

Challenges

- High-volume, secure data analysis & transactions
- Well-known, incumbent load balancing and SSL acceleration products slowing application performance
- Existing solution peaking at 10 Mbps - jokingly referred to as the SSL decelerator

Solution

- Array SLB + SSL acceleration w/ market leading SSL TPS
- Cost-effective solutions w/ best value on the market
- Software upgradeable to support disaster recovery w/o additional hardware

Results

- 90% improvement in processing HTTPS traffic
- Enabled more users on fewer servers, greatly increasing ROI

Banking on Array for securing and accelerating business critical financial services applications.

A subsidiary of its larger parent company Moody's, Moody's KVM is the world's leading provider of quantitative credit analysis tools to lenders, investors, and corporations. The Moody's KVM database contains 30 years of information on over 6,000 public and 70,000 private company default events for a total of over 70,000 public and 1 million private companies, healthy and distressed, around the worlds.

Backgrounds

Moody's KVM analyzes and processes high-volume, secure data on a daily basis from numerous global sources to create 15 high-value custom applications packaged as products for their financial services customer base.

These customers include more than 2,000 leading commercial and investment banks, insurance companies, money management firms, and corporations in over 80 countries.

KVM's infrastructure includes two Web servers and fifteen application servers, replicated in their entirety for both quality assurance and production environments.

To support their custom applications, KVM runs a wide selection of back-end Web servers, servlet containers (IIS) and EJB containers (JBoss/Weblogic) running J2EE.

The Challenge

KVM's primary application deployment challenge stemmed from an architecture that tasked servers with performing SSL encryption individually, hindering overall performance. This performance degradation, in turn, enacted all services and applications running on the Web servers.

Initially, KVM introduced a single-purpose SSL accelerator to their network in hopes of curing the problem. Unfortunately, the product performed so poorly in production environments it soon came to be known as the "SSL decelerator".

The Array Solution

After in depth analysis, KVM concluded their application deployment requirements demanded a more comprehensive solution.

An industrial-strength SSL acceleration product was needed, one with the ability to direct static requests to Web servers and dynamic requests to application servers, all while performing intelligent load balancing to ensure high-end customers receive a premium user experience.

"Our customers now enjoy a dramatically improved application experience, and our network has never been more efficient. We are both impressed and completely satisfied with the capabilities of the Array solution."

Zack Shapiro
Client Operations Manager, KVM

After a thorough evaluation of vendors, KMV selected the Array TMX Series appliance to replace its previous-generation load balancing and SSL acceleration infrastructure, based on the Array's combination of performance, feature functionality, and overall value.

The Verdict

By supporting KMV's entire range of vendors for Web servers and servlet containers, the Array TMX Series was able to enhance the entire J2EE infrastructure.

The TMX's SSL acceleration feature allowed Web download performance (encrypted and unencrypted) to be significantly increased. Reporting indicated a 90% performance improvement in processing HTTPS traffic.

By implementing customized load balancing rules, priority customers are directed to the most optimal set of servers. This allows premium customers to have the best possible experience, which in turn results in continued high satisfaction and customer retention.

Not only was the Array appliance able to intelligently route static and dynamic content to the appropriate Web and application

servers, KMV found themselves able to take advantage of the Array's robust reporting and management tools to track customer activity and trends in order to further refine their products and better support their customers.

Summary

Based on the success of the initial Array deployment, KMV has since added a number of additional Array appliances to support their growing needs. What is the result over the course of the last year?

"Our customers now enjoy a dramatically improved application experience, and our network has never been more efficient. We are both impressed and completely satisfied with the capabilities of the Array solution," says Zack Shapiro, Moody's KMV client operations manager.

With KMV looking to further accelerate the end-user experience and move towards redundant data centers to provide disaster recovery, the best may be yet to come.

Support for license key options including caching, compression, and GSLB are set to further cement the Array TMX as a cornerstone of KMV's application delivery architecture.

Moody's KMV Architecture

