



# Clavister Secure WAN Load Balancing Solution

A solution that never lets you down

## SOLUTION AT-A-GLANCE

- **Outperforms MPLS** – Higher service reliability, higher performance, lower costs, higher security, more scalable and flexible.
- **High-capacity** – Aggregate multiple WAN Links and utilize all links at the same time.
- **Robust** – Distribute load across multiple links and monitor the health of each link.
- **Scalable** – Scale as easily from two to three to ten links.
- **Flexible WANs** – Use any combination of fixed cable, WiFi, 3G, 4G/LTE, Satellite or radio links.
- **Application Transparency** – Applications will operate smoothly and without special configurations.
- **Flexible deployment** – Deploy using turn-key hardware appliances, Virtual Gateways or even as a SDN/NFV components.

## The Challenge

Secure and reliable connectivity to the internet or to a central HQ is key for many business cases. Unfortunately reliable and high-performance links are not available everywhere and for everyone.

On movable objects such as trains, busses, boats and cars it is especially difficult to achieve reliable connectivity if using a single type of WAN link.

MPLS Links is often considered reliable but in reality even these expensive links suffer from latency, peak-hour performance issues and are often not secure at all.

### Solution Overview

The Clavister Secure WAN Load Balancing solution ensures highest possible service availability and security by using multiple VPN tunnels and distributing traffic across multiple WAN links, preferably with different technologies such as WiFi, fixed cable, xDSL or even satellite.

### Robust – Minimum Service Downtime

By connecting multiple WAN links to the Clavister Security Gateway it is possible to ensure that your mission critical communication flows with minimum disruption.

### Smooth Integration – Transparent for the applications

Thanks to the unique packet-by-packet load distribution over VPN links provided by Clavister your applications will not even notice if one or several of your links is unavailable or have too high latency.

## Capacity Scaling – Improved Network Performance

The Clavister Secure WAN Load Balancing solution does not just use multiple links for backup but can even aggregate all links and actively use them at the same time, resulting in a network with higher performance and better scalability.

## Reliability – A Network that's Always Up

---

The Clavister Secure WAN Load Balancing solution ensures maximum availability for your mission critical communication by utilizing multiple WAN links simultaneously. Each link is monitored by the Clavister Health Monitoring feature that will detect if a link is unavailable, has too high latency or having intermittent problems. In events where a link is no longer healthy, your traffic will be routed across the other WAN links until the unhealthy links becomes available again.

Thanks to the unique packet-by-packet distribution feature the applications in the network will not even notice when links goes up or down. This ensures a smooth integration where no additional work is needed in order to start aggregating links and distributing traffic across them.

## Increased Capacity - Load Aggregation

Using the Clavister Secure WAN Load Balancing solution does not only improve service availability but also increase network performance. By aggregating the WAN Links and distributing the load across all available links means that no capacity is wasted.

## Moving Objects – Solving the problem with intermittent connectivity

Using multiple WAN links of different types, such as WiFi, fixed cable, xDSL, radio or even satellite and distribute the load across these links is a great solution for moving applications such as on trains, busses, cars and boats. No matter what type of link it is that has connectivity for the specific point in time, the Clavister Secure WAN Load Balancing solution will ensure that your communication flows smoothly and without the hassle of re-configuring any of your applications or underlying network equipment.

## High Security - Encryption with Traffic Distribution

Hackers, competitors and even governments are known for eavesdropping on network traffic and the best way to avoid this is to encrypt your communication using, for example VPN.

Even if VPN itself ensures were high level of data confidentiality the more sophisticated parties such as the NSA and others can still decrypt the communication and re-assemble the content. Clavister Secure WAN Load Balancing makes this virtually impossible since all data is split up in many fragments and transmitted over multiple VPN tunnels, across multiple WAN, each with its own encryption. This means that Clavister Secure WAN Load Balancing provides military grade encryption utilizing common industry practice technologies that not even NSA will be able to penetrate.

## Features

---

Feature	Benefit
Resilient Load Balancing	Utilize multiple WAN connections simultaneously and ensure that traffic is flowing with as little service downtime or disruption as possible.
Link Health Monitors	Actively monitors the health and performance of all your links to ensure optimal network capacity. This ensures better working applications and more satisfied users.
VPN with High Security	Ensure the confidentiality of your communication and avoid data loss and security breaches.
Flexible Deployment	Deploy the exact same technology using either turnkey hardware appliances, virtual appliances or even as components in a SDN/NFV scenario. This provides more flexibility and makes it easier to manage.
Capacity Scaling	Aggregating the capacity from all links and utilizing them at the same time provides a better network performance and makes it easy to scale the WAN capacity as your needs increase.
Central Management	Easily manage large networks with many devices, across multiple geographical locations in a smooth and effective way with a minimum amount of resources/cost. With Clavister the Central Management system comes included in your normal maintenance fee.

## Benefits and Conclusions

---

The Clavister Secure WAN Load Balancing solution ensures maximum network availability with minimum disruption. Thanks to the unique packet-by-packet load distribution capabilities it is easy to integrate the solution in almost any network environment as the traffic is managed in a way that is transparent for the applications.

The Clavister Secure WAN Load Balancing solution is more secure than any MPLS link but also more secure than traditional VPNs as traffic is distributed between multiple VPN tunnels and across multiple WAN links.

The unique combination of scalable WAN link aggregation, security, minimized network downtime and flexible deployment make the Clavister Secure WAN Load Balancing solution a perfect match for anyone who needs reliable network communication.

## Where to Buy Clavister

---

For more information about where to buy Clavister products, visit [www.clavister.com/partners](http://www.clavister.com/partners). Additional resources and customer testimonials can be found at [www.clavister.com/support/resources](http://www.clavister.com/support/resources).

---

#### About Clavister

Clavister (NASDAQ: CLAV) is a leading security provider for fixed, mobile and virtual network environments. Its award-winning solutions give enterprises, cloud service providers and telecoms operators the highest levels of protection against threats, with unmatched reliability. Clavister's performance in the security sector was recognized with the Product Quality Leadership Award from Frost & Sullivan. The company was founded in Sweden in 1997, with its solutions available globally through its network of channel partners. To learn more, visit [www.clavister.com](http://www.clavister.com).

#### Where to Buy

[www.clavister.com/partners](http://www.clavister.com/partners)

#### Contact

[www.clavister.com/contact](http://www.clavister.com/contact)



# CLAVISTER®

WE ARE NETWORK SECURITY

Clavister AB, Sjöгатan 6 J, SE-891 60 Örnsköldsvik, Sweden

■ **Phone:** +46 (0)660 29 92 00 ■ **Fax:** +46 (0)660 122 50 ■ **Web:** [www.clavister.com](http://www.clavister.com)