

TCP Packet Transfer System

TPTS enables the secure transfer of TCP/IP socket-based information, with TCP proxy servers on either side of a cross-domain connection enforced by Owl DualDiode® Communication Cards and related software drivers. The Owl TPTS solution achieves unidirectional movement of data streams for remote file transfers, and secure printing between network domains.

The Owl Solution

TCP Packet Transfer System (TPTS) is a single protocol application supporting the transfer of TCP/IP data streams across the one-way data diode. TPTS allows data to come into the data diode as a TCP data stream and terminate at the TCP/IP socket-based proxy on the source side of the DualDiode. The payloads from the TCP/IP packets cross the one-way data diode and are re-established as a new TCP/IP data stream by the proxy on the destination side of the data diode and sent on to the final destination.

All of the Owl Data Transfer applications leverage our exclusive, Common Criteria EAL certified DualDiode Technology® to support reliable, high speed one-way transmissions. Consisting of a pair of send-only and receive-only communication cards, our patented DualDiode Technology® operates at the transport protocol layer assuring data integrity and availability at speeds ranging from 26Mbps to 10Gbps.

Features

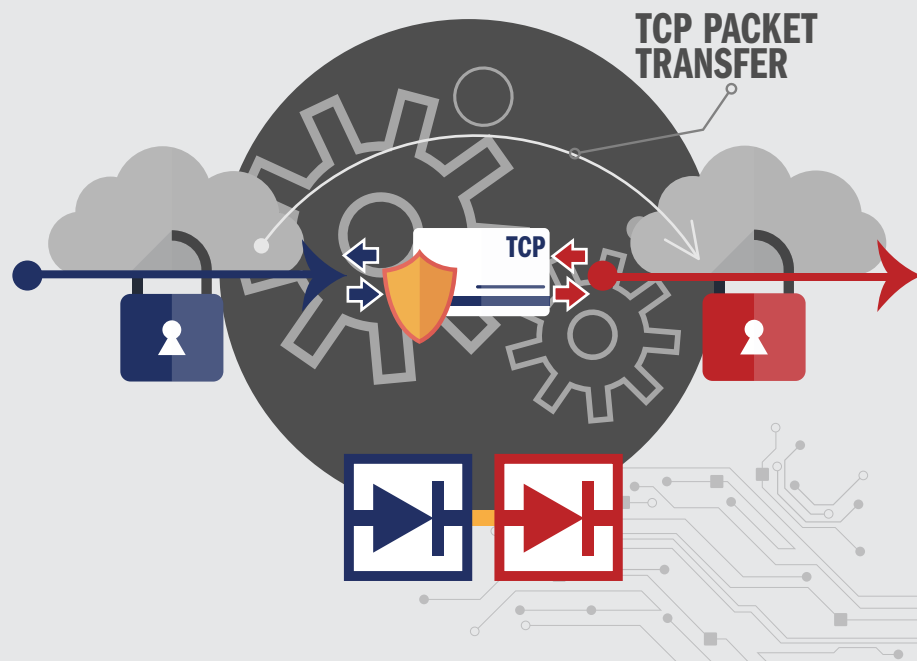
- Real-time information transfer
- Upguard / downguard operations
- Database information retrieval
- Double-firewall architecture replacement
- Secure printing

Benefits

- Drop-in deployment transparency
- Broad OS support
- Log file-management system
- Editable file processing scrip

DualDiode Technology®

Owl's DualDiode Technology is built around patented circuitry which only allows data to physically flow in one direction thereby preventing all network based cyber attacks. The design also includes a deep protocol break which terminates all Ethernet traffic, transfers the payload via the ATM protocol and then converts it back to Ethernet. This has the unique benefit of hiding all the IP and MAC address information from the outside world and preventing any probing of the network. This technology comes in different form factors depending operational environment.



Hardware Specifications

DualDiode® Technology hardware:

Server-mounted custom-designed communication cards – one Send-Only, one Receive-Only

Owl V4 Communication Cards:

Fiber-optic multimode, 62.5/125 ST-ST – 155.52 Mbps link speed; 15 Mbps user throughput

Owl V6 Communication Cards:

Fiber-optic single mode, LC-LC 2.488 Gbps link speed
Clear-channel 2500 – 270+ Mbps user throughput
Channelized 2500 – Supports up to 8 discrete application connections across 1 physical link; User throughput 65+ Mbps per connection

Owl V7 Communication Cards:

DualDiode® Technology OCCs, and drivers enable one-way-only data transfer with upgradeable bandwidth up to 10 Gbps

Owl CDS Small Form Factor:

Two custom-designed communication cards – one Send-Only, one Receive-Only in PC104 form factor, each integrated with independent servers within an Owl CDSFF chassis -- fiber optic link speed 155Mbps, with user throughput at 10 MBytes per second

Owl Perimeter Defense Solution:

Two Owl-designed communication cards – one Send-Only, one Receive-Only in PC104 form factor, each integrated with independent servers within an Owl PDS chassis -- fiber optic link speed 26-155Mbps.

DualDiode Communication Card Software:

Secure Transfer System Send/Receive drivers & Send/Receive install software

User Application Software:

A wide range of Owl applications for file/directory, TCP/IP, UDP, and UNIX syslog message & SNMP TRAP one-way transfer

Compatibility:

Dell PowerEdge, Sunfire and Sun Blade, HP ProLiant (for other platforms, contact Sales)

Operating Systems:

SPARC SOLARIS® 8, 9, 10
SOLARIS® on Intel®
TRUSTED SOLARIS®
RED HAT® LINUX® SE LINUX®
Microsoft WINDOWS® XP
Microsoft WINDOWS® 2003

About Owl

For over 16 years Owl Computing Technologies has been implementing next generation cybersecurity solutions for critical networks. Owl's DualDiode Technology®, a proprietary data diode, boasts 24 technology patents and has over 2,000 successful deployments globally across intelligence, government, military, financial services, utility, energy, and other critical infrastructure networks. Owl's hardware-enforced technology ensures secure networks and enables the reliable and robust transfer of all data types and file sizes.

