NPTS

Network Packet Transfer System Data Transfer Application

KEY FEATURES

- Networking Monitoring & Reporting
- Intrusion Detection Support
- Communications & Protocol Analysis

BENEFITS

- Drop-in Deployment Transparency
- Standalone or Multiple Application Deployment
- Log File Management System
- Editable File Processing Scripts



Network Packet Transfer System

Network Packet Transfer System (NPTS) provides secure one-way Ethernet packet transfer for network monitoring or sniffing, via proxy servers on either side of a cross-domain connection. The connection is secured and enforced by Owl data diode Communication Cards and related software drivers. NPTS enables unidirectional streams of raw Ethernet packets at full line-rate.

The Owl Solution

NPTS application provides secure one-way transfer for all network packets across the data diode. This application is typically used as a solution for monitoring (sniffing) all network traffic at full line-rate. The send-only side of NPTS "listens for" and processes all raw Ethernet packets on the source network, sending them across the data diode one-way path. On the receive-only side, NPTS restores the traffic to native Ethernet packet format for processing by a client IDS monitoring system or other application.

All of the Owl Data Transfer Applications leverage Owl's exclusive, Common Criteria EAL certified technology to support reliable, high speed one-way transmissions. Consisting of a pair of send-only and receive-only Communication Cards, Owl's patented data diode operates at the transport protocol layer assuring data integrity and availability at speeds ranging from 26 Mbps to 10 Gbps.

NETWORK MONITORING FOR SECURITY

The monitoring of network health, and of network traffic, are key tasks for many organizations seeking to maintain the highest levels of network domain security. Network managers use a variety of analysis/ sniffer tools to diagnose network problems, to gather & report network statistics, and to debug communications and protocols.

Domain security policies require network analysis to detect network intrusion attempts -- perhaps, even to gain information for affecting a network intrusion. Such analysis often occurs on highly secure control networks; hence, the need for isolation of the destination network by hardware-enforced one-way information transfer technology.



DATA DIODE TECHNOLOGY

Owl's data diode technology is built around patented circuitry which physically only allows data to flow in one direction, thereby preventing all network-based cyber attacks. The design also includes a 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.

WARRANTY & SUPPORT

- Includes ninety (90) days of Owl Software Technical Services (Hotline Service & Support, Software Updates)
- Annual maintenance and monthly maintenance available. Contact Owl Sales for pricing.

Hardware Specifications

OWL V7 COMMUNICATION CARDS:

Data diode hardware 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 receiveonly in PC104 form factor, each integrated with independent servers within an Owl 1U chassis -- fiber optic link speed 155 Mbps, with user throughput at 10 Mbps

OWL PERIMETER DEFENSE SOLUTION:

Two Owl-designed Communication Cards – one send-only, one receiveonly in PC104 form factor, each integrated with independent servers within an Owl 1U chassis -- fiber optic link speed 26-155 Mbps

DATA DIODE 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:

RED HAT[®] LINUX[®] SE LINUX[®] Microsoft WINDOWS[®] CENTOS[®]



Incorporates EAL4+ Certified Technology



OWL V7 COMMUNICATION CARDS



Owl Cyber Defense Solutions, LLC leads the world in data diode and cross domain network cybersecurity. With a constant focus on customers in the military, government, critical infrastructure, and commercial communities, Owl develops market-first, one-way data transfer products to meet a variety of operational needs, from entry level to enterprise.

For more information on Owl, or to schedule a demo, visit www.owlcyberdefense.com



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