

**Encore Networks brings a patent-based IPSec solution for enhanced VPN over VSAT.**

## Encore Networks Has The Solution For VPN Over VSAT

### Problem

In the satellite industry, users often run into situations that are unique to their network applications. One typical example is running a VPN over or through the VSAT link from remote sites to headquarters (see diagram below). The most common form of VPN is IPSec, either 3DES or AES, both of which are recognized by FIPS (Federal Information Processing Standard) as a secure VPN solution. Customers running a VPN over VSAT generally find a loss of throughput which can result in as much as a 70% decline in available bandwidth. This is the main reason many of today's latency sensitive applications fail.

When running any IP based application over VSAT, all service providers have TCP acceleration which is required to support basic TCP communications. Without this acceleration, the IP sessions would time out due to basic physics and the height of the satellite with respect to the VSAT. This acceleration is commonly comprised of processors called Performance Enhancing Proxy Servers or PEP. All VSAT service providers have a similar process but all are unique to their network topology.

### The Encore Solution

Encore Networks brings its patented IPSec VPN solution to the VSAT industry called Selective Layer Encryption (SLE). SLE is designed to enhance VPN and work in tandem with PEP providing fully encrypted IPSec data. SLE can be found in all of Encore's VSR™ and BANDIT™ routers.

The VSR™ and BANDIT™ line of environmentally hardened (rugged) routers offer superior performance improvements over a common VPN. Customers have realized the full potential of the VSAT link with less than a 5% net loss of bandwidth. SLE leverages the inherent acceleration provided with the VSAT service which maximizes throughput. For example, in File Transfer Protocol mode (FTP), SLE performs as well as running non-encrypted data up to 10M files. This is documented in Encore's rigorous certification process with all VSAT carrier partners. If you are looking for high performance in your VSAT network along with a secure VPN, Encore Networks provides the best choice on the market today.

