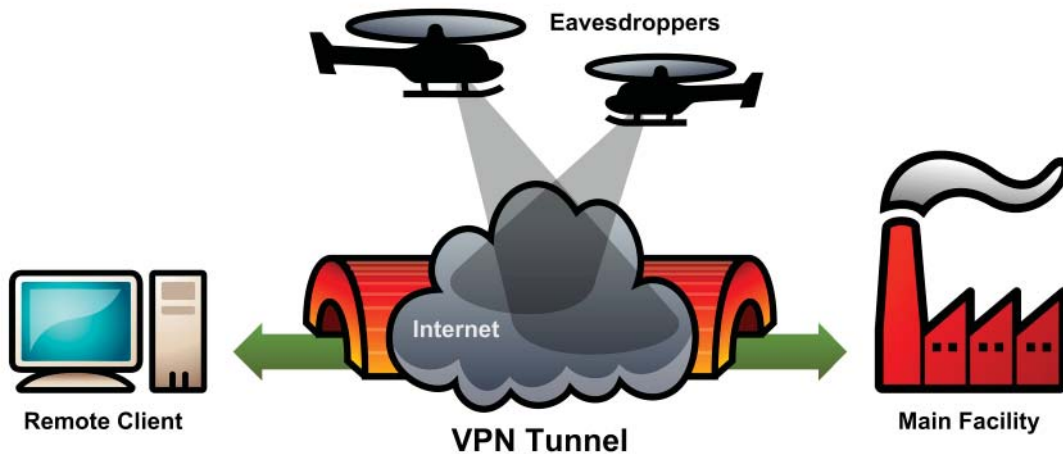# Tofino™ VPN Server and Client LSMs

Secures remote SCADA communication

A VPN system that is easy to deploy and does not risk industrial processes.

Industrial facilities often want to utilize highspeed Internet connectivity in order to integrate control systems and/or people from multiple locations. How can you take advantage of this cost-effective technology without risking viruses or inappropriate access to your control and SCADA systems?

The Tofino VPN solution creates secure 'tunnels' of communication over untrusted networks, such as the Internet or corporate business networks. Un like other VPNs, the Tofino VPN is easy to deploy, test, and manage. This ensures that good security is not compromised because of configuration errors.

The Tofino VPN also supports legacy automation devices and protocols, and is industrially hardened. Best of all, it can be combined with other Tofino LSMs, such as the Tofino Firewall LSM or the Tofino Modbus TCP Enforcer LSM, to provide a comprehensive security solution.

Saves you money through:

- Reduced telecommunication and travel costs

- Reduced implementation, engineering and IT costs due to ease of deployment

- Leveraging investments by enabling communications to legacy non-IP devices

Unique capabilities:

- Creates highly secure tunnels using Secure Sockets Layer (SSL) technology to protect control system integrity

- Easy to deploy, test, and manage with drag and drop configuration interface

- Allows testing of the VPN tunnel without committing control traffic to it

- Supports legacy automation protocols

- Interoperates seamlessly with other Tofino LSMs to provide fine grained VPN access and SCADA-capable firewall protection

- Industrially hardened

Applications

- Manage remote plants from a central facility

- Provide secure access to plant facilities for remote personnel

- Interconnect legacy non-IP equipment

- Secure communications between critical controllers

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Features and Specifications

Security implementation	Industry-standard Secure Sockets Layer (SSL/TLS)
Encryption	AES-CBC, 128-bit key
Authentication	SHA-1, 160-bit key
Maximum no. connections	Server supports at least 8 simultaneous connections
Devices connected	Allows encrypted tunnels to be set up between multiple Tofino SAs, computers with VPN PC Client package installed and 3rd party VPN servers
User-settable options	The following options may be set for each connection: • Endpoint IP address and mask • Enable server routing between clients • Allow non-IP broadcast traffic to be transported on the VPN
Compression	Built-in data compression for optimum performance over low-bandwidth networks
Supported protocols	Tunnels all IP and non-IP Ethernet-based protocols
Easy deployment, test and management	• Configuration is simple using a drag and drop interface • Test the VPN tunnel without risking control traffic • No changes required to the network design or addressing • Configuration & management is done centrally with the Tofino CMP
Operating modes	All standard Tofino modes supported: Passive, Test and Operational
Security alerts	Reports security alerts to the Tofino CMP console via the Tofino 'Exception Heartbeats' (Link Established, Link Disconnected, Authentication Failure)
System requirements	• Tofino Security Appliance • Tofino Central Management Platform (CMP) • Tofino Firewall LSM and / or Tofino Modbus TCP Enforcer LSM (optional, but strongly recommended for enhanced end-point security)
Ordering information	• Part number: **9520-VPNS** Name: **Tofino™ VPN Server LSM** • Part number: **9520-VPNC** Name: **Tofino™ VPN Client LSM** • Part number: **9520-VPNL** Name: **Tofino™ VPN PC Client License** Visit: www.mtl-inst.com/tofino for ordering info for all products.

The Tofino™ VPN Server and Client LSMs are components of the Tofino™ Industrial Security Solution

Tofino Security Appliance

Hardware platform that creates Plug-n-Protect™ zones of security on control and SCADA networks

Loadable Security Modules

Firmware modules that customize the security features of each Tofino SA:

- **Firewall**: Directs and controls industrial network traffic
- **Modbus TCP Enforcer**: Content Inspection and connection managament for Modbus and OPC
- **Secure Asset Management**: Tracks and identifies network devices
- **VPN**: Secures remote communication
- **Event Logger**: Reliably logs security events and alarms

Tofino CMP

Software that provides coordinated security management of all Tofino Security Appliances from one workstation or server