Industrial SHDSL Router for Utilities in Europe.

Background

Utility sectors (Energy, Water, Gas, Transportation) in European countries had adapted and embraced SHDSL technology for over a decade. The utility served up to several million customers for their mission critical applications on a daily basis. A secured and reliable data transmission over existing copper infrastructure is required to connect electricity, water and gas meters, sensors, IP Cameras and other control equipment across their properties.

Challenges

Increasing Industrial IoT applications have grown rapidly to deliver new insights and optimize business processes. Cybersecurity for industrial networks became a major concern due to potential risk and threats posed by hundreds and thousands of connected devices. Many networking products used in IIoT applications are shipped with poor security features. Utility sectors in Europe demands a secure and reliable data communications over their private network in harsh environment where fiber infrastructure is not available.

Solutions and Benefits

Proscend worked closely with its long term partners in Europe and customized a series of industrial Shdsl Routers to meet the high security standards of their Utility customers. The Shdsl router delivers Ethernet services with symmetrical bandwidth at rates up to 15.3Mbps/pair over existing copper infrastructure, enabling a good alternative in places where fiber is unavailable or not economical to deploy. The 4-Wire and 8-Wire Shdsl routers support Ring and Daisy Chain topologies for industrial network environments and extend Ethernet beyond 8 KM for each point to point connectivity. The products features advance built-in security features such as OpenVPN, IPSec (DES/3DES/AES, MD5,SHA-1, IKE/Manual Key), PPTP, L2TP, RSTP/MSTP, SNMP v3, HTTPS, SSH, Ring Redundancy, Firewall and etc. The addition of these enhanced features allow the SHDSL routers to fulfill and compliant with the security requirements of Utility companies. Thousands of units are successfully deployed every year.

Product Used

Proscend 6200-4W/U 4-Wire G.Shdsl.bis ATM/EFM VPN Router and its industrial grade variants

- Extending Ethernet Services to sites with existing copper infrastructure

- Each pair is capable of 5.7Mbps to 15.3 Mbps depending on distance requirement

- EFM Bonding up to 61 Mbps (4 pairs, TC-PAM 128)
- Support Ring and Daisy Chain Topologies.
- Advance Security Features (VPN, Firewall, Access Control)
- Flexible configuration as CPE or CO
- Low Delay, Jitter and Packet Loss for delay sensitive applications
- Future-proof Ethernet traffic management and QoS features

Application Topology