Isolated Client Modules: dedicated hardware and zero-trust remote access

Plantformance · Cross-industry

Plantformance designed the Isolated Client Module (ICM) architecture so large multi-site clients get physically separate hardware and a closed zero-trust jumpbox, with no direct laptop connections into factory OT networks.

100%

hardware-level isolation between clients

THE PROBLEM

Large multi-site enterprises need remote management and specialized integrations for their factories. They also need two things that usually conflict with that. They do not want to share cloud virtual machines with other tenants. And they cannot allow engineers to connect laptops directly into sensitive factory OT networks. Any architecture had to deliver remote engineering and custom client services while removing both risks completely.

HOW WE DID IT

Plantformance designed the Isolated Client Module (ICM) architecture. Each large client gets dedicated infrastructure that is physically separated at the hardware level from every other client. All remote engineering access goes through a closed zero-trust jumpbox, with no exceptions. The jumpbox can be hosted in the Plantformance data center or on-premises inside the client's own network. Because each ICM belongs to one client, it can also host custom services built only for that client.

BEFORE

Shared cloud virtualization carried a risk of cross-tenant exposure. Direct engineer-to-plant connections created unacceptable attack surfaces and limited custom client-specific services.

AFTER

Each enterprise client runs in a fully isolated hardware and network environment, with zero direct laptop-to-factory connections and full flexibility to host client-specific services.

RESULTS

- Cross-client compromise risk removed through 100% hardware-level isolation
- Strict zero-trust jumpbox access enforced across global enterprise factories
- No direct laptop-to-factory connections
- Room to host custom client-specific services

Plantformance products and services: 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

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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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