

## USE CASE

# Secure Monitoring & Reporting

Dell's PowerProtect Cyber Recovery Data Vault Paired with Owl Data Diodes

## Summary

### Challenges

Monitoring and reporting on vault performance and system health data without introducing risk to the air-gapped network architecture

### Solution

Owl Talon™ MK100 - Owl's one-way datadiode cybersecurity solution that securely transfers system health and performance data out of a secure vault to a SOC without introducing risk

### Benefits

Vault operators do not need to physically enter the vault to extract system health and performance data. They can be assured that the data diode is protecting the air-gapped vault architecture, while enabling the critical data to be transferred to a SOC for monitoring and reporting

## Cybersecurity Challenge

Time is critical in a data vault. You may need to perform a recovery and collect historical data from a certain time period. Or in the event of an attack, you will need to analyze logs to identify and eradicate that attack, making time synchronization in the vault critical to those scenarios. The challenge is creating a source of time in the vault while minimizing new threat vectors to the air-gapped architecture of the vault.

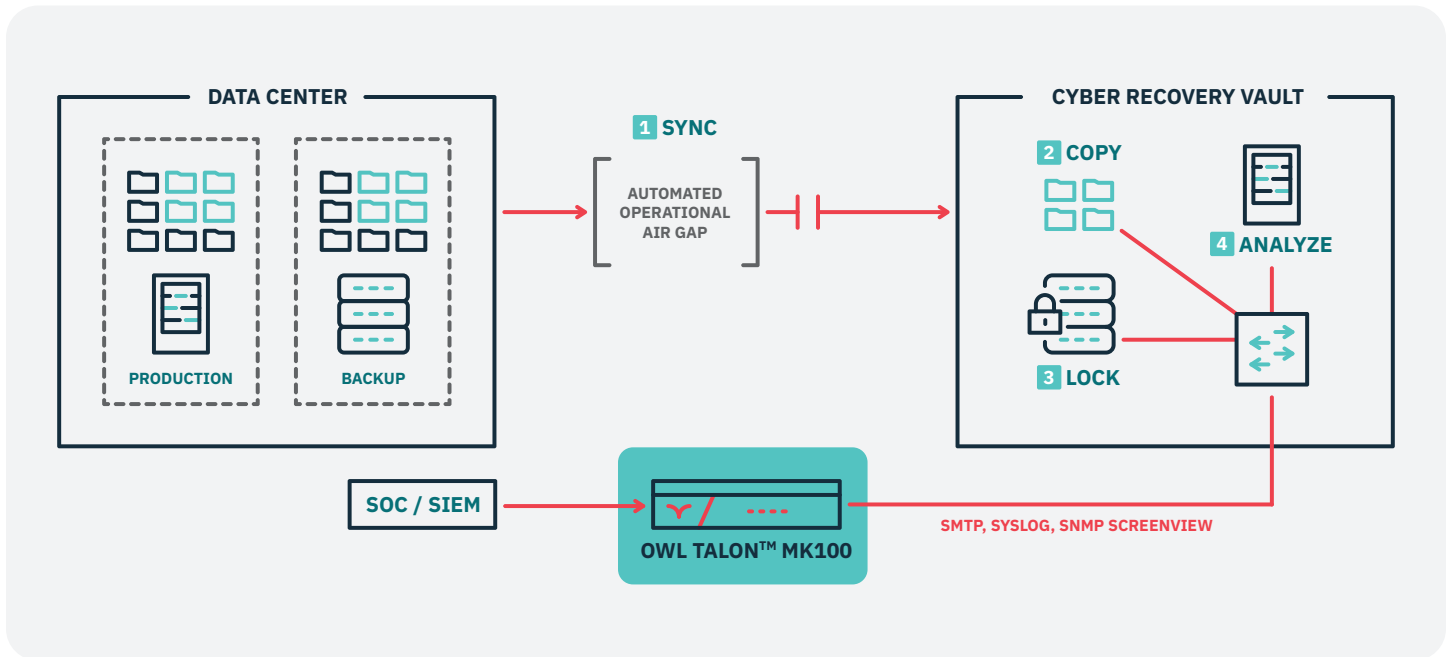
## Secure Monitoring and Reporting Solution

Dell has partnered with Owl Cyber Defense to provide organizations with a secure way to create a source of time in a data vault. Owl's Network Time Protocol (NTP) solution is a hardware-enforced data diode that points one-way into the vault. The Owl Talon™ MK100 data diode provides time synchronization in the vault by taking a trusted source of time from the production network (SOC, GPS device), and relaying that time to a node sitting on the vault side. That node inside of the vault then becomes the NTP server and can be used as a source of time within the vault.

### Key Features

- One-way only architecture – hardware-enforced to prevent any threats from entering the secure vault
- Non-routable protocol break – strips all source IP and MAC routing information to maintain network isolation and prevent unauthorized access
- Vault operators do not need to physically enter the vault to extract critical information
- Data can flow out of a secure vault to a SOC in real-time
- Supports simultaneous data streams of SMTP (email), Syslog, SNMP traps, and Virtual Screenview all in one device

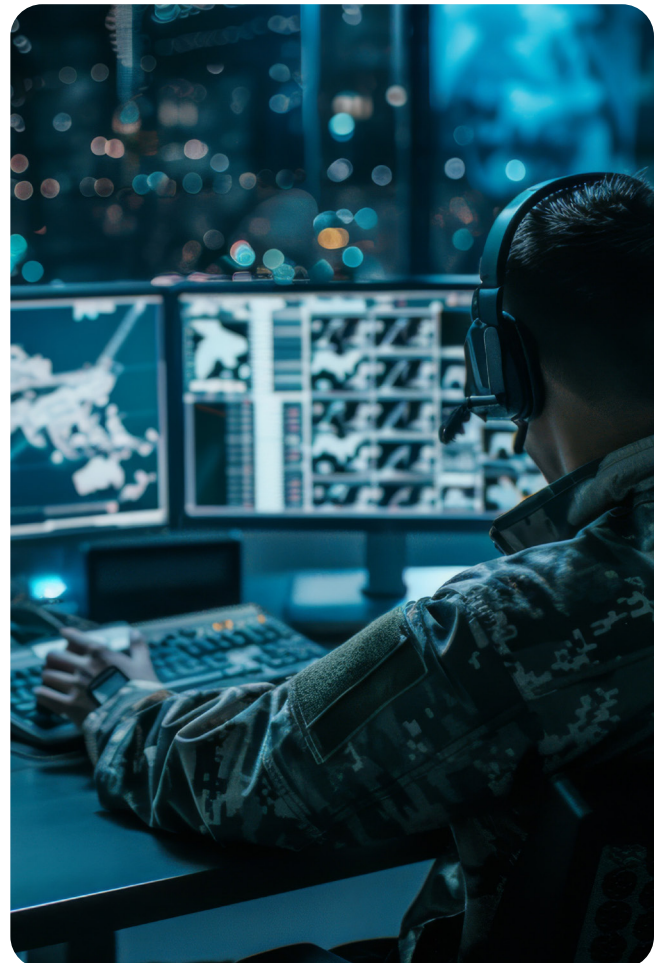




## How It Works

By implementing a data diode in a Cyber Recovery Vault architecture, data can securely flow one-way out of the vault through a hardware-enforced data diode to a SOC for remote monitoring and reporting. With a revolutionary system-on-module architecture leveraging Owl's XDE Radium FPGA-based diode technology, a single Owl Talon One Data Diode Card performs the work of two separate cards, enabling organizations to leverage smaller form factor hardware, with exponential SWaP benefits at scale. Data can only flow in one direction and a physical barrier or "air gap" is created between the two networks.

A protocol break also occurs, which is the process of terminating a data transfer protocol, sending the data payload via a different protocol, and then re-establishing the original protocol before data travels to its destination. This makes it impossible for any external threat actor to ping, deconstruct, or otherwise obtain information about the source network. Proxies in the data diode's network interface allow two-way communication to continue seamlessly on each side of the data diode, with a one-way link in between. This allows organizations to create one-way data flows using protocols that are inherently two-way, such as TCP/IP, SMTP (email), Syslog, SNMP Traps, and Virtual Screenview. Data streams can be securely transferred over the data diode simultaneously, all in one device.





## Technical Specifications



### Case

19" 1U Rackmount Chassis with 4-wire PWM

### Processor

1 x Intel Xeon

### Memory (RAM)

1 x 8GB DDR5 UDIMM

### Primary Storage

1x 128GB SATA SSD

### Power Supply

1 x 300W Flex-ATX Power Supply – US Power Cord

**Input:** 100~240 VAC

**Estimated Normal operating usage:** 120 Watts

### Mounting

Rackmount ears + half-depth rackmount Sliding Rail Kit

### Operating Conditions

10 - 35 C, 20% ~ 90% non operation humidity (non condensing)

### Approvals/Certifications

Pending regulatory certification

### Interfaces

**Front:** 2 USB (3.0)

**Rear:** 1 DB15 (VGA) 2 RJ45 (1GbE), 1 dedicated IPMI 2 Type A (USB3.2 Gen1) 1 UID button, 1 UID LED

**OTO Data Diode Card:** 2 RJ45 (1GbE)

### Dimensions

#### Chassis Size:

**With Mounting Ears:** 482.6mm W x 257.1mm D x 44.4mm H

**Without Mounting Ears:** 431.8mm W x 257.1mm D x 44.4mm H

**Unit Weight:** 4.35 kg / 9.59 lbs.

