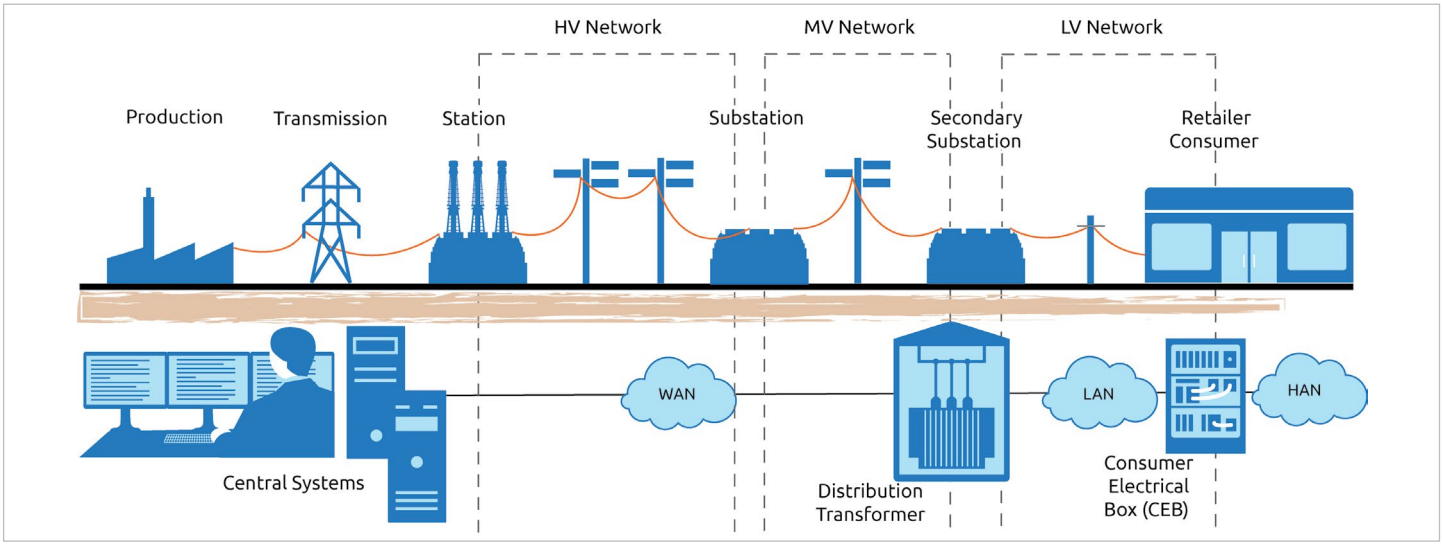
VIRTUAL ACCESS

CRITICAL APPLICATION CONNECTIVITY

Managed Substation Connectivity



Client Requirement Summary

- Device mounted in street/pole cabinets
- Resilient communication paths
- Rugged to power industry standards (IEC 61000)
- Advanced security and routing functions
- Integrated with northbound systems
- Minimise operational costs

Key Benefits

- Resilient comms: Dual SIM, dual antenna, 3G/4G, DSL option
- IP-rated
- Last GASP message for power failure
- Rugged: high isolation options on the PSU and interfaces
- Vibration and mechanical to EN standards
- Advanced security: DMVPN, OSPF, BGP, cable interception prevention
- Activator for service automation
- OSS integrator for Northbound
- Integration with IT systems
- Monitor system is automatically populated when provisioned

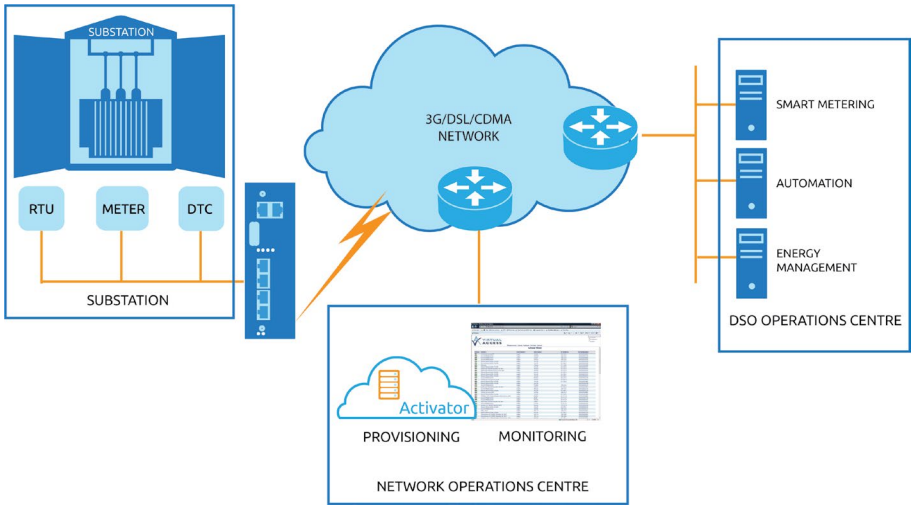
Requirement

A European Distribution System Operator (DSO) wanted to provide a single managed device at each substation for smart grid, smart metering and distribution automation. The device had to be secure, centrally managed, provide resilient communications paths, support both Ethernet and serial devices, and be hardened to substation EMC, isolation and environmental requirements.

Virtual Access Solution

The client chose the GW2024P Series and GW7300 Series substation hardened routers with dual path 3G, 4G, advanced security and Activator for service automation. Virtual Access provide a single device that can be used for distribution automation, smart metering and energy management that includes serial RS232/RS485, Ethernet interfaces with wireless broadband and optional DSL.

A key difference in the solution was the carrier-grade Activator provisioning and monitoring system designed to scale to tens of thousands of devices. This means that devices do not need to be pre-configured and can be installed without staff skilled in networking. The solution allowed the DSO to maximise the level of process and field deployment automation by integrating with Northbound IT systems and enabled the devices behind the VA router in the substations' cabinets to be configured identically while still being individually addressable from the central SCADA systems.



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