PLANTFORMANCE CASE STUDY · INTEGRATION AND DATA

New interfaces reach 20 factories in 2 weeks instead of years

A multi-site manufacturing group · Multiple industries

A manufacturing group running Ignition under strict security rules needed approval for every new connection at every plant. Plantformance built one reusable data layer, so a new interface now goes from request to 20 factories in 2 weeks.

2 weeks

from interface request to rollout

20

factories per rollout

THE PROBLEM

A large group was in the middle of a major Ignition rollout on Plantformance FactoryBrain servers. Its security environment was locked down: every port and every connection to Ignition needed approval. Connecting any new solution to all factories, such as cloud, ERP or streaming, meant a new approval document for each factory. Some solutions would clearly take years to deploy because of process alone, not technology.

HOW WE DID IT

Plantformance proposed a major project to fully abstract every non-factory interface. The idea was to build one data communication layer, once, and reuse it every time a new global interface is requested. This solved the approval problem. It also added a proxy layer, so Ignition never connects directly to outside services, and a buffering and reprocessing layer for guaranteed data delivery. We built it with Apache NiFi locally and centrally, on a high-availability cluster, with site-to-site connectivity and buffering.

BEFORE

Each new connection request across several factories was a long, painful process. It involved local, central, business and security stakeholders, plus Plantformance and the service supplier.

AFTER

Factories have no direct connection to any external system. Data is wrapped in its own protocol, yet Ignition developers keep it simple, for example one line of code to confirm a production order. Data is buffered locally and centrally in both directions, and monitoring gives a live view of every data flow with alerting.

RESULTS

- A new interface goes from request to rollout across 20 factories in 2 weeks, including development and validation on 1 site
- Massive savings in deployment time
- Complex solutions now roll out fast across all factories
- Data exchanges ride through communication incidents thanks to local and central buffering

Plantformance products and services: FactoryBrain, Professional Services

PLANT FORMANCE

NEXT STEP

Planning a project like this?

Talk to an Ignition engineer about your sites, timeline and architecture. We will tell you honestly what it takes.

Contact Plantformance

Read this case online and see more Ignition projects: plantformance.com/case-studies/reusable-data-layer-new-interfaces · all case studies

Plantformance is an Inductive Automation Alliance Partner that helps enterprises deploy, secure, and scale Ignition across sites through plug-and-play modules, turnkey zero-maintenance HMI hardware, and 24/7 managed infrastructure.

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