

FROM FRUSTRATION TO FULL CONTROL: HOW ONE PLANT TRANSFORMED ITS PROCESS CONTROL NETWORK

A leading chemical manufacturing site was facing a growing storm of operational challenges. Their process control network (PCN), the backbone of their automation systems, was outdated, fragile, and largely inaccessible to the very engineers who depended on it daily. With aging hardware, undocumented configurations, and a remote support partner unable to respond quickly, the plant's productivity and data integrity were at risk.

THE BREAKING POINT

The tipping point came when a single switch failure disrupted the flow of critical process data to a centralized monitoring system overseas. This interruption not only halted visibility into plant operations but also delayed decision-making at the corporate level. Engineers on-site were left in the dark, unable to troubleshoot or even access the network infrastructure. The lack of resilience and transparency had become a liability.

A SMARTER, STRONGER NETWORK

Our team stepped in with a bold solution to completely overhaul the PCN using Fortinet hardware. We replaced the legacy components and rearchitected the network into a resilient ring topology, eliminating single points of failure. A high-availability firewall configuration ensured seamless traffic flow, even during simulated fiber breaks, proving the network's new robustness.

EMPOWERING THE ENGINEERS

The transformation didn't stop at hardware. Using Fortinet's FortiGate interface, we gave the plant's operations team full visibility and control.

Engineers could now:

- Monitor real-time traffic and device status
- Configure VLANs and port settings with ease
- Troubleshoot issues without waiting for external support

This shift empowered the team to manage their network independently, reducing downtime and increasing agility.

LOCAL SUPPORT, GLOBAL IMPACT

With our certified engineering team located nearby, the plant gained rapid-response support—both on-site and remote. This local presence meant faster diagnostics, quicker fixes, and peace of mind.

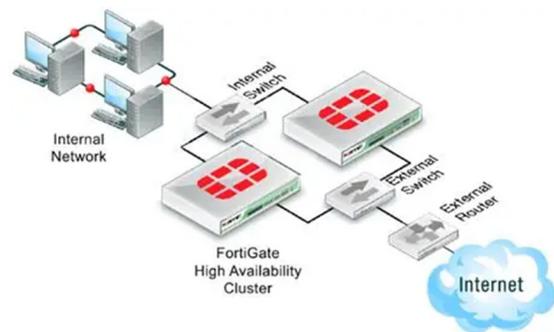
RESULTS THAT MATTER

- **Zero downtime** during migration
- **100% network uptime** since deployment
- **Improved data integrity** for global monitoring systems
- **Enhanced security** through next-gen firewall rules and deep packet inspection
- **Cost-effective implementation**, delivered below budget expectations



BUILT FOR THE FUTURE

The new network isn't just resilient, it's scalable. With virtual segmentation and expansion-ready architecture, the plant is now prepared to integrate future technologies like camera systems and advanced automation tools.



Contact Us and Make A Change Today