## Link Balancing & Failover



### **FAILOVER SOLUTIONS**

Whether you're hosting your own public applications or have a workforce that always requires access to the Internet, connectivity can become a bottleneck. By deploying only a single link which of course will go down at the worst possible moment, any outage becomes a disaster: employees are unable to access online resources and customers are no longer able to complete transactions, which can result in catastrophic revenue losses for your business, as well as a tarnished image. For businesses who need to support their international home & traveling workforce, employees should always have a way to VPN back into their corporate office, even during link outages.



The obvious solution is to throw in a backup link. As long as one link is working well, everything runs smoothly. But how do you manage multiple links? Does your network support automatic failover during link outages, or will a network administrator need to manually conduct the transition? The traditional approach is to turn to the Border Gateway Protocol (BGP). While it is capable of managing multiple links, it usually comes with serious disadvantages. To use BGP, all networking equipment must be BGP-capable, which is typically more expensive, and needs enough power to synchronize with the 250,000+ Internet based routes. In addition, organizations usually need to purchase a "class C" service for the IP address range which is becoming harder to obtain as the number of IPv4 addresses is depleting and becoming more expensive.

### **DID YOU KNOW?**

Three main causes of telecom carrier outages are physical breaks, weather related and network updates/upgrades. Even the best and most reliable Fiber circuit can be severed by accident. ISP and technology diversification is the best way to avoid unpleasant outages.

# MARTELLO'S ELFIQ NETWORKS' LINK BALANCING AND FAILOVER

Martello's Elfiq Networks' link balancing solutions bring a new level of bandwidth management and uptime to organizations looking to improve their overall competitiveness and reduce costs. With any Elfiq Link Balancer, organizations can use multiple ISPs for outbound traffic balancing, distributing traffic optimally across all links. This process can be customized to meet specific needs and requirements or to maximize existing bandwidth with the use of several different balancing algorithms. The Elfiq Link Balancer continually monitors the health of each ISP and distributes bandwidth accordingly. When a carrier link fails to respond normally, the Elfiq Link Balancer removes it from the list of available ISPs but continues testing it. When it becomes available again, it will be used normally along with the other links. The LBX Series can handle complex scenarios and guarantee bandwidth for key services while still performing failover tasks. Furthermore, such devices are very simple to deploy and provide visibility through the use of detailed statistics and charts.

Links of different speeds, providers and technologies can be aggregated together to provide larger, costeffective, scaleable and manageable virtual links while also providing network resilience. This means that your organization is not dependent on a single ISP and/or technology. Specific traffic can be sent down (or up) specific links and be instantly redirected during a link failure or outage.



## BENEFITS OF ELFIQ **NETWORKS' LINK BALANCERS?**

- 1. Leverage simultaneous ISPs for added flexibility, seamless failover, increased throughput and smarter path selection
- 2. Proactively balance inbound traffic requests with iDNS
- 3. Remain in complete control of all traffic flows to and from the internet
- 4. Does not require any reconfiguration, resulting in minimal deployment costs and risks

With an easy integration and a rich feature set, you can rest-assured that with Martello's Elfiq Networks' LBX devices, so long as one of your ISP links is working correctly, you will retain Internet connectivity. The LBX Series are easy to deploy and scale, allowing any organization to manage and balance all its Internet-based traffic. No need to manually balance and failover traffic anymore, to rely on complex dynamic balancing algorithms like BGP or to settle for the limited capabilities of your firewall.

With a vast array of LBX models, all of which can support different degrees of bandwidth and support innovative features, odds are that there is a model which will fit your environment and that will not require you to break the bank.







#### About Martello

Founded in 2009, Martello Technologies is headquartered in Ottawa, Canada with staff in Canada, the United States and France. In January of 2018, Martello merged with SD-WAN player Elfiq Networks to offer a solution that pairs performance management software with SD-WAN technology to provide stellar UC performance. Martello's solutions deliver confidence in the performance of real-time services on cloud and enterprise networks and is a proven provider of rmance management software for Mitel customers.