OWL Cyber Defense

Owl PaciT
Secure Enterprise-level Packet Transfer Software

KEY FEATURES

- Scalable configurations available at 1, 5, or 10 Gbps link speeds

- Utilizes channelization

- Source and destination content management

- Modular design facilitates tailoring to satisfy changing business requirements and scalability needs

Analyze Network Traffic in Real-Time

In critical infrastructure plant operations, the collection of network data usually requires secure transfer to an analysis center for review and long-term storage.

In these cases, a reliable and accredited cybersecurity solution must be utilized to ensure a secure one-way data transfer across network boundaries.

Owl PaciT is a two-server, enterprise solution, using a dedicated send-only server and a dedicated destination-only server. The servers are connected by Owl's proprietary data diode hardware to create a deterministic one-way only data transfer path. Owl's hardware technology provides a complete non-routable protocol break, assurance of confidentiality, and network isolation.
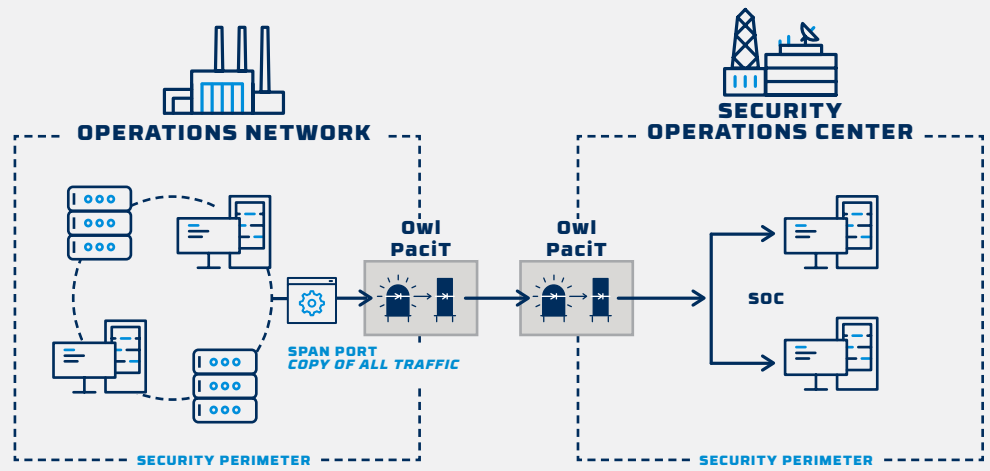
Functional Architecture

Owl PaciT presents separate source and destination host computer platforms connected by Owl data diodes. Administration of each server is entirely independent of the other. Server platforms are selected and optimized for data transfer performance.

A nuclear power generation company needed to perform real-time analysis on all OT network traffic on an isolated forensic network. Given the regulatory requirements and associated network isolation restrictions, a secure one-way solution was required to provide compliance, as well as access to critical network traffic.

Owl PaciT enabled secure one-way transfer of 100% of network traffic, at line rate, across the security boundary to an isolated network for analysis. Using Owl's deterministic one-way only data transfer pathway, Owl PaciT would meet all compliance requirements for transfer of network traffic across the security boundary.

OPERATIONS NETWORK

SECURITY OPERATIONS CENTER

Owl PaciT

Owl PaciT

SOC

SPAN PORT
COPY OF ALL TRAFFIC

SECURITY PERIMETER

SECURITY PERIMETER

OPERATING SYSTEM AND SYSTEM ADMINISTRATION

The security imposed by Owl PaciT is only as rigorous as the environment in which the solution operates, and the controls placed on those administrators given privileged access to the solution's operation. Owl PaciT's architecture itself enables secure defense-in-depth, and provides the customer a component of an overall IT/OT defense-in-depth strategy.

Owl PaciT performs its functions in a hardened Linux OS - Owl Security Enhanced Linux (OSEL). The OSEL profile applies explicit constraints and limits on what tasks the operating system can perform, and on what functions software applications (including Owl proxy applications) can deliver. Activities in violation of these constraints/limits are prohibited. Applications attempting to act outside defined, specific, functions are disabled. Network security is maintained. Access levels to Owl PaciT administration are explicitly defined, as well. Owl and the customer operator define privileged administrator profiles and their levels (or roles) of permitted functional activity. Owl PaciT enforces user-case defined Owl Role-based Access Controls (RBAC).

Specifications

OWL DATA DIODE TECHNOLOGY
• Server-mounted custom-designed communication cards – one source-only, one destination-only

OWL V7 COMMUNICATION CARDS
• Owl data diode technology OCCS and drivers enable one-way-only data transfer

OWL COMMUNICATION CARD SOFTWARE
• Secure Transfer System source/destination drivers & source/destination install software

COMPATIBILITY
• High-end servers

OWL Cyber Defense

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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