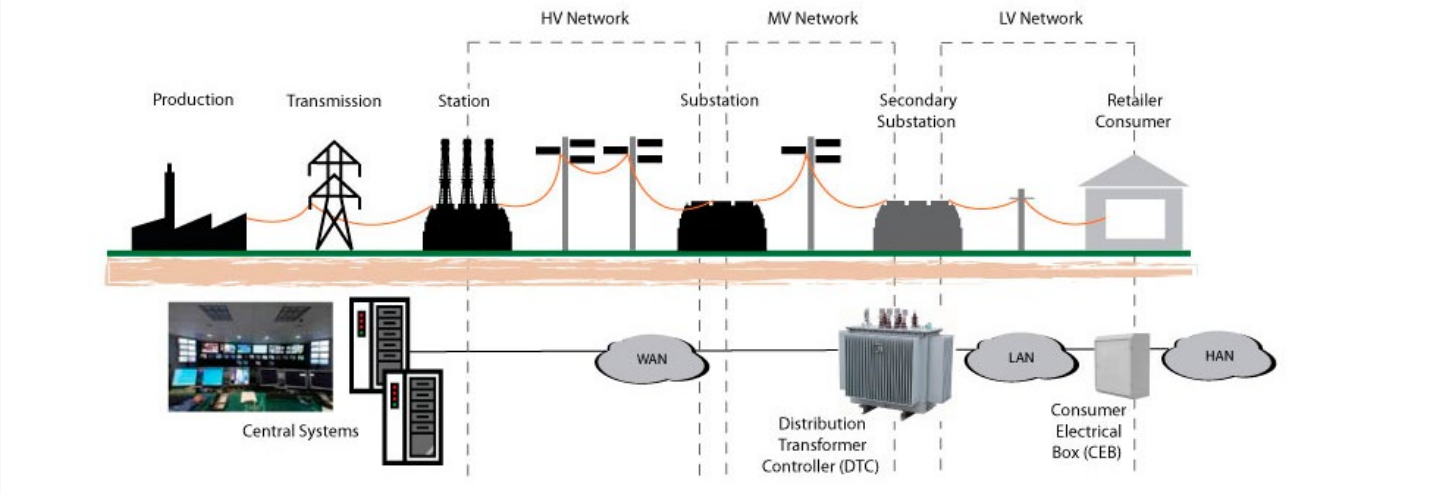
VIRTUAL ACCESS

SMART NETWORK SOLUTIONS
FOR SERVICE PROVIDERS

Managed Substation Connectivity



Client Requirement Summary

- Device mounted in street/pole cabinets
- Resilient communication paths
- Rugged to power industry standards (IEC 61850-3)
- Advanced security and routing functions
- Integrated with northbound systems

Key Benefits

- Resilient comms: Dual SIM, Dual antenna, 3G/4G, DSL option,
- Last GASP message for power failure
- Rugged: IEC61850-3 high isolation options on the PSU and interfaces
- Vibration and mechanical to EN standards
- Advanced security: DMVPN, OSPF, BGP, cable interception prevention
- Activator for automation provisioning
- OSS integrator for seamless integration with metering, energy management and automation systems
- Monitor system is automatically populated when provisioned

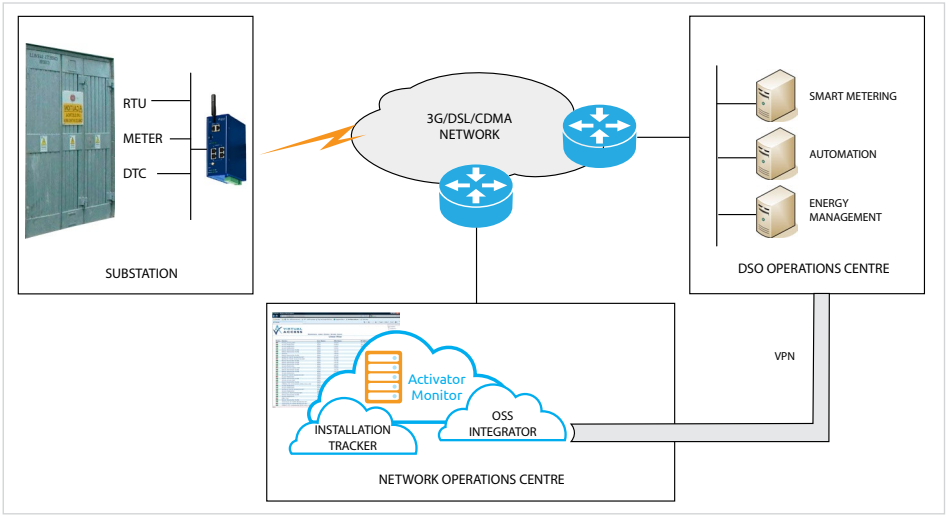
Requirement

A European distribution system operator (DSO) operates a network of substations and wanted to improve efficiency of their smart grid deployments. The DSO wanted to consolidate substation connectivity for existing legacy serial devices and new Ethernet IP devices onto a single, rugged, secure centrally managed device over a dual path 3G network. The applications include automation (serial), energy management and metering.

Virtual Access Solution

The client chose the GW2020 Series and GW7300 Series managed industrial routers with dual path 3G/4GCDMA450 and Activator for central management. The Virtual Access device provides a single device for automation, smart metering and energy management providing legacy serial RS232/RS485 and Ethernet interfaces with wireless broadband.

The 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 all 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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