Leeward Business Advisors (LeewardBA) specializes in helping clients leverage technology to achieve compelling business results. The company offers its customers a broad range of services, workshops, and life-cycle consulting that cover topics such as technology, finance, risk reduction, and IT operational support.

When the Going Gets Tough

With decades of experience in the IT sector, Leeward Business Advisors is frequently pulled into situations where companies need immediate help. Michael Polzin, CEO of LeewardBA, recalled a recent scenario: “We were called by a partner that had unsuccessfully tried to assist with a very technically challenging issue, which needed to be addressed within an extremely tight time frame.”

The client in question was Kings Road Merch (KRM), a full-service music merchandising company that provides bands with customized online stores, tour supplies, and retail distribution. KRM’s client list reads like a who’s who of performers from across a wide spectrum of popular music genres, including Ziggy Marley, the Beastie Boys, Dropkick Murphys, and Rise Against. KRM also provides the online merchandising presence for apparel-maker Vans’ hugely successful Warped Tour and for several record labels, such as Epitaph Records, itself a promoter of dozens of well-known artists.

Big Problems

Kings Road Merch is acutely aware of the critical responsibility it has to its bands and artists: Buyers of band merchandise aren’t just customers—they literally are fanatics—so having a poor buying experience directly reflects on the relationship a fan has with the artist. Similarly, for many bands, merchandising represents a very large percentage of overall income, so it’s imperative to ensure a completely trouble-free transaction.

As with all internet retailers, one of KRM’s biggest fears is suffering an unplanned outage, especially during peak buying times like Black Friday—frequently cited as the busiest shopping day of the entire year. Polzin elaborates, “Kings Road Merch had already experienced several site-wide web server crashes during periods of high-volume traffic. As online sales are KRM’s only source of revenue, this is a big problem!”

The challenge for LeewardBA was to analyze the issues, and then design, test, and deploy a completely revised IT architecture— encompassing almost 400 individual websites—all in time for a rapidly looming Black Friday relaunch.
One Step at a Time

Jason Klein, CTO for Leeward Business Advisors, says, “We segmented the architecture into four functional areas and determined that by addressing issues with KRM’s existing firewall and content/delivery functions, we would have an immediate positive impact.”

He continues, “We are enthusiastic users of many Fortinet solutions—including FortiGate, FortiSwitch, FortiSandbox, and FortiMail—and were very excited to hear about the FortiADC application delivery controller.”

The FortiADC controller combines intelligent load balancing with a web application firewall and automatic failover to deliver 24/7 application availability. “It seemed like the perfect fit for the KRM environment and the specific challenges the company has, so we decided to do a real-world evaluation by performing a proof of concept [POC],” Klein notes.

To assist in confirming sizing and throughput requirements, KRM granted LeewardBA access to the production ecommerce platform. The team defined a set of acceptance criteria, including detailed functionality and performance characteristics. “We also investigated maintenance and management requirements, as it was important for the FortiADC controller to be able to handle real-time configuration changes—like taking down nodes and swapping servers—without disrupting operations. Previously, doing this in the legacy environment caused serious outages, with each one creating a measurable revenue hit,” Klein observes.

Taking Everything in Its Stride

The FortiADC controller delivered on expectations: “We had a high level of confidence that the FortiADC controller would pass the POC with flying colors,” Polzin states. “And it did! The FortiADC solution gave us exactly what we needed and being part of the Fortinet Security Fabric ensures that all the components integrate well together to deliver best-in-class performance for clients.”

Klein confirms, “We were particularly impressed with the significant ability of the FortiADC solution to dynamically scale: This is critically important for companies like KRM because of their potential for growth and the need to accommodate massive spikes in traffic associated with new releases, tour announcements, promotional events, et cetera.”

A decision was taken to go live and move the FortiADC solution into the full production environment, displacing the legacy gateway. “Previously KRM operated with heavily limited failover capabilities, but now the FortiADC provides full cross-site resiliency, and we’ll further bolster disaster recovery functions when we roll to a second site in the next phase,” Klein says.

Extensive use is being made of the comprehensive scripting capabilities in the FortiADC controller, in areas like secure sockets layer (SSL)/transport layer security (TLS) encryption offloading and redirection. On-the-fly server swaps are accommodated without interruption and comprehensive reporting capabilities provide detailed visibility into traffic patterns.

The architectural redesign conducted by LeewardBA deliberately eliminates single points of failure. “We’ve been able to dispel the fear of a catastrophic outage,” Polzin observes. “And because KRM’s sites don’t go down anymore, they are able to sell more items to happier end-users in less time.”

He adds, “The FortiADC controller’s ability to intelligently allocate traffic across a pool of servers—instead of having one server dedicated to each individual site—really enables KRM to maximize the return on its IT investments; financially, technically, and operationally.”

With the stability of the FortiADC solution, Kings Road Merch is now able to run even the biggest artist and band promotions without the web sites crashing. In turn, this has led to new business from other performers attracted to the KRM value proposition.

Business Impact

- Increased revenue generation through improved site availability
- Enhanced user experience driving repeat purchases
- Removed single points of failure and implemented full resiliency
- Optimized existing IT investments
- Accommodated spikes in revenue-generated traffic and systemic growth in business volumes

Solution

- FortiADC

“Fortinet is one of the rare breed of companies that continually impresses us—the global presence, the reliability, the quality—everything comes together within the Security Fabric to create outstanding solutions. The FortiADC solution is just one more example of Fortinet making it happen.”

– Michael Polzin, CEO, LeewardBA
Polzin sums up the experience, "Fortinet is one of the rare breed of companies that continually impresses us—the global presence, the reliability, the quality—everything comes together within the Security Fabric to create outstanding solutions. The FortiADC solution is just one more example of Fortinet making it happen."

Matteo Ferrari, chief technology officer at Kings Road Merch, adds, “Leeward Business Advisors has been able to synthesize our business requirements and create a technology strategy that fully supports our objectives. We’re leveraging state-of-the-art components to deliver a flawless experience to fans around the world, including our first ever Black Friday without a hitch!”