Multi-tier backups with air-gapped tape stored in a bank vault

Plantformance · Cross-industry

Plantformance built a multi-stage backup architecture for Ignition gateways: fast restores from high-speed storage, archive retention for up to a year, and monthly air-gapped tape kept in a bank vault.

THE PROBLEM

An Ignition gateway holds the configuration and project history a plant depends on. If that data lives only locally, or on a single backup tier, one event can wipe it out. Hardware failure, a site disaster or ransomware can each mean catastrophic production loss. Facilities need backups that restore quickly for everyday incidents and still survive the worst case, when the local site and the network are both compromised.

HOW WE DID IT

Plantformance implemented a multi-stage, bank-grade backup architecture. Backups run automatically to the Plantformance data center. Each week they rotate onto high-speed storage, so recent states can be restored almost instantly. Older backups move to slower archive storage and are kept for up to a year. Every month, an air-gapped physical tape backup is written and stored in a bank vault, completely offline. Each tier covers a different failure, from a bad change yesterday to a full cyber or site disaster.

BEFORE

Single-tier local backups were slow to restore, lacked long-term retention, and stayed exposed to network-wide cyberattacks and site-level incidents.

AFTER

Recent configurations restore quickly from high-speed storage, historical states stay retrievable for up to a year, and an immutable offline tape copy guarantees recovery even in worst-case cyber or disaster scenarios.

RESULTS

- Rapid restores of recent Ignition configurations from high-speed storage
- Historical states retrievable for up to a year
- Monthly air-gapped tape backups held in a bank vault
- Resilience designed to financial-institution standards

Plantformance products and services: FactoryBrain

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/air-gapped-ignition-backups · 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.

plantformance.com
info@plantformance.com
Ennetbaden, Switzerland