

#### **REFLECTION NETWORK**

"Listenless servers" accessible via the network are attack-proof by reflections.

**DATASHEET** 

### "Listenless servers" inaccessible via the network are attack-proof by reflections.

The Reflection Network is a network based on the Transmission Control Protocol/Internet Protocol (TCP/IP) that isolates and protects servers through a proprietary technology developed by TekMonks.



#### Patented security technology

Proprietary technology that provides high levels of security for servers.



#### Listenless servers for isolation

Isolation makes them secure from cyber threats



#### Redirects attacks to mirror servers

Protects the actual server from the attack and allows it to continue operating normally.

This network allows for the use of "Listenless servers," which do not actively listen to external ports or accept incoming traffic. Due to this isolation, these servers are considered to be completely secure and impervious to hacking attempts. However, by participating in the reflection network, these servers are still able to serve data to external clients.

- Immunity to attacks
- Quick setup of reflectors
- Modify reflector
- Reuses reflector
- Prevent incoming connections



# Anything inaccessible is unhackable Anything accessible is hackable

Reflection Network redirects incoming traffic and attacks to a mirror server, which handles the traffic on behalf of the actual server. This process makes it possible to prevent attacks on "Listenless servers" without directly exposing them to the incoming traffic, making them highly resistant to cyber threats.

Reflections are a crucial component of the security strategy for "Listenless servers". They work by redirecting incoming traffic and attacks to a mirror server, which handles the traffic on behalf of the actual server. This process makes it possible to prevent attacks on "Listenless servers" without directly exposing them to the incoming traffic.

The reflection process works by redirecting traffic through a reflection network, which is a network of interconnected servers. When a client sends a connection request to a "Listenless server", the request is redirected to the mirror server in the reflection network. The mirror server receives the request, processes it, and sends the data back to the "Listenless server" through the reflection network. The client receives the data as if it were sent directly from the "Listenless server".

The reflection process has the ability to redirect attacks to the mirror server, which acts as a shield for the "Listenless server". When an attacker sends an attack to the "Listenless server", the reflection network redirects the attack to the mirror server. The mirror server receives the attack and processes it, preventing it from reaching the "Listenless server". This makes it possible to prevent attacks on "Listenless servers" without directly exposing them to the incoming traffic, making them highly resistant to cyber threats.

## "You cannot attack what you cannot access"

TekMonks, innovators amongst those with cutting edge cybersecurity solutions, has brought unique products unlike any others into the current marketplace. Reflection Network, a security solution to protect data has the following features:

- Immunity to attacks Mirror server allows for seamless continuity of service in case of attempted cyber attack. By attacking the mirror server, attackers are essentially attacking a redundant system, and therefore their efforts are rendered futile.
- Quick set up of reflectors Rapid installation of reflectors that will mirror servers, which won't establish a direct connection with the clients.
- **Modify reflector** Transform actual servers to not listen to any ports or even allow incoming connections. Yet, allowing reflector to open an outbound connection to the mirror server.
- Re-uses reflector Allow external clients to connect to the reflection server as it reuses pre-existing connections to serve the clients.
- Prevent incoming connections designed to prohibit any incoming connections as all forms of communication are encrypted with the Advanced Encryption Standard (AES) of 256 bits. This security measure ensures that any unauthorized attempts to access the system will be prevented and that all data transmitted between the parties involved will remain confidential and secure.

#### **Benefits**

Reflection network provides a cost-effective, simple, and secure solution for server security that is easy to use and scalable, making it an attractive option for organizations looking to improve their security posture.

- **1. High security:** By not listening to external ports or accepting incoming traffic, "Listenless servers" are highly secure and isolated from potential cyber threats.
- **2. Cost-effective:** Cost-effective as they require minimal hardware and maintenance compared to traditional servers.
- **3. Simplicity:** Simple to set up and manage, reducing the need for complex security measures.
- **4. Ease of use:** Reflection network makes it easy to manage security threats by redirecting traffic and attacks to mirror servers, without disrupting the operations of the actual servers.
- **5. Scalability:** Allows easy addition of new servers to the reflection network, making it easy to scale server capacity as needed.
- **6. Resilience:** Provides a high level of resilience to cyber threats by providing a redundant infrastructure that can handle traffic and attacks even if individual servers are compromised.







| Specifications           |  |
|--------------------------|--|
| Supported OS             | <ul><li>Linux</li><li>Redhat Enterprise</li><li>Ubuntu</li></ul> |
| Compliance               | ISO 27001  |
| System Requirements      | <ul><li>4 cores</li><li>12 GB RAM</li><li>250 GB Disk</li></ul>  |
| Product Model            | SaaS Software  |
| Installation Methodology | Delivered as Saas or Pre Built<br>VMs                            |
| Integration              | <ul><li>Windows</li><li>Linux</li><li>Network via SNMP</li></ul> |
| Support                  | Support Documentation  |

#### Produced/Printed in the UK 02/2023

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