



Case Study: OEMs & Manufacturing

Objectives

- Improve real-time synchronization across multiple systems
- Reduce project implementation costs
- Optimize efficiency using machine learning insights from full resolution edge data
- Make insights available via real-time APIs

Summary

One of the world's largest companies focusing on industrial automation and information wanted to reduce the programming effort required for maintaining and restoring operations at complex, process manufacturing facilities. Using SWIM EDX, the company was able to demonstrate an autonomous agent architecture that acted as a supervisory control loop, successfully responding to changes in the operations with real-time speed, accurate decisions, and robustness. The result is an edge-based, distributed capability that will reduce their implementation costs for customer projects and enable advanced analytics.

Solution

SWIM EDX was embedded on the company's standard industrial computers and generated self-contained services for each component within the manufacturing facility. These services acted as digital twins, observing the real-time data streams and operating states from process controllers and providing a layer of abstraction for interpreting the state of the system as a whole. The stateful architecture of SWIM EDX allowed the services to collaborate in real-time, across distributed devices, and implement system configurations that supported various optimization strategies. SWIM EDX enabled an architecture that could independently react to changes and reconfigure a system appropriately at a fraction of the time and cost of traditional automation solutions.

Learn More

Learn how SWIM uses edge intelligence to deliver real-time insights from the dark data generated by connected enterprise systems by visiting www.swim.ai