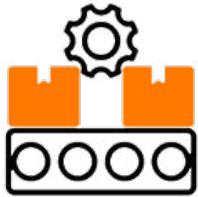


“Before WIP, order execution at our sites used to be a daily firefight. Now every batch runs in sequence, deviations are flagged instantly, and our teams focus on making product and not chasing down problems.”
Regional Operations Director, Global Food Ingredients Manufacturer



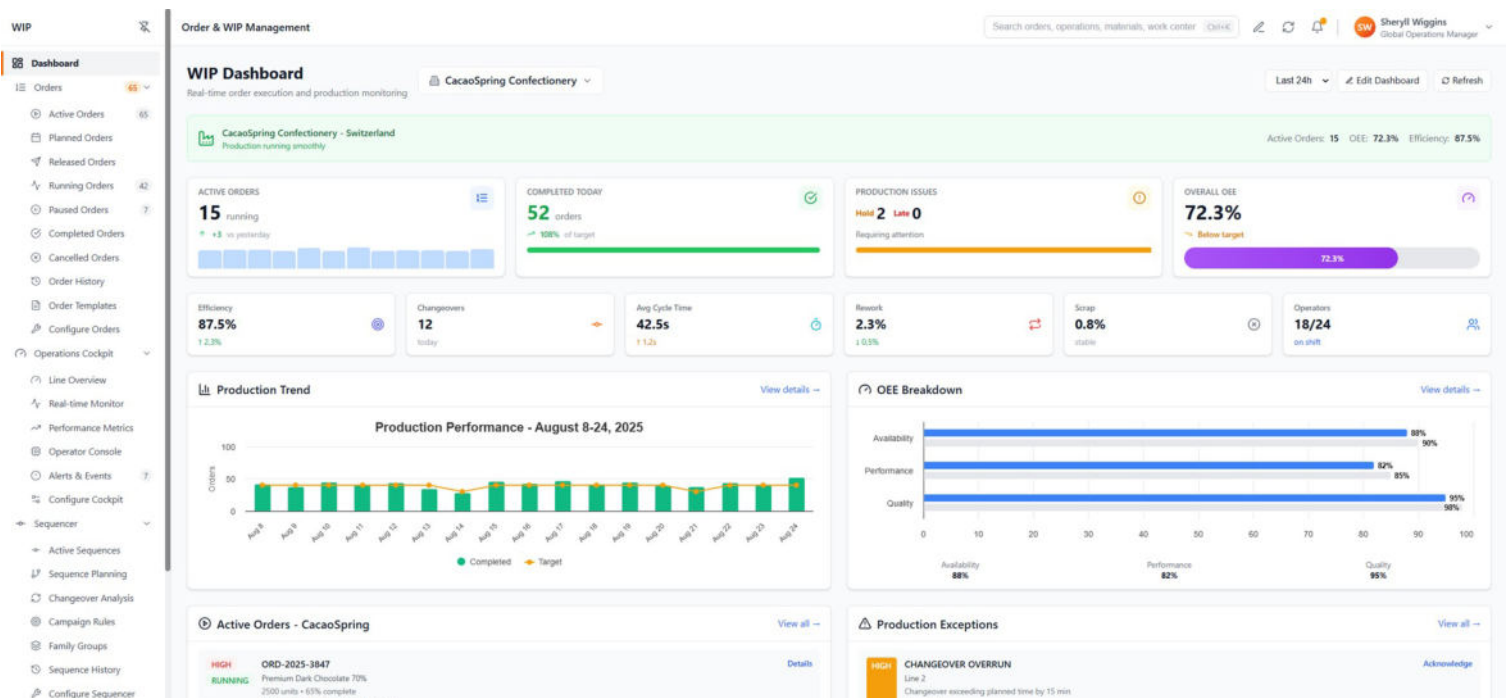
DATASHEET

Order & WIP Management

Sequenced to Plan. Verified by Exception. Execution Without Surprises.

Manufacturers today juggle high-mix products, strict regulatory demands, and just-in-time schedules. When order execution is managed through paper travelers, spreadsheets, or disconnected systems, the result is delays, mis-sequencing, and compliance risk. Supervisors spend more time firefighting than managing flow, while operators struggle with unclear priorities and uncontrolled WIP. The cost is missed schedules, excess changeovers, and reduced customer confidence.

The LOGICAL SYSTEMS Order & Work-in-Process (WIP) application closes this gap by transforming order execution into a governed, real-time process. Built on Inductive Automation’s Ignition® platform and grounded in ISA-88/95 principles, WIP sequences, tracks, and controls every order from release to completion. Operators gain controls directly in the cockpit, while supervisors monitor deviations, SLAs, and cycle time performance as they happen. Suborders, holds, and rework are managed with full auditability, ensuring production runs flow predictably and compliantly across continuous, discrete and batching work centers even in the most rigorous regulatory environments. By integrating natively with planning, materials, warehouse, and genealogy systems, WIP ensures production never loses alignment with the bigger supply chain picture.



Unlike traditional MES modules that blur inventory and execution, the WIP app stays order-first and exception-driven. Intuitive dashboards surface only what requires attention, sequencing intelligence minimizes changeover losses, and every confirmation, hold, or reject is logged for audit. Whether implemented on a single line or deployed enterprise-wide, WIP delivers secure, governed order execution that eliminates surprises and turns compliance into competitive advantage.

Core Capabilities

Order Modeling & Execution

- Equipment-aware order modeling for discrete routings and batch phases (ISA-88/95 aligned)
- Suborders and partial completions with full parent-child traceability
- Start, pause, resume, stop, confirm, reject, hold, and rework actions directly in cockpit
- Audit trail enriched with signatures, reason codes, and photo/attachment evidence

Sequencing & Campaigns

- Family-based sequencing rules to minimize changeover and allergen loss
- Campaign planning for high-mix and seasonal production runs
- Split, merge, or reprioritize orders without losing traceability
- Sequencer dashboard with active rules, changeover matrices, and family groups

Material Tracking

- Continuous visibility of quantities in progress, confirmed, rejected, and reworked
- Automatic reconciliation of subassemblies across parent-child orders
- Balances tracked against planned values with early deviation warnings
- Material readiness and consumption

Exceptions & Compliance

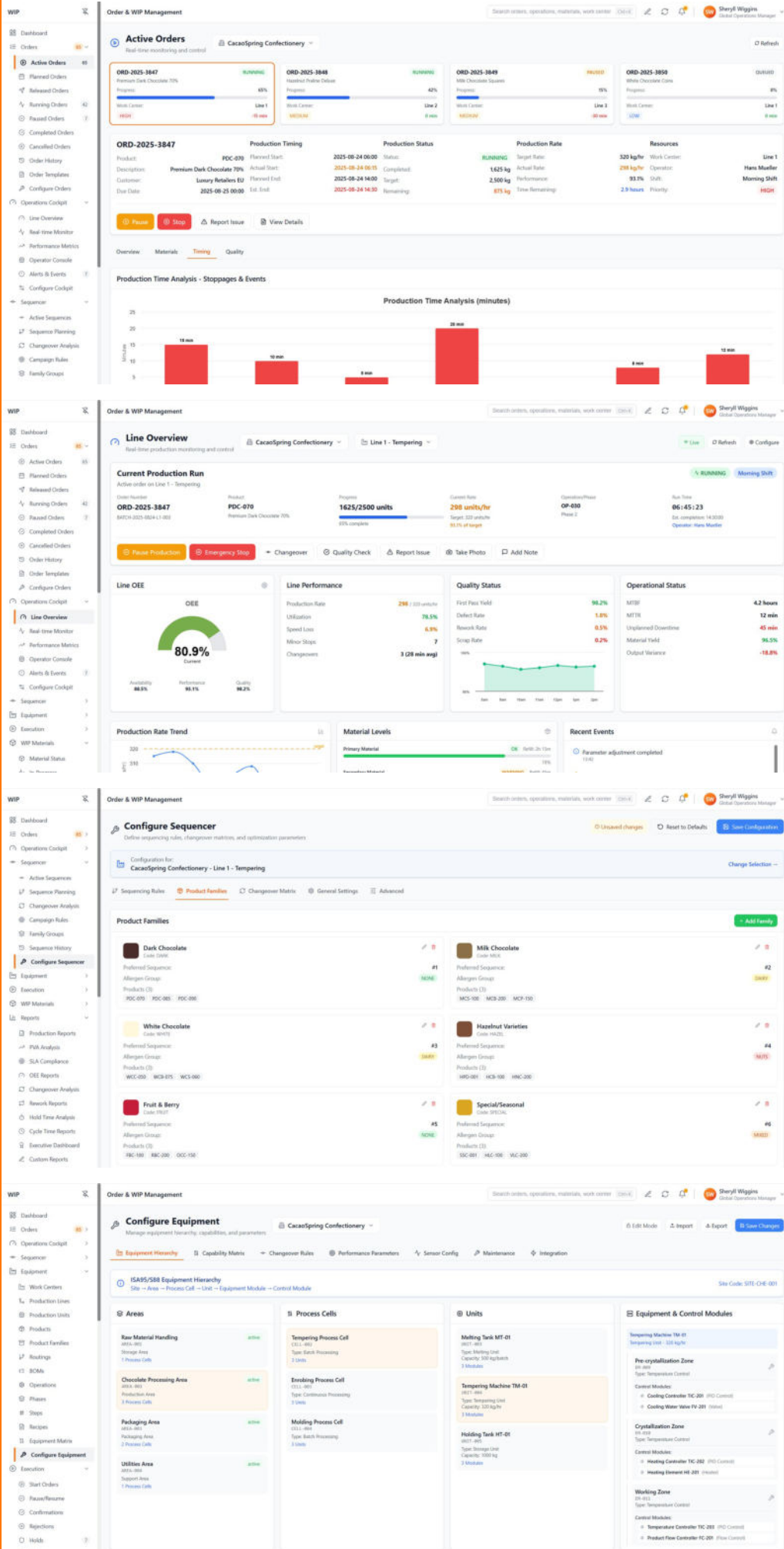
- Deviation-first dashboards surfacing holds, overruns, and rework loops
- Exceptions auto-generate tasks in TMS for supervisor review and closure
- SLA compliance and cycle time references benchmarked against plan
- Immutable execution records supporting audits

Performance & Analytics

- Real-time KPIs for schedule attainment, cycle time integrity, and SLA adherence
- Changeover losses, rework rates, and scrap cost attribution per order
- Supervisor review time reduced through exception-driven monitoring
- Management dashboards spanning orders, lines, and multi-site rollups

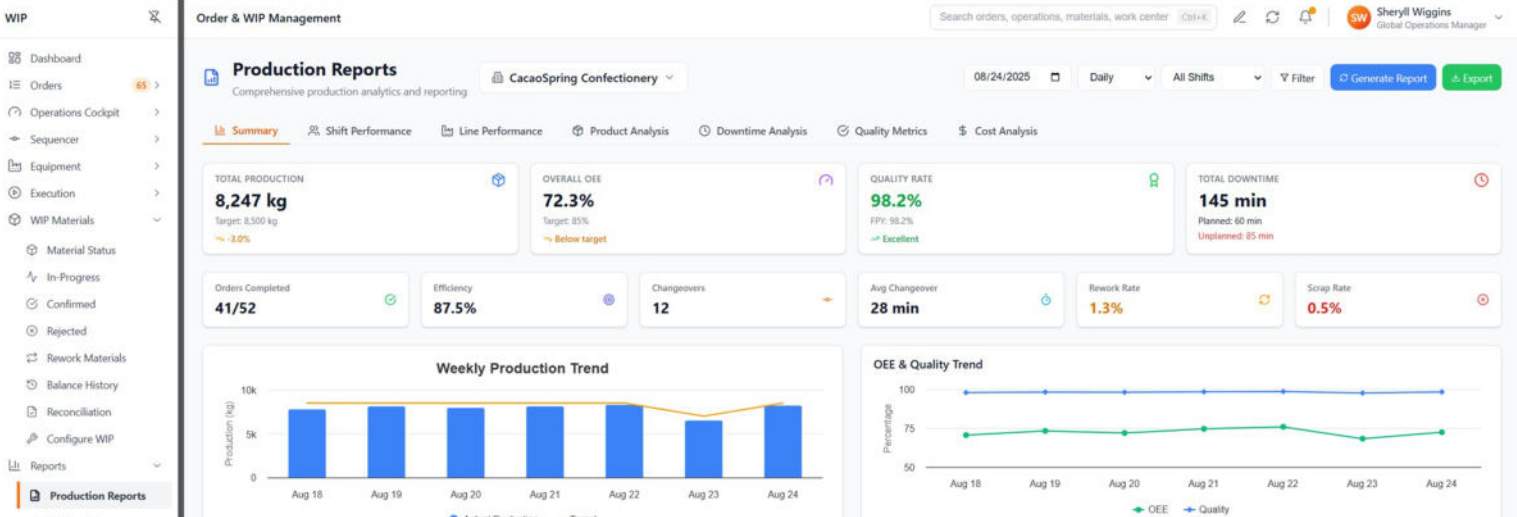
Scalability & Integration

- Deployed on Ignition® with modular expansion across lines, plants, and enterprises
- Native connectivity with APS, MM, WD, WMS, TXG, OEE, CMMS, and UNS
- Hybrid support for continuous, discrete, and batch work centers
- Secure, role-based access with audit-ready event publishing across the enterprise



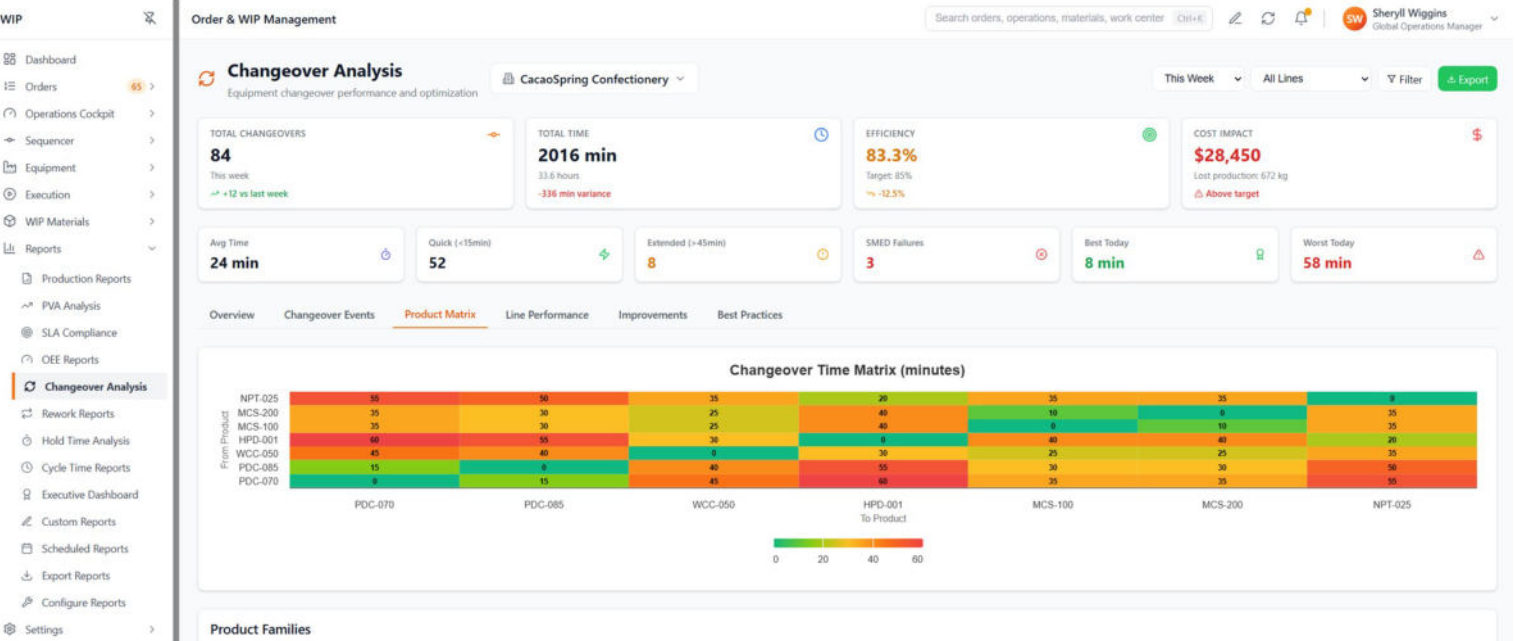
Expert Execution

Sequencing, Tracking, and Governing



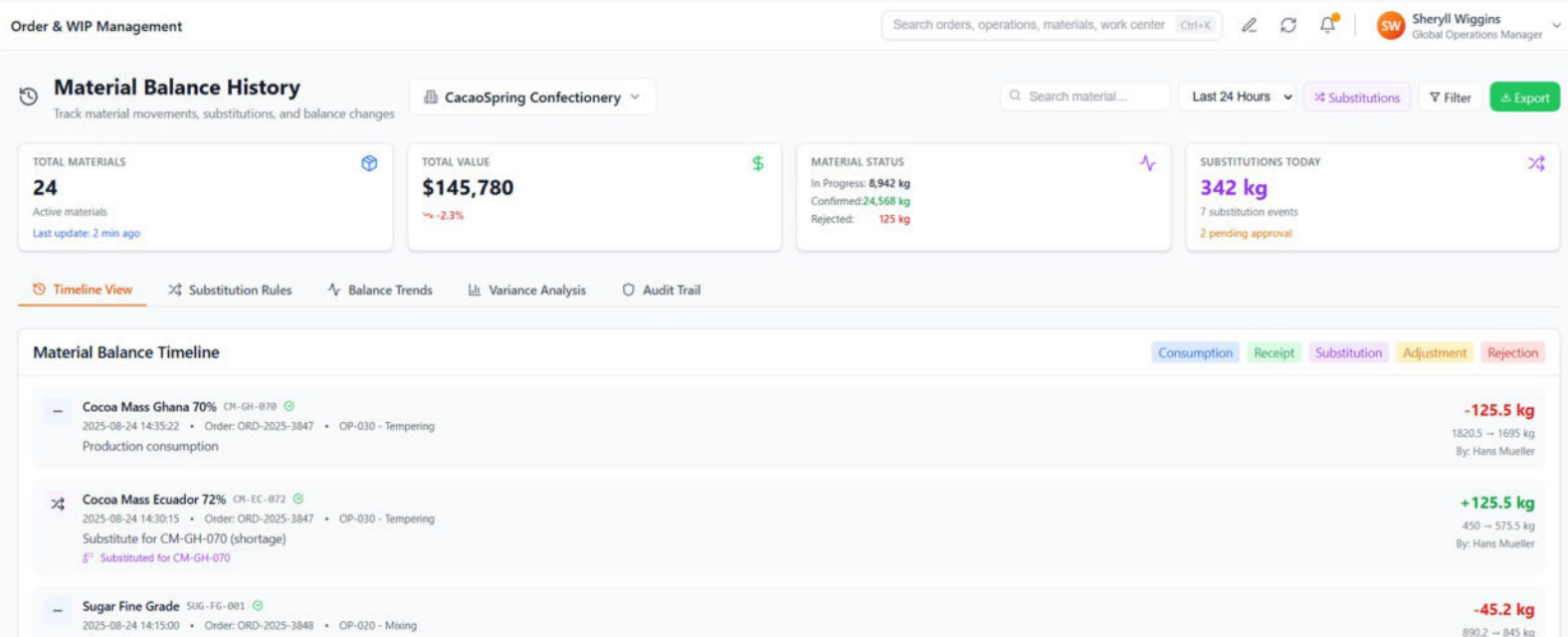
The WIP app transforms order management from paper-driven firefighting into a governed, auditable, and exception-first execution layer that keeps production on track.

- Order-Centric Control: Execute every order, suborder, and phase with start, pause, stop, confirm, reject, and rework actions logged in real time.
- Sequenced Flow: Apply family rules, changeover matrices, and campaign logic so orders run in the right sequence with minimal loss.
- Continuous WIP Tracking: Monitor in-progress, confirmed, rejected, and reworked quantities against plan to surface deviations early.
- Governed Compliance: Capture signatures, reason codes, and attachments for every exception, creating an immutable audit trail.
- Exception-First Supervision: Surface holds, overruns, and rework loops in dashboards that let supervisors act where attention is needed.



Order Management You Can Trust

- Execution KPIs: Track schedule attainment, cycle time integrity, sequencing adherence, and exception rates as production runs unfold.
- Compliance Proof: Automatically log holds, rejects, rework, and approvals with signatures and reasons, building a complete, auditable WIP record.
- Operational Impact: Translate deviations into measurable business outcomes such as lost minutes, wasted materials, and reduced service levels.
- Real-Time Cockpit: Give operators guidance and control while providing supervisors and managers a live view of orders and suborders, with drilldowns from the production floor to enterprise dashboards.



Key Features and Benefits

Features

- Real-time order execution cockpit with start, pause, stop, confirm, reject, hold, and rework actions
- Equipment-aware modeling for discrete routings, BOM explosion, and batch phases (ISA-88/95 aligned)
- Sequencing intelligence with family groups, campaign planning, and changeover matrices
- Suborder management with parent-child traceability and partial completion reconciliation
- Continuous WIP tracking of in-progress, confirmed, rejected, and reworked quantities
- Exception-first dashboards highlighting holds, overruns, deviations, and loss risks
- Cycle time reference library comparing planned vs. actual for each order and phase
- Audit-ready compliance with signatures, reason codes, attachments, and immutable records
- Native integration with APS, MM, WD, WMS, TXG, OEE, CMMS, and UNS for end-to-end flow
- Secure, role-based access with multi-line and multi-site scalability

Benefits

- 10-15% Improved schedule attainment by surfacing and resolving deviations early
- 5-10% Lower changeover losses through family-based sequencing and campaign logic
- 20-30% Reduced supervisor workload for review time with exception-driven monitoring
- Stronger compliance posture with auditable execution records and governed holds
- Increased flow reliability by aligning material readiness, equipment status, and sequencing
- Higher customer confidence with on-time, in-sequence, and audit-verified order completion

Technical Requirements

System Requirements

Ignition® (8.1.+) Core Modules, Quad-core processor, 16 GB RAM, 20 GB free disk space

Supported Operating Systems

Windows Server 2019/2022/2025, Windows 10/11, macOS (X, 10.16+), Linux (Ubuntu, CentOS, RHEL)

Supported Protocols

MQTT, OPC UA / OPC DA, REST API (JSON Payloads) Kafka (via connector), Snowflake (via pipeline, data bridge)

Supported Databases

Microsoft SQL Server, Oracle, MySQL, MariaDB, PostgreSQL, any database with JDBC driver

Supported Browsers

Chrome, Firefox, Safari, Microsoft Edge

