Owl x Curtiss-Wright PacStar® 400-Series

Low-SWaP, High-Assurance Rugged CDS for Modular Tactical Edge Communications.

Key Features

→ Meets the U.S. Government's rigorous Raise the Bar standards for Cross Domain Solutions.

→ Deployable across any compliant low-SWaP rugged platform.

→ Flexible schema management via Apache Daffodil enables direct operator control over data flows.

→ Validated for cross domain voice, FMV, XML, TAK/CoT, VoIP, and RoIP.

Supported Dataflows

→ Voice, Voice over IP

→ Radio over IP

→ Full-Motion Video

→ Structured Data

→ Text Chat

→ Team Awareness Kit

→ Cursor-on-Target

Supported Platforms

→ Curtiss-Wright PacStar 451

→ Curtiss-Wright PacStar 453

→ Curtiss-Wright PacStar 454

The Trusted CDS Standard: Now Deployable at the Edge

For nearly three decades, Owl Cyber Defense® has been at the forefront of cross-domain security, delivering secure, adaptable Cross Domain Solutions (CDS) to the most demanding defense and intelligence missions. Building on that legacy, Owl Rugged Cross Domain Solutions extend Owl's proven software architecture, which features high-assurance data pipelines, an easy-to-use admin GUI, flexible schema management via Apache Daffodil, and data routing via Apache NiFi, to a growing portfolio of validated low-Size, Weight and Power (SWaP) rugged platforms. Owl Rugged CDSs have successfully validated support for various datatypes, delivering secure, real-time data exchange across domains of varying classification levels when and where the mission needs it.

Owl V2CDS™: The Engine Behind Every Cross-Domain Connection

Owl's V2CDS delivers point-to-point voice, VTC, FMV, streaming audio, and XML/binary structured data across network security boundaries using existing infrastructure, with dedicated performance per connection. With numerous security and authentication features and an exclusive assured pipeline architecture for voice and video content filtering, V2CDS mitigates covert channels to an acceptable risk level while enabling real-time collaboration between secure or classified network domains. V2CDS also leverages DFDL-based structured data schemas and Apache MiNiFi to enable direct operator control over data flows.

Curtiss-Wright PacStar® 400 Series: Compact Form, Uncompromising Security.

The Curtiss-Wright PacStar 400 Series family of small communications modules is designed for maximum compute and networking capabilities in the smallest rugged form factor on the market. PacStar 400-Series includes routing, switching, and advanced network services with built-in configuration flexibility and robust power options for austere environments. These solutions are driven by PacStar IQ-Core® Software to simplify setup and operation.

Figure 1: Curtiss-Wright PacStar 451, 453, 454 platforms have been successfully validated with Owl V2CDS.

PacStar 451

Server Module provides a high-performance computing and virtualization platform for hosting software applications or virtual appliances in a compact, quick setup, rugged form factor.

USE CASES

→ VoIP

→ Structured Data

PacStar 453

NVIDA GPU-enhanced server that provides a high-performance virtualization and compute platform for hosting intensive applications such as graphics, video processing, and artificial intelligence in a compact, quick setup, rugged form factor.

USE CASES

→ Video (SD or single-stream HD)

→ VoIP & VTC

→ Structured Data

PacStar 454

NVIDIA GPU-enhanced server provides a high-performance virtualization and compute platform for hosting intensive applications such as graphics, video processing, and artificial intelligence in a compact, quick setup, rugged form factor.

USE CASES

→ Video (Multiple HD streams)

→ VTC

→ Structured Data

OWL Cyber Defense™

Owl Cyber Defense Solutions, LLC, headquartered in Columbia, MD, leads the industry in data diode and cross-domain network cybersecurity solutions for faster, safer and smarter decision making. We create solutions tailored for high-risk sectors including the military, government and critical infrastructure. Our advanced technologies enable secure, near-instantaneous collaboration, bridging network barriers to protect critical missions. With a focus on scalability and interoperability, Owl ensures that organizations can maintain secure, reliable, and compliant communication channels against evolving cyber threats.

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

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