVue Guardian** and **ProcessVue Analyser**, you can implement every lifecycle stage efficiently, building a safer, more consistent, and fully auditable alarm management process.

Talk to an expert

Discover how to align your operations with ISA-18.2

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