

Owl Talon™: File Transfer

Secure. Flexible. Fast.

Key Features & Benefits

- Robust security features including SE Linux, AIDE, BIOS passwords, disk encryption, linear pipeline.
- Meets U.S. Government Protocol Filtering Diode (PFD) requirements.
- Throughput speeds up to 100 Gbps.
- Supports multiple protocols simultaneously.
- Compatible with COTS hardware.
- Available in 1U and DIN-Rail form factors.
- Supports a variety of secure file transfer use cases via RFTS, SFTP, TCP-based file streaming.

For critical unidirectional transfers like backups or remote analytics, traditional methods risk cyberattacks and leaks. Hardware enforced data diodes, on the other hand, ensure secure, unidirectional transfer, block inbound threats, prevent exfiltration, and optimize protection for high-security networks.

Owl Talon™ data diodes, including protocol filtering diodes (PFD), are trusted worldwide to deliver secure, high-performance one-way data transfers for defense and critical infrastructure. Owl Talon's hardware-enforced architecture ensures deterministic protection, meets U.S. PFD standards, and integrates with COTS systems to reduce cost and SWaP.

RFTS: Simple, Secure File Transfer

RFTS is Owl's secure client-server application for one-way file transfers via data diodes. It supports single files, directories, and multiple transfers with hash verification, ensuring top-tier security and data integrity—perfect for high-security file transfer needs without having to set up and maintain FTP/SFTP servers.

SFTP: High-Assurance Server-to-Server File Transfer

SFTP (SSH File Transfer Protocol) enables secure, encrypted file transfers between remote systems, protecting sensitive data across networks. Owl Talon data diodes enhance SFTP with simultaneous transfers, robust security, and simple administration, making it an ideal choice for enterprise file transfer.

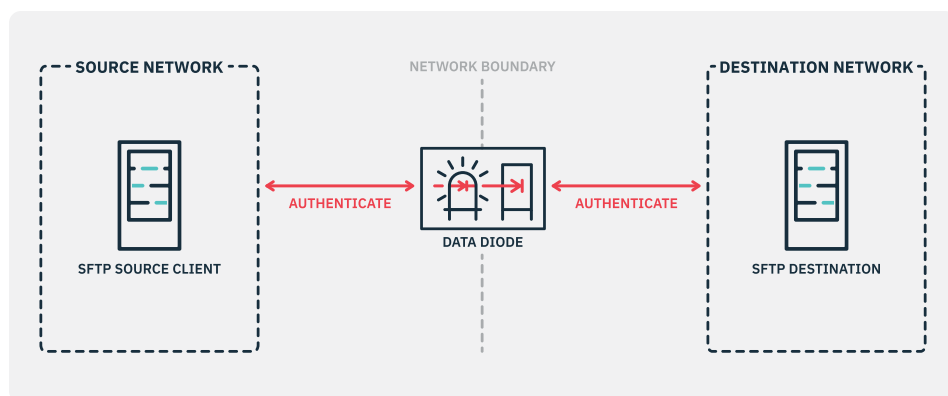
TCP-Based File Streaming: High-Bandwidth File Transfer

TCP-based file streaming handles high-bandwidth, continuous data flows by segmenting files for rapid transmission. Engineered for extensive datasets, sensor telemetry, and video feeds, this method minimizes latency while maximizing throughput. Integrated with Owl Talon data diodes, it delivers multi-layered security, supporting simultaneous protocols for critical real-time video streams and large-scale system logs.

How it Works

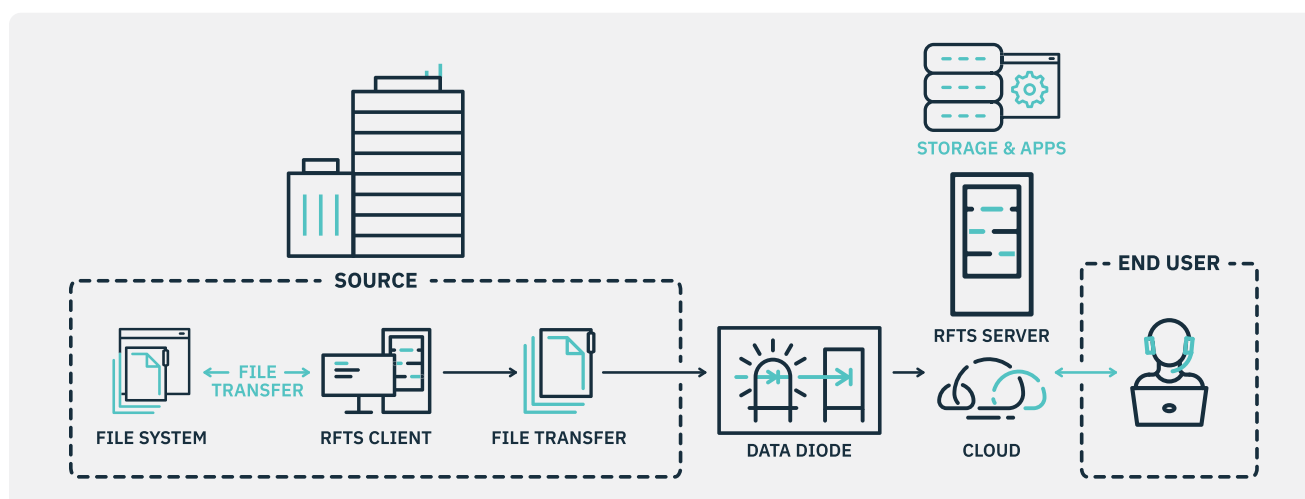
The data diode transfer process includes the preparation of source data, one-way sending of data through a hardware-enforced path that prevents any return flow, and 3) delivering validated data to the destination side, ensuring secure, unidirectional transfer between separated networks.

Protocol-specific processing:



For SFTP transfers, a transmit-side adapter enables authenticated payload-only transit, while the receive side reconstructs and validates file integrity before secure delivery. The SFTP protocol adapter can support two models where the Talon Source can act as the SFTP server as well as the SFTP client. The Talon Destination acts as the SFTP client to the customer's SFTP Destination server in both models.

RFTS transfers leverage advanced cryptography for encrypted replication, with the receive side verifying confidentiality and integrity to ensure accurate, secure file and directory transfer.



TCP streaming enables continuous, low-latency data transfer, with the receive side applying sequence and hash validation to prevent loss or corruption while enforcing one-way flow.



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.

