

Insight: Factory Operations Visibility & Intelligence (FOVI) Testbed Data Streams Collection

RESULTS

- Real-time visualization of data based on reliable data flow collection (within 3 seconds), with six manufacturing stations producing streams of status data and product data.

Participants

- Fujitsu Limited
- Cisco Systems

The Challenge

- Collect and consolidate edge data on a factory floor, for near-real time visualization & analytics
- Avoid introducing equipment that represents an additional risk factor and management overhead.
- Leverage IT equipment already deployed on the shop floor.

The Solution

- Deploy shared memory repository on production server as an alternative to an edge gateway.
- Upload log data from assembly line machines to the production management server via a common LAN.
- Format, aggregate and contextualize the data stream, then feed an on-site process visualizer, while also archiving for analytics.

Key Insights

- Shared memory on a LAN can achieve near real-time visualization & analytics of manufacturing processes when applied to a limited number of equipment & assets.
- IIoT often needs to validate immediate operational value in a factory environment. Near-real time visualization of operations details and basic analysis is effective to demonstrate the value of data collection and to empower plant operators as both are key to the successful adoption and further development of a solution.
- Industry resources:
 - [Industrial Internet Reference Architecture](#) - Implementation Viewpoint
 - [Industrial Internet Connectivity Framework](#) - Framework Layer



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