OWL Cyber Defense

OFLS

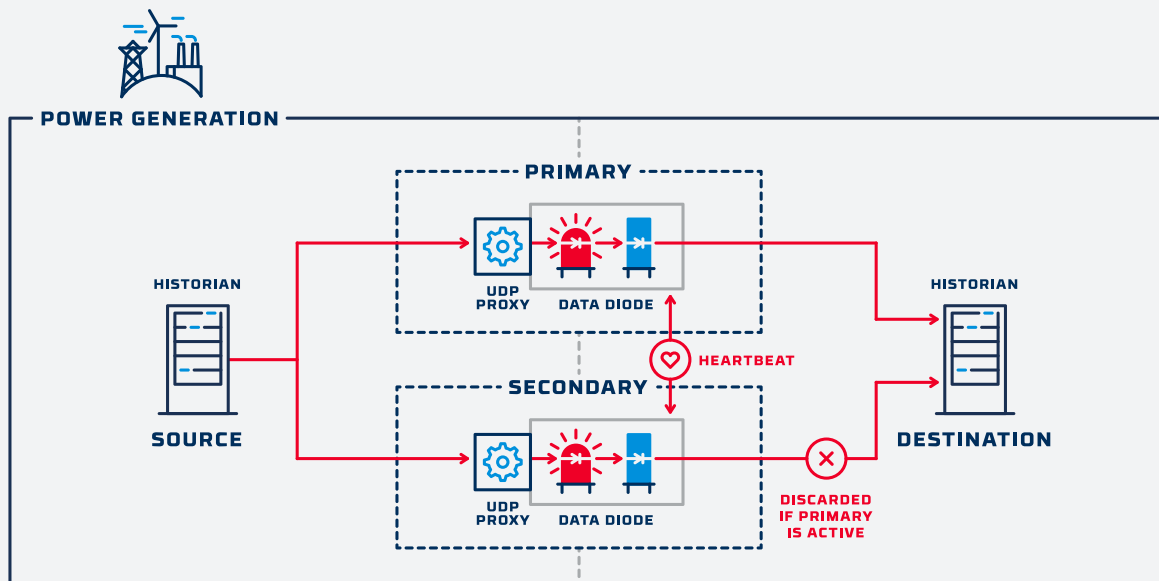# Owl Failover Service
Software Module

FEATURES

- Highly secure failover software

- Ensures high availability of UDP streams

- Primary and secondary servers for active/ passive configuration

- Compatible with Owl hardware devices

Obtain High Availability for Strict Uptime

Owl Failover Service (OFLS) is an optional software application that uses a pair of Owl hardware devices to create a high availability solution for UDP streaming. OFLS is designed for operations that require high-availability for one-way transfers of critical data in operational environments. The failover capability allows customers to maintain operational dataflows whether there are planned (maintenance updates) or unplanned (communications disruptions) outages.

Operational Configuration

The OFLS application is installed on each of the Owl devices in the redundant pair. One of the devices is designated as the primary and the other is the secondary, creating an active/ passive failover pair. A communication link (heartbeat mechanism) is configured between the two devices on the destination side, allowing the devices to determine between themselves when a failure has occurred and when the secondary system should take over.

POWER GENERATION

PRIMARY

HISTORIAN

UDP PROXY

DATA DIODE

HEARTBEAT

SECONDARY

SOURCE

UDP PROXY

DATA DIODE

DISCARDED IF PRIMARY IS ACTIVE

HISTORIAN

DESTINATION

## OFLS IS DESIGNED TO MEET THE FOLLOWING REQUIREMENTS:

- Failover of multicast UDP traffic streams.

- Failover is orchestrated between the pair of Owl devices and physically interconnected via the destination administrative interface on each device.

- Failover is configured by the user through the menu system on each of the Owl devices.

- Failover occurs within 5 seconds.

Primary and Secondary Stream Support

The OFLS solution relies on both the Primary and Secondary appliances receiving the UDP streams from the source. On the destination side, the heartbeat mechanism allows the data flows to be compared and if for any reason the data being generated by the Primary is incomplete, the Secondary will take over and handle all current streams and any new ones until the Primary comes back online. As long as the Primary is functioning, the Secondary will discard its data and never forward it to the final destination.

Heartbeat Operation

Due to the absolute one-way nature of data diode appliances, the heartbeat mechanism must operate on the destination side of the devices (all Owl devices are physically separated between source and destination sides). The heartbeat mechanism is in constant use, monitoring the operation of both the Primary and Secondary, making automatic decisions as to when to switch between Primary and Secondary and back again.
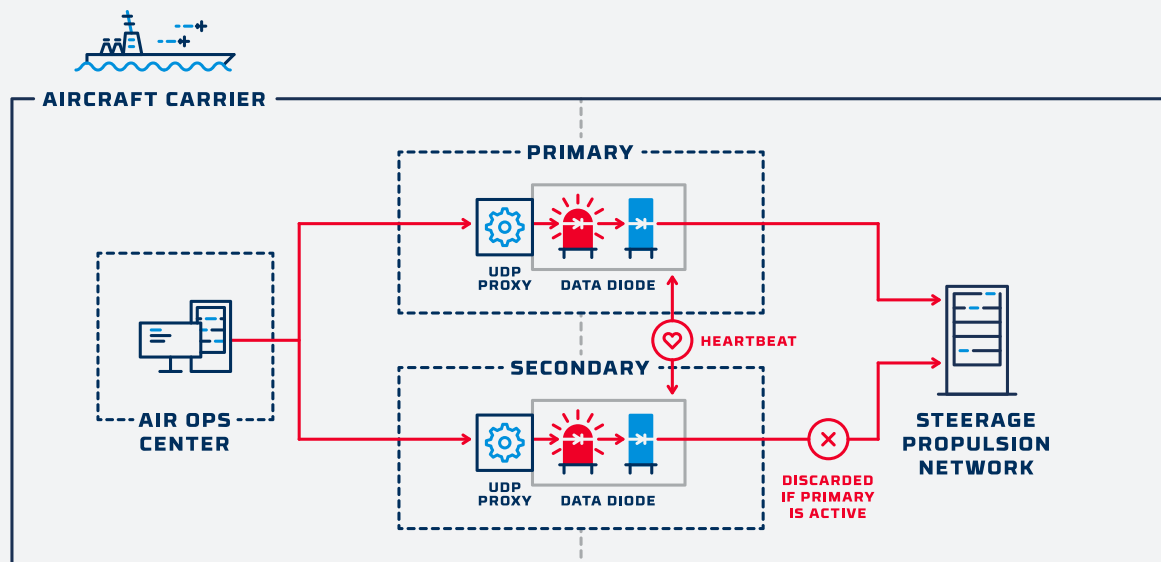
OWL Cyber Defense

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