IOBridge

Key Solutions for Equipment Automation

The IOBridge series has been a trusted solution for equipment automation and integration for over 20 years, delivering seamless communication and message transmission with an improved user-friendly API. BridgeX, a SECS communication driver, ensures reliable equipment connectivity with enhanced performance and a modern user experience. BridgeP simplifies and standardizes various PLC communications, making equipment control and integration more flexible and efficient.

BridgeP

Protocol for automating manufacturing equipment communications

Field-oriented Optimized service

What is BridgeP?

BridgeP serves as an Equipment Field Network Interface, allowing seamless communication with the equipment’ s fieldbus. It supports efficient status monitoring and enables automated control for enhanced performance.

Over 30 years of expertise in factory automation system operations

Data analysis services crafted by experienced field professionals

Industry

Industrial Automation

- A Leading Provider of Total Factory Automation Solutions
- Delivering production automation services across diverse industries
- Offering a wide range of solutions and products for domestic and international markets
- Providing specialized solutions and products for the display, semiconductor, and general manufacturing industries

Enjoy!

Good UX Validation History
Management Spec Management

01

Convenient working environment / Maximized operator efficiency

Ease of application

- Instant communication enabled through
- XML-based Map address configuration
- Effortless Map address-to-XML conversion using dedicated tools

  Customizable read intervals for different data groups

  Multi-block read/write with support for continuous transactions

Scalability/Flexibility

- Simultaneous communication with multiple PLCs and field networks
- Data branching for multiple host programs
- Modular design for the easy addition of required drivers

  Compatible with Windows and Linux platforms

Built-in communication testing tools

- I/O Signal (BIT) read/write monitoring
- I/O Data (WORD) read/write monitoring

Product Configuration

Development Environment

- **Web UI Framework**

Vue JS(JavaScript) UI Framework	Spring Tool Suite, Maven	Comply with Html 5 standard + CSS3

Application Framework

.NET 6.0

.NET 6.0

Communication between the front-end
and
back-end using HTTP(S) and JSON
(JavaScript Object Notation)

BridgeP Users

HTTP(S)

aimIOCon

WEB UI
aim Web UI Framework
(Vue JS)

BridgeP(.NET)
Back-End

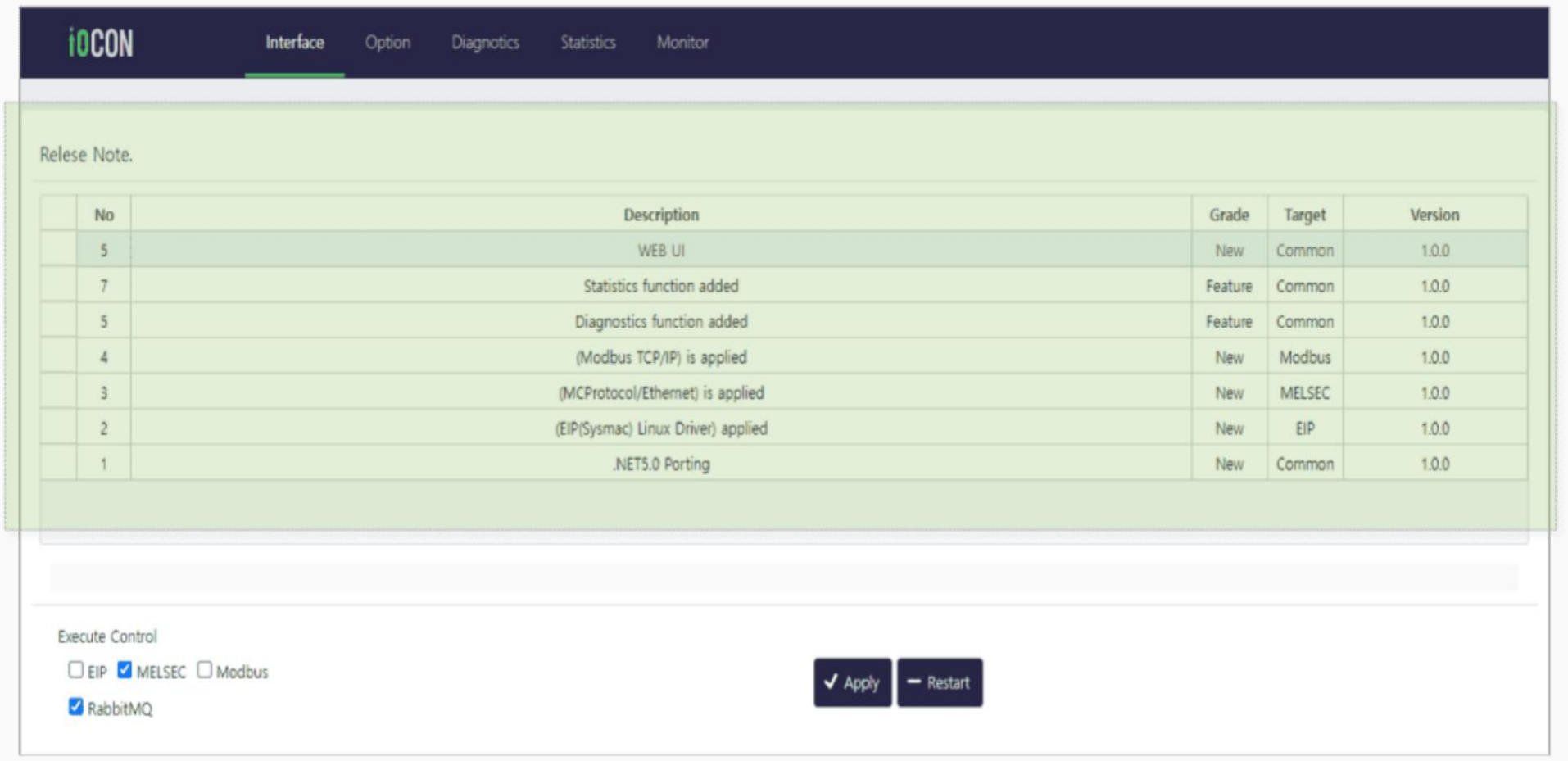
BridgeP

MELESEC | EIP | Modbus

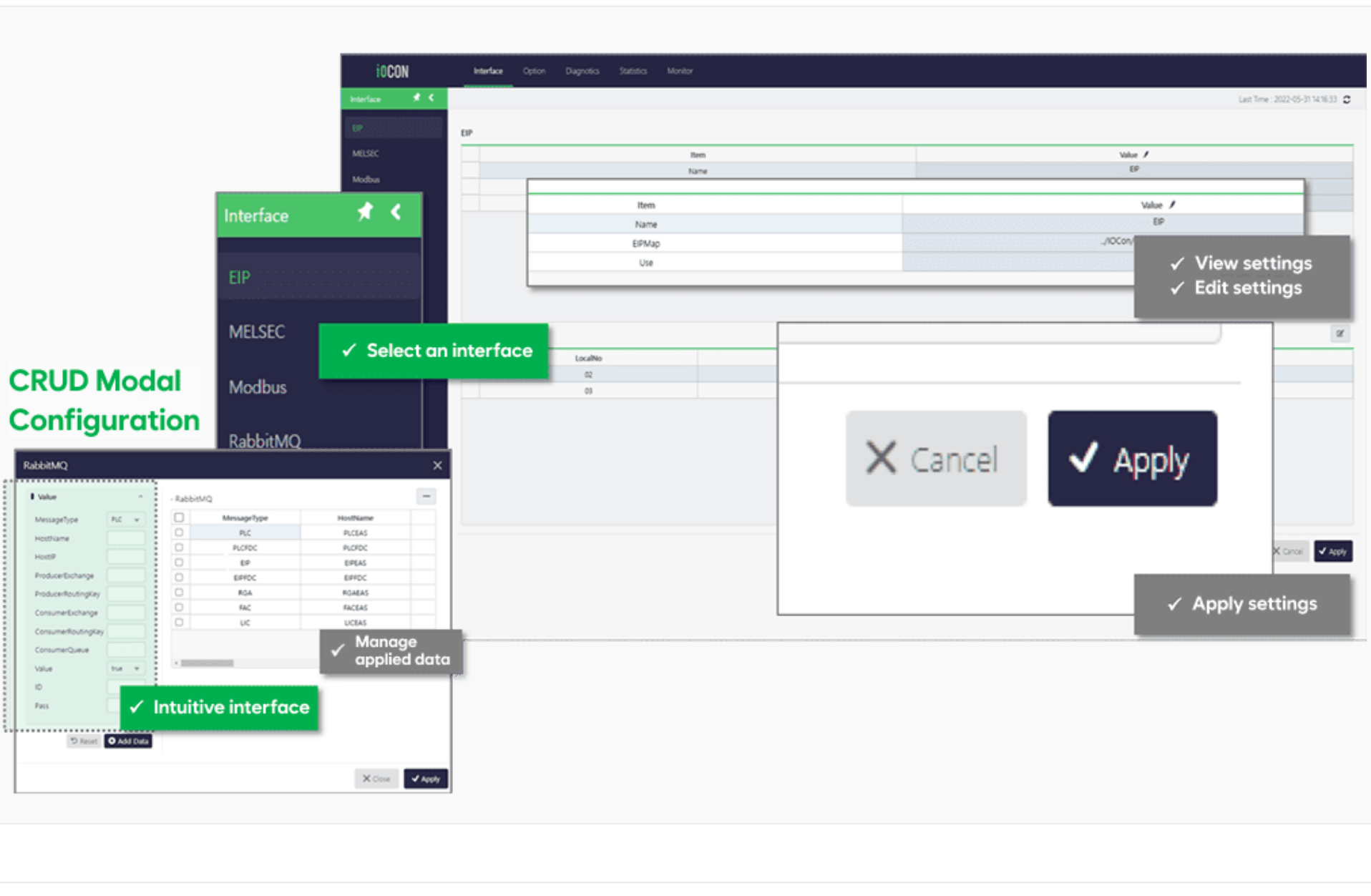
Configuration Diagram

Field-oriented Optimized service

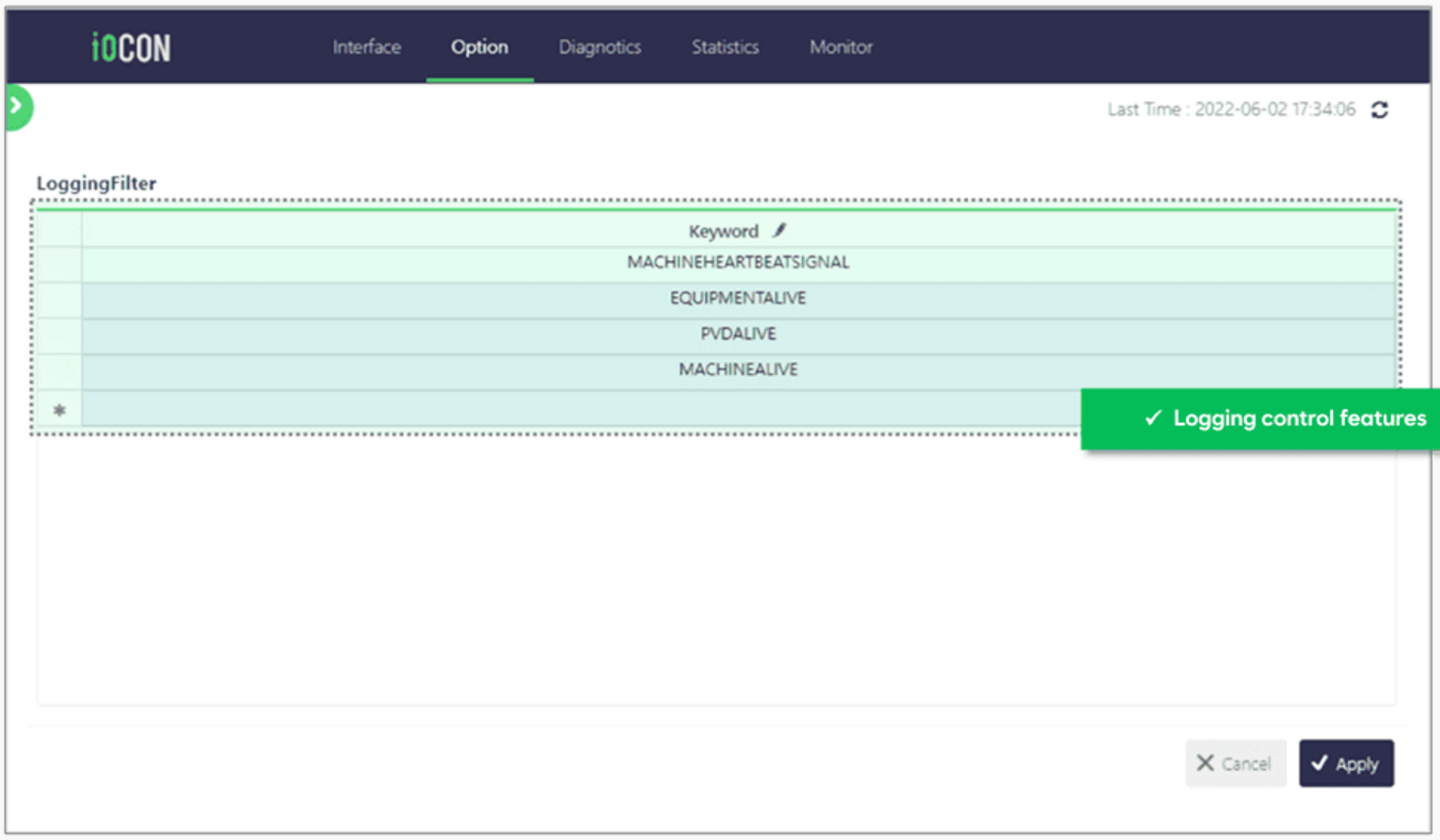
01 Deployment and history management



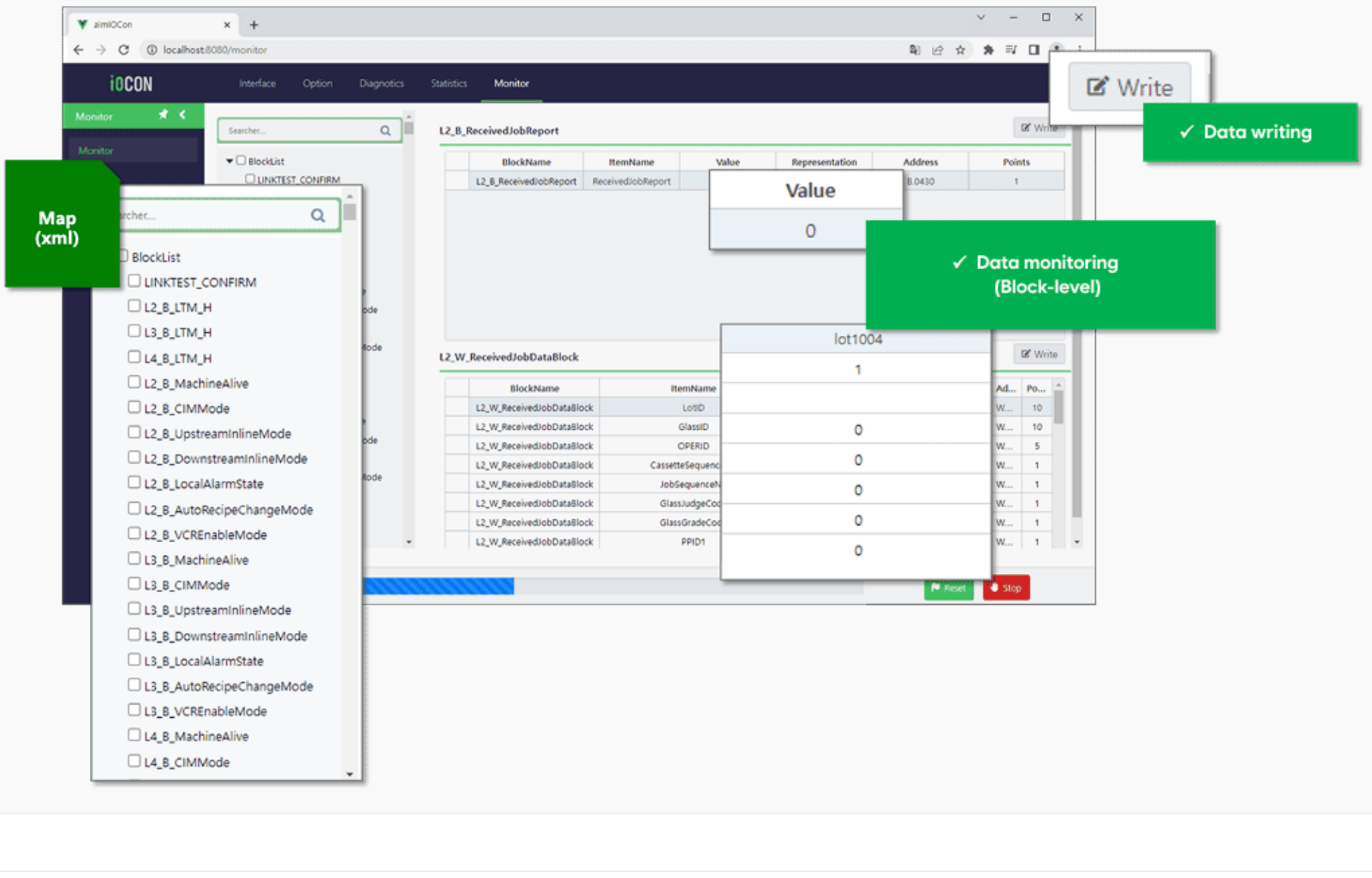
02 Easy-to-configure connection settings



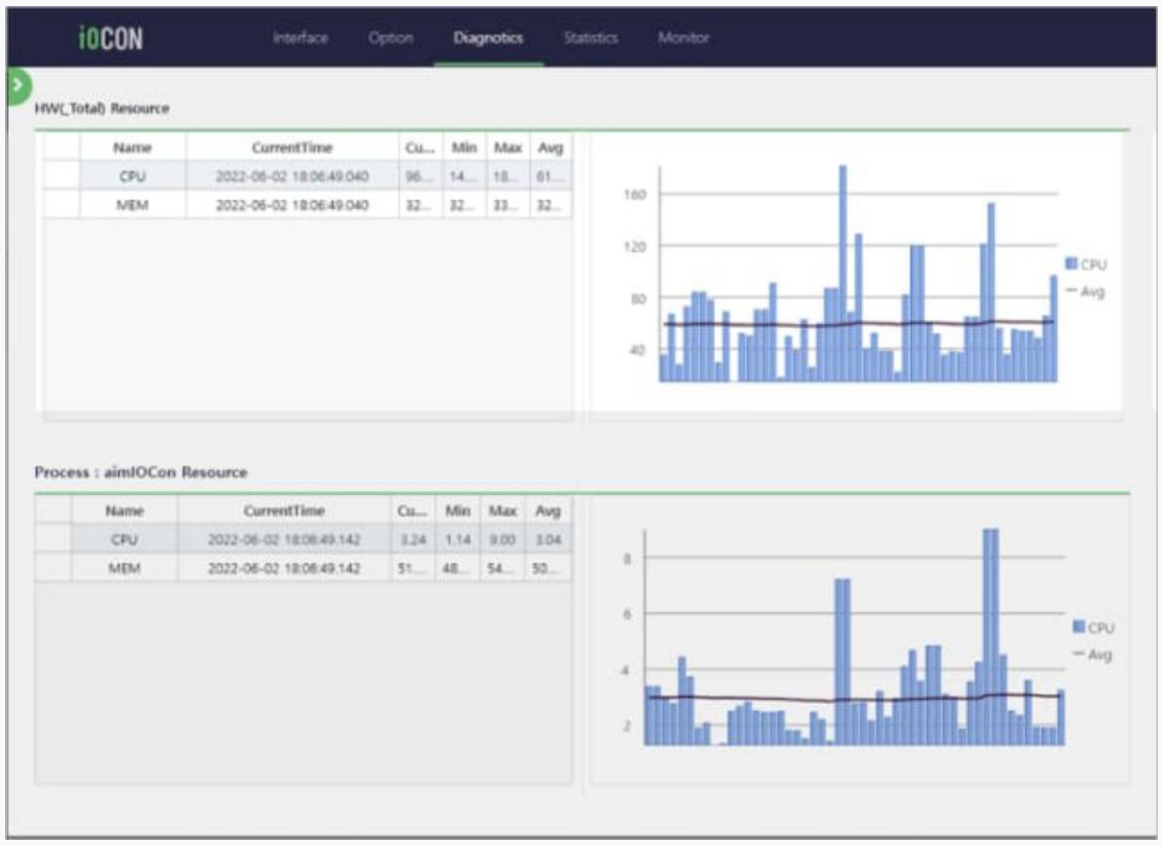
03 Real-time option adjustments tailored to different operating environments

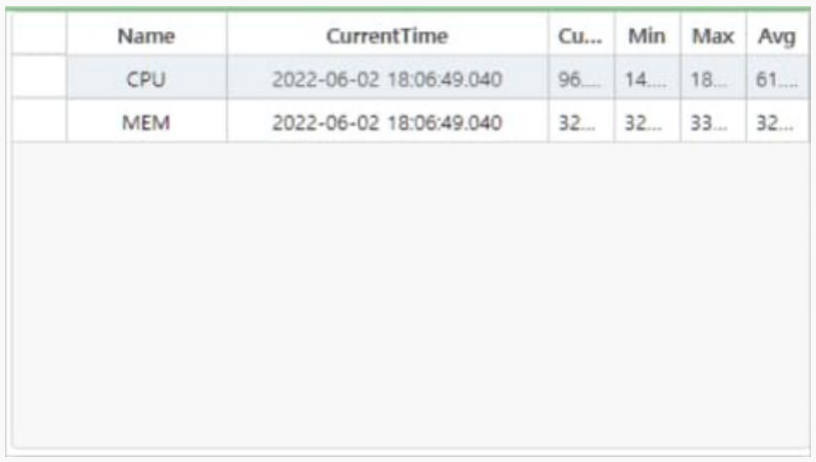


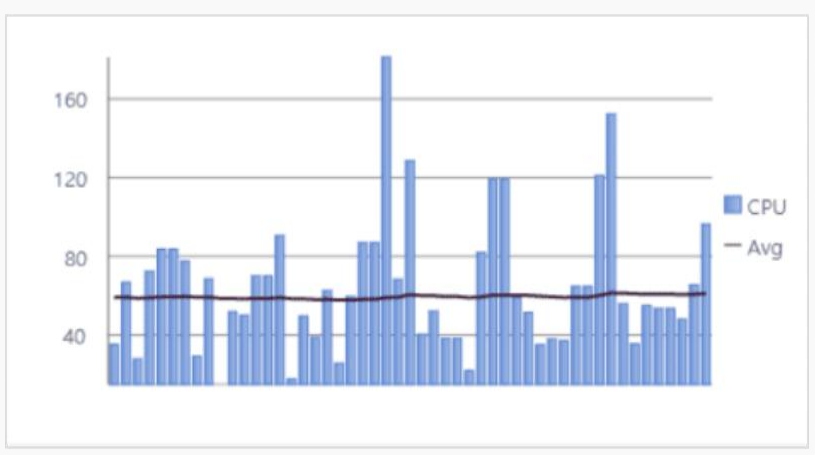
04 Block-level monitoring based on address mapping, ideal for testing during setup



05 Diagnostics to analyze hardware and process resource usage







Grid

- Data updated every second
- Current: Current value
- Min, Max, Avg: Statistics for the last 30 minutes

Graph

- Data from last 30 minutes
- Column: Current
- Line = Avg

06 Support for operational checks and analysis to pinpoint areas for communication improvement

Statistics Dashboard

- Provides statistics for the last 30 minutes
- Read: Read operations
- Write: Write operations
- Transaction: Group operations