

Data Diode

Segment and defend networks with automated uni-directional transfer

Challenge

Government organizations face challenges collecting and sharing data across oceans, battlefields, and offices due to GDPR and Raise the Bar regulations. In addition to hardware-based data separation, one-directional data flow is mandatory, requiring a solution that ensures compliance and facilitates seamless data exchange.

Solution

Advanced features allow rapid data transfers between networks using this highly customizable data diode, adhering to regulatory requirements by maintaining strict one-directional flow. As well as providing compliance with multiple protocols and data types, Data Diode provides a user-friendly configuration interface that boosts productivity. In diverse operational environments, it provides a reliable and efficient method for obtaining critical information from networks.

Benefits

- Secure One Way Transfer
- Rapid Automated Transfer
- High Assurance Security
- Lower Total Cost of Ownership
- Simple Setup

Securing one-way data flows

The Everfox Data Diode enables rapid data transfers from one network to another, while ensuring that no information passes in the opposite direction.

The Data Diode can be used to get information out of a critical network without introducing any means by which that network can be attacked. Additionally, it can be used to get data into a network that handles highly sensitive information without risking a leak.

With the Data Diode, you can be confident that there are no reverse information flows. This is down to the physical properties of fiber optic networking electronics, rather than any software.

That means you can get the monitoring data, open source intelligence, software updates, etc., that are so essential to your operation without endangering the critical system.

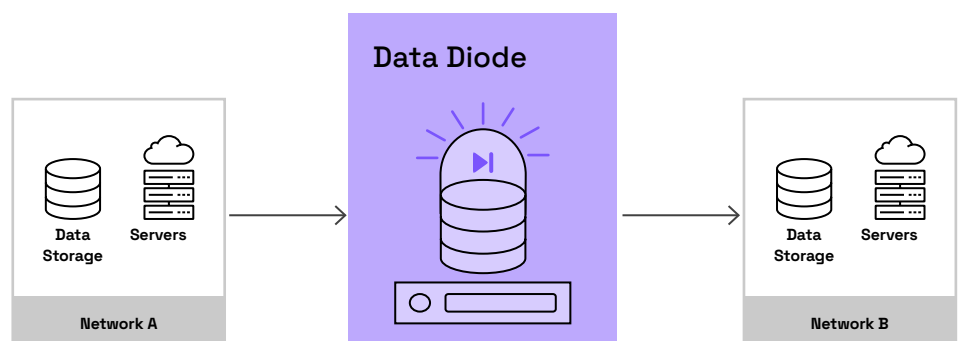


Figure 1: Everfox Data Diode
One-way transfer of data between two domains

Everfox Data Diode

Everfox Data Diode is configurable for simplified operations and maintenance while offering security, flexibility, usability, and reduced total cost of ownership. The Everfox Data Diode enables rapid speeds of 9Gbps, unidirectional, supports large file transfers up to 10GB of highly complex data to segment and protect networks, devices, and other digital assets (including databases, historians, SCADA, PLCs, DCS, and more) from external threats. It's cost-effective, easy to use, and ideal for any size organization. The solution can also be configured for bi-directional use, while additional diodes can be easily deployed for increased throughput.

Decades of experience

Everfox Data Diode is based on Everfox's decades of experience in building cross-domain products to help organizations mitigate malware reach-back and data exfiltration. It eliminates expensive and time-consuming manual data transfers while meeting various compliance and regulatory standards around optical isolation, making it the ideal choice for threat- and compliance-focused deployments.

Ensuring Secure Data Transfer: Diodes and Guards

Diodes and Guards together create a comprehensive security posture. Diodes provide one-directional data flow and a physical separation

between networks. However, Diodes alone do not provide deep content inspection, sufficient status, control, or even basic availability notifications.

A comprehensive solution must also incorporate guards, which fill this gap. Much like the layered approach to physical security at an airport, the combination of these two technologies is more powerful than either technology working independently.

A trustworthy security solution

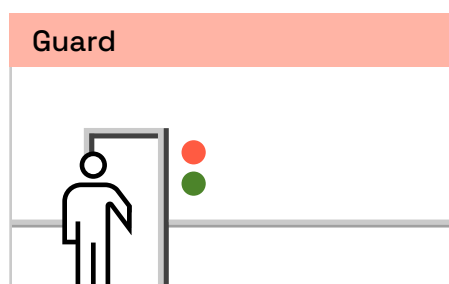
Data diodes remain one of the most reliable security solutions for unidirectional data transfer. They ensure complete confidentiality and segmentation between networks. Combining Diodes and Guards creates a

comprehensive security posture. Diodes provide one-directional data flow and a physical separation between networks, while Guards provide deep content inspection.

Building on Everfox's decades of experience supporting organizations worldwide, the Everfox Data Diode takes these benefits to the next level.

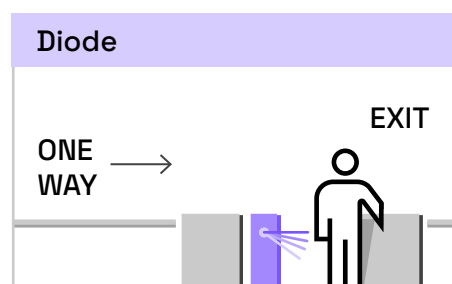
The Everfox Data Diode enables rapid, uni-directional, automated data transfer and is easy to configure and customize for any specific protocol or data type.

Real World Comparison



Security Checks

- Deeper inspection than ID only
- Detailed inspections of personal belongings
- Authorized to take/remove unauthorized/banned items



Airport Exit

- One-way path of exiting
- No security inspections
- Cannot reenter without going through security checks
- No record of leaving airport

Figure 2: A comprehensive solution must incorporate diodes and guards.
Real World Comparison: Think of it like airport security.