VIRTUAL ACCESS

CRITICAL APPLICATION CONNECTIVITY

Managed Water Plant Connectivity

Client Requirement Summary

- Device mounted in outdoor plant
- Extremes of temperature and damp
- Resilient communication paths
- Hardened to industry standards (IEC 61000)
- Utility grade cyber security
- 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

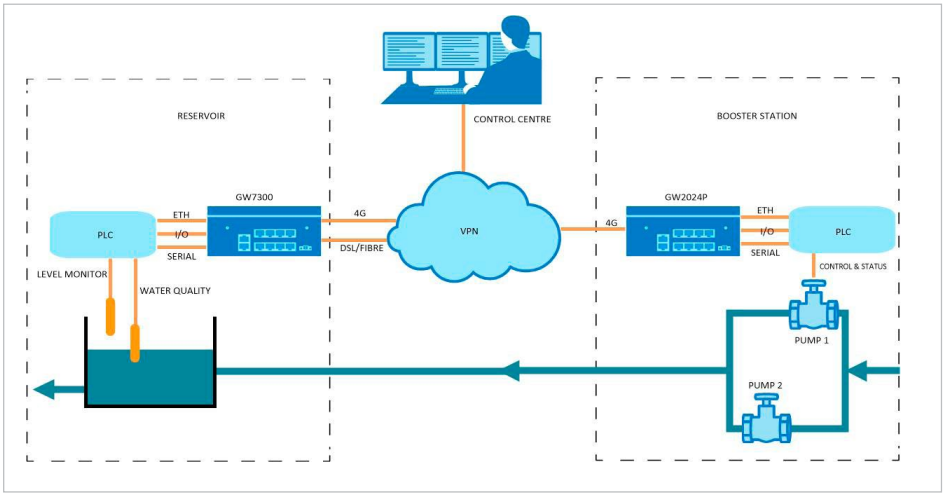
Requirement

A European water authority needed to extend its telemetry system used for automation, control and monitoring of assets. The telemetry system measures parameters from a number of different types of assets, monitoring both digital inputs, such as pump runs and faults, and analogue inputs such as PH, pressure, chlorine flow etc. Alarms can be triggered on the status and value of these signals and recorded as events. The telemetry network requires connectivity devices that are environmentally hardened, certified, secure and centrally managed with resilient communications paths, supporting both Ethernet, serial and I/O. Example usage could be control of booster stations to reservoirs. The applications do not require significant bandwidth but do require a reliable, secure service.

Virtual Access Solution

The client chose substation hardened routers with dual path 3G, 4G, DSL, integrated RTU functionality, advanced security and Activator for service automation. Virtual Access provide a single device that can be used for automation of new and legacy assets that require I/O, serial RS232/RS485, and Ethernet interfaces with wireless broadband and optional DSL.

A key difference in the Virtual Access 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 water authority 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.



Virtual Access (Ireland) Ltd., 9B Beckett Way, Park West Business Park, Dublin 12, D12 PK44, Ireland. Tel: +353 1 604 1800 Fax: +353 1 670 5380