Secure Marine Satellite Data Networks

THE PROBLEM

Merchant marine companies, oil and gas firms and captains of industry manage and operate land based IPsec Virtual Private Networks (VPN) to privately and securely access corporate data. However, they have not been able to extend this VPN capability to their most valuable assets – their shipping fleets, production platforms and private yachts. The reason: VPN products that work well for the terrestrial corporate VPNs perform poorly over expensive satellite Internet connections.

THE SOLUTION

Encore Networks provides satellite VPN solutions that make efficient use of expensive satellite bandwidth, and provide end-to-end security across modern marine VSAT terminal services all the way back to the corporate Intranet. Encore's VSR-30™ provides firewall, routing and VPN services in a single platform – ideal for simple satellite based VPN access for the corporate professional or production manager. Encore's BANDIT™ product provides the same functionality with combined legacy protocol conversion capabilities – enabling the remote transport of RS-232 connected marine control and diagnostic information, and SCADA information from the oil and gas platforms.

PLUG-AND-PLAY MARINE VPN

Extending the corporate VPN to remote marine endpoints has been a configuration and integration nightmare to this point. It has required the combined efforts of corporate IT professionals, the satellite hub operator, the marine satellite terminal reseller and the installation technician on the boat or remote production platform.

With Selective Layer Encryption, Encore's patented high performance method of providing end-to-end VPN over satellite back to the corporate Intranet, one unit is provided to the corporation, and one to the hub operator and the remote terminal finds its own way back to the corporate VPN.

Encore's VPN technology is compatible with all currently deployed standards based IPsec VPN devices, and has been proven interoperable with commonly deployed equipment from Cisco, Juniper, Avaya (formally Nortel) in testing with the VPN Consortium (VPNC).

Encore also includes legacy protocol conversion capabilities, allowing corporations to link and converge non-IP based terminals, networks and devices to secure IP based networks. As an example, this capability would enable remote terminal access to troubleshoot engine or HVAC control systems. It would also provide production platforms a way of to securely sending Supervisory Control and Data Acquisition (SCADA) information back to land based control systems.

Encore is leading the way in IPsec VPN based devices for marine networks.
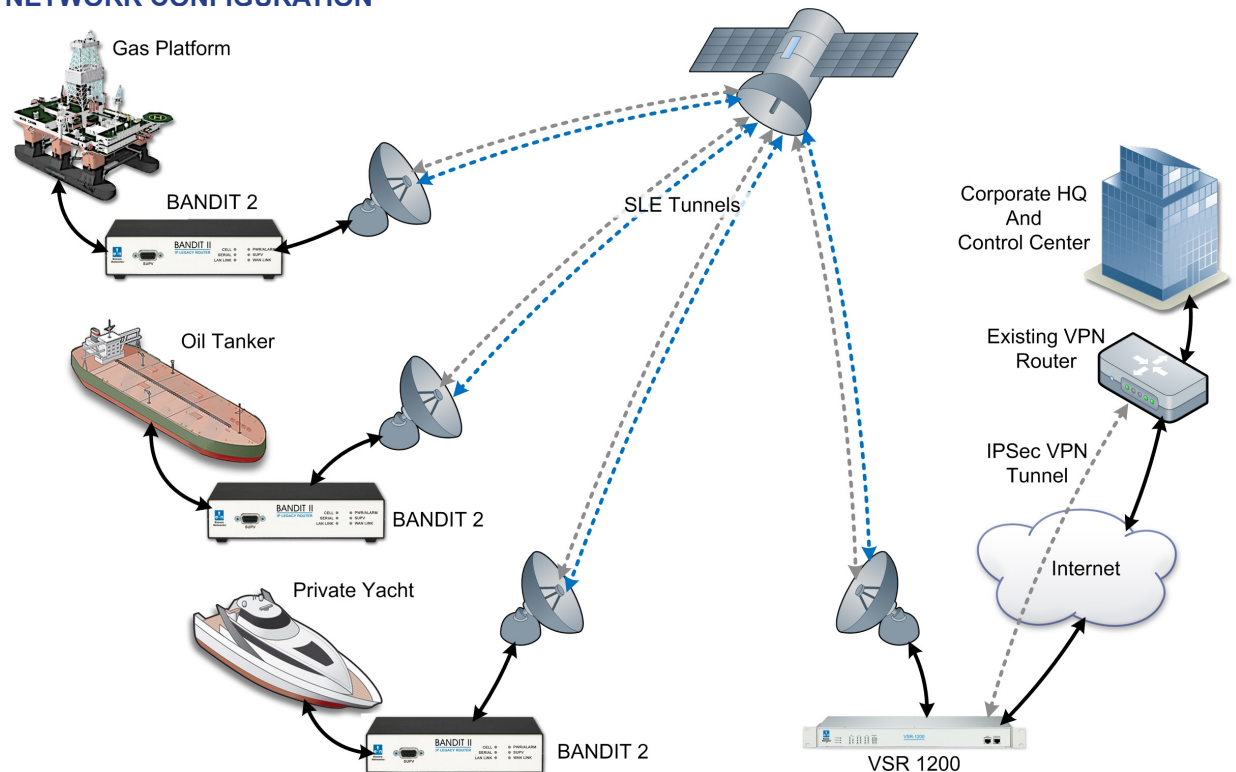
Encore BANDIT™

Integrated legacy protocol conversion capabilities:
- SCADA – Oil/Gas Control Systems
- SNA/SDLC – Corporate Mainframe Access
- X.25 – Point of Sale, Ships Purser
- Remote Telnet Server support for non manageable devices, i.e. control panels, and engine diagnostic
- Encore Network's exclusive patented breakthrough Selective Layer Encryption (SLE™) provides end-to-end satellite VPN access to corporate Intranets
- Standard stateful inspection Firewall with configurable port filtering and DoS attack settings
- Compatible with Cisco, Nortel, Netscreen IPsec VPN Networks – Certified by the VPNC

NETWORK CONFIGURATION

Gas Platform — BANDIT 2 — SLE Tunnels — Corporate HQ And Control Center — Existing VPN Router — IPSec VPN Tunnel — Internet — Oil Tanker — BANDIT 2 — Private Yacht — BANDIT 2 — VSR 1200