

MACHINE INTEGRATOR

ADDRESS COMPLEXITY OF DYNAMIC BUSINESS PROCESS

Increasing automation of manufacturing processes can add complexity to your plant and warehouse equipment, especially if you face a need for frequent introductions of new product lines or are consolidating production within a region. Complexity can grow, particularly when trying to manage a diverse products portfolio across multiple facilities operating with different machinery and legacy equipment. A key to survival is a system capable of rapid adaptation and of handling increasing complexity at reasonable a cost.

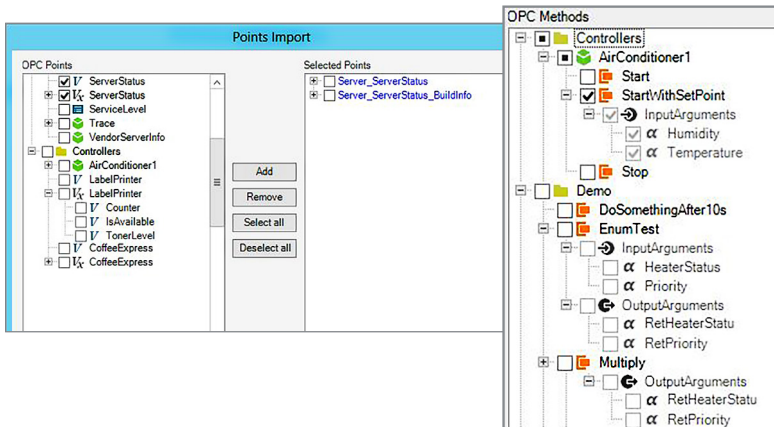
DELMIA Apriso Machine Integrator is an integral component of DELMIA Apriso’s solution for manufacturing operations management, providing a vital link to simplify management of the equipment layer. By automating real-time data collection with a distributed, bi-directional machine or process control connectivity, DELMIA Apriso integrates your business processes with machinery using common industry protocols. Pulling machine behavior configuration out of the machine layer gives far greater flexibility, while a distributed, n-tiered architecture provides reliability, performance, and visibility into both the functional and technical dimensions of your machine’s operations.

ENABLE YOUR IIoT OPERATIONS

With DELMIA, your company is IIoT-enabled for plant and equipment connectivity. Machine Integrator is a key component that has been adopted by leading enterprises to stay responsive with real-time visibility into manufacturing processes and equipment events. Leveraging OPC UA—a widely accepted standard for IIoT in plant floor connectivity—Machine Integrator drives increased performance, customer satisfaction, and responsiveness in real-time by connecting DELMIA Apriso applications with Edge Computing. In use with many manufacturers, OPC UA is a reliable approach to connecting factories to the world of IIoT.

BENEFITS

- Maintains adaptability of business processes by separating business logic from the machine layer
- Enriches ERP by providing operational accuracy delivering real-time machine status
- Real-time production and quality data visibility
- Processes traceability with automatic gathering of all relevant process information
- Improves quality by real-time alerting of any incident, delay, or deviation
- Assures quality by eliminating errors and paperwork
- Optimizes asset utilization with automatic machine setups and executing machine connectivity configuration changes
- Executes quality initiatives and continuous improvement programs such as Lean and Six Sigma down to the machine layer



EXPAND CONTINUOUS IMPROVEMENT & QUALITY INITIATIVES

Lean, Six Sigma, and other continuous improvement programs are driving the need to optimize business processes to improve quality. Business processes created using DELMIA Apriso's native Business Process Management (BPM) framework and enriched with machine connectivity configuration can be easily changed, managed, and distributed to any plant throughout your enterprise. By separating business logic from the shop floor, DELMIA Apriso eliminates the need to re-program PLCs and SCADA systems every time a change is needed, simplifying process improvement.

The end result is a highly fluid system enabling you to adapt your operations quickly and easily to changing market conditions and unexpected events without impacting productivity. The improved automation and synchronization of production activities, elimination of paper-based and manual operations, live monitoring of process execution, event-based actions, and instant alerts from machines operating out of tolerance will decrease the likelihood of errors and increase production quality.

OPTIMIZE MACHINE UTILIZATION

By automating machine setup and controlling it from the operations management level with system-assisted equipment calibration, manufacturers can shorten setup time and increase machine utilization. Improved asset utilization results from greater machine efficiency and visibility to machine performance, helping to identify and eliminate causes of underutilization.

LOWER TOTAL COST OF ITS OWNERSHIP

Located outside the machine layer, DELMIA Apriso Machine Integrator is equipment agnostic, making it much easier to centrally administer and monitor across many or all locations. Built-in mechanisms deliver distributed configuration management, better reliability, and higher availability. By supporting standard communication protocols, such as RS-232, OPC-certified DELMIA Apriso Machine Integrator works with virtually every type of equipment system, whether modern or legacy devices.

PART OF THE TOTAL DELMIA APRISO SOLUTION

DELMIA Apriso Machine Integrator is a key component of DELMIA's broader DELMIA Apriso solution for manufacturing operations management. With DELMIA Apriso you can manage production, quality, warehouse, maintenance, and labor processes to achieve visibility into, control over, and synchronization across global manufacturing operations. Built with a native Business Process Management (BPM) framework that incorporates a unified data model, DELMIA Apriso applications enable continuous improvement and rapid response to market changes. DELMIA Apriso delivers a global view of manufacturing operations by utilizing a Service Oriented Architecture (SOA) to ease integration with enterprise applications, such as ERP and PLM, while interfacing with the shop floor and automation equipment.

FEATURES

- Control and synchronization of machines and production lines with automatic machine setup and calibration
- OPC UA compliant for real-time connectivity and visibility into manufacturing processes and equipment events
- OPC-DA compliant, access to any machine, SCADA, PLC, HMI, Historian, or DCS connected to an OPC server
- RS232 / Serial Port compliant
- Fully integrated with Apriso's native BPM framework to support machine-level, event-triggered actions and scripting
- Centralized or distributed machine connectivity and monitoring with OPC failover / redundancy support
- Machine characteristic reading with persistence
- Production, quality, maintenance, and logistics support
- Advanced monitoring, alerting, and troubleshooting
- Machine configuration export and import for the plant / enterprise

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