

CROSS DOMAIN SOLUTIONS

# USAF Maintenance Facility Secures and Automates Parts Management Communications

**CASE SUMMARY:**

**INDUSTRY:**  
U.S. Air Force

**CHALLENGE:**  
Enabling improved, automated inventory management of onsite industrial vending machines without compromising the high security of the maintenance facility.

**SOLUTION:**  
Owl OPDS-100 data diode deployed to transfer inventory data and purchase orders out of secure network to 3rd party parts vendors.

**BENEFITS:**  
Deterministic, one-way transfer maintained security for maintenance facility. Facility met SLAs with suppliers and automated inventory management processes.

## Company Overview

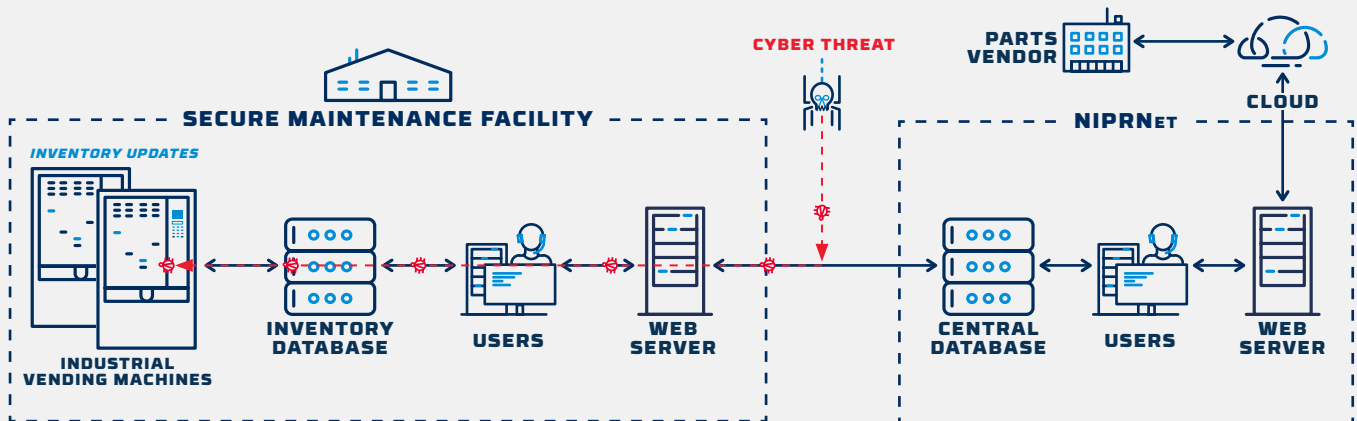
Secure U.S. Air Force aircraft maintenance facility with multiple industrial vending machines for parts dispensing and inventory tracking.

## Cybersecurity Challenge

A United States Air Force maintenance facility utilized a number of industrial vending machines to dispense and manage their inventory of parts. These machines submit inventory information into a database, which alerts users when inventory gets low. Maintenance users then send these alerts to an external unclassified network. From there, the request is sent to parts vendors for replenishment. The facility required a more efficient way to communicate the changing inventory levels to parts vendors without compromising the security of the network.

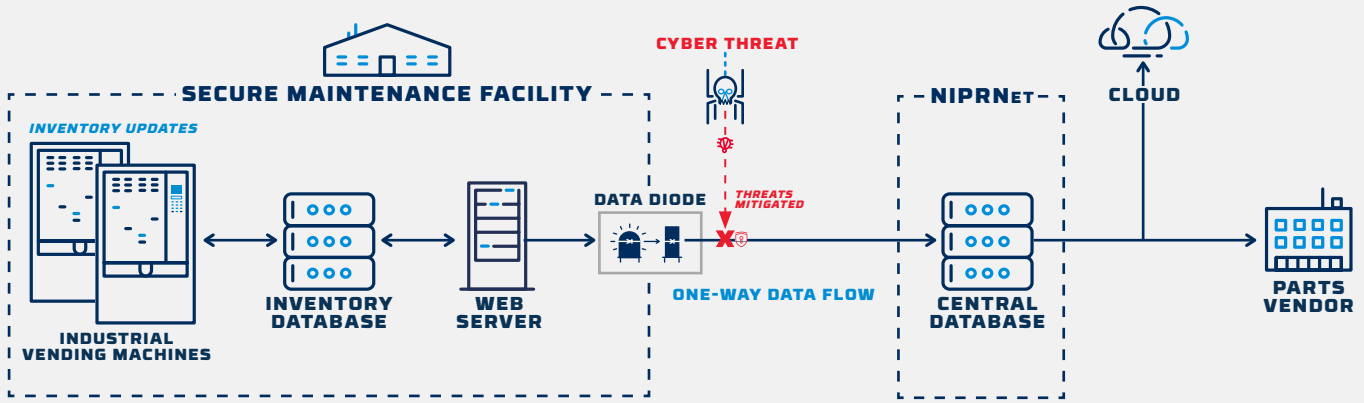
**REQUIREMENTS:**

1. Maintain highly secure cybersecurity architecture inside the secure facility
2. Replace existing multi-stage manual process for inventory management with more efficient, automated process
3. Enable transfer of parts inventory/supply data and purchase orders from parts database to suppliers according to SLA



**SOLUTION**

The Owl Perimeter Defense Solution (OPDS-100) utilizing DualDiode Technology™ was selected for effective network segmentation, and deterministic, one-way data transfer. The OPDS-100 allowed inventory information to be automatically sent one-way, directly to the external third party parts vendors, without allowing any external access.



**Deployment**



**OPDS-100**

**Owl Perimeter Defense Solution - 100**

Self-contained 1U data diode, purpose-built for network segmentation and deterministic, one-way data transfer.

**Results**

- 1 Preserved effective network security and “closed” architecture at the maintenance facility network boundary
- 2 Enabled secure automated one-way data transfer from vending machine parts inventory database to the parts suppliers
- 3 Replaced inefficient manual processes for inventory management, decreasing time to repair and maintain aircraft



**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](http://www.owlcyberdefense.com)