



**AB&R®**

identify. track. manage.

# REAL-TIME OPERATIONS INTELLIGENCE FOR DISTRIBUTED GLOBAL MANUFACTURING

AB&R® Case Study

"Our current focus is on lean manufacturing, common systems, and ergonomics. AB&R® helps us create such an environment by providing the capability to collect, analyze, correlate, and act upon edge device and applications data in a highly adaptive, real-time environment." -**Bryan D.**, Senior Manager Aerostructures Manufacturing

## BACKGROUND

The world's leading aerospace company and the largest manufacturer of commercial jetliners and military aircraft combined—this company designs and manufactures rotorcraft, electronic and defense systems, missiles, satellites, launch vehicles and advanced information and communication systems. The company's Integrated Defense Systems (IDS) combines weapons and aircraft capabilities, intelligence and surveillance systems, communications architectures, and extensive large-scale integration expertise across several diverse business areas.

## CHALLENGE

By developing its Integrated Global Operations (IGO) that is intended to provide real-time operational performance, ease integration of devices, systems and data across its distributed manufacturing and supply chain, enabling smart assembly processes to power collaborative, real-time manufacturing of the future. A new architecture is required to optimize a distributed manufacturing environment. This giant aerospace company and its suppliers require greater visibility into critical manufacturing and supply chain events in real-time.



## SOLUTION

The most important performance measurement in this project was the speed at which new services were created, tested, connected to the RFID equipment and integrated into a workflow. A new service would literally take a few hours to be created compared to weeks or months with other approaches.

Every step of deployment has been designed for ease of use to deliver a customer experience that is truly unique in the marketplace. The full function software capabilities support a web-based interface enabling the team to have immediate access to the system's many features for edge application development and integration. The team quickly learned the SDL workflow services language, device configuration and emulation, and report generation with real-time alerts and notifications.

The complete project took only three months of planning, training, design, implementation, and preliminary testing. A cross-functional team from the Systems, Research, IT, and Manufacturing Operations departments was brought together for this project.

The team set out to explore domain specific languages, process simulation, Radio Frequency Identification (RFID), Application Level Events (ALE), and Java Business Integration (JBI). AB&R® selected the OMNITROL appliance for this project as it uniquely provides forward looking functionality and prototyping support.

## BENEFITS

- Real-time Integration of operations
- Sensors becoming ubiquitous
- Data barrage must be handled intelligently on the fly – on the shop floor
- RFID-enabled workflow edge application services

**For an assessment on how your business can gain the benefits of this program.**

**Call Today 800-281-3056**