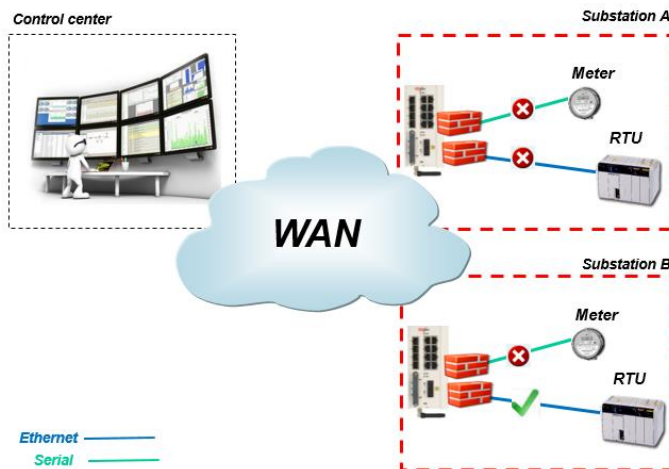


Substations Security

Secure Gateway for Substations

The substations of the utilities are becoming more and more automated. Since the substations are distributed they become vulnerable to cyber-attack either from an insider that gained access to one of the sites or via the network links.

Radiflow routers are securing the data-flow from the control center to the substations and between the substations. A distributed DPI SCADA firewall is implemented inside the routers combined with remote user authentication, enabling the validation and logging of the critical SCADA operations done on the remote substations.



The Radiflow 3180 routers are optimized to secure the access to the substation:

- **Identity management** for user authorizations for device/application access
- Validation of the SCADA behavior per user using **per-port DPI firewall**
- **Automatic learning** of the **SCADA behavior** as a baseline for the DPI rules
- **Detailed log** of user activities for auditing
- **IPsec VPN** for inter-site secure connectivity (against man-in-the-middle attacks)
- Support **Ethernet** and **Serial** interfaces for modern and legacy devices including protocol gateway functionality and **PoE+** support for integrated CCTV traffic
- Network interface over **Ethernet copper and fiber** and **cellular** as a backup
- **Ruggedized routers** compliant to IEC 61850-3/IEEE 1613 requirements