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David Sliwowicz
Vice President, FMR



Financial Application Service Provider Improves Security and Network Performance with a Single, Integrated Solution from F5

Industry

Information Technology

Challenges

- Maintain tight security for sensitive financial data
- Improve network management to deliver improved service for clients
- Increase system usage
- Provide remote network access to hosted applications

Solution

BIG-IP® Local Traffic Manager
BIG-IP® Application Security Manager
FirePass® SSL VPN

Benefits

- Passed rigorous testing with highly secure systems
- Effective traffic management, enabling clients to benefit from capacity-on-demand
- 50+ percent increase in system usage
- Secure remote access to hosted applications

Overview

Established more than 30 years ago, FMR specializes in providing software and services for the financial services market in Israel. The company's real-time, online financial trading application is used by leading banks and brokers to give their customers direct access to the trading floor.

Fulfilling the role of an application service provider (ASP), FMR hosts the trading application on behalf of its clients. As a result, the company has a responsibility to ensure the high performance and security levels its clients' customers demand.

Challenges

Tight security is a top priority for FMR. Its online trading systems store very sensitive information and are accessed by thousands of concurrent users every trading day.

“Our systems handle personal financial data, as well as information about holdings and trading activities,” says David Sliwowicz, Vice President at FMR. “Data doesn't get any more critical than that. A security breach could trigger very serious consequences—possibly exposing us to litigation.”

FMR's previous security solution had served the company well, but it had become out-of-date and was no longer supported. It was therefore essential for the company to implement a new and rigorous security solution to help FMR protect the interests of its clients and their customers.

Moreover, the company's financial trading application had been highly successful in recent years and had a strong reputation in the financial services industry. As a result, FMR regularly received inquiries from potential new clients, and was dedicated to continuing to grow its client base. At the same time, the company was also committed to developing and enhancing its services.

To achieve these goals, FMR knew it would need to maintain a highly robust and flexible IT infrastructure. While its current IT infrastructure met its existing needs, it recognized that significant changes would be required to help it expand and deliver service improvements, such as capacity-on-demand.

Finally, FMR also needed a solution to provide its clients with highly secure, remote access to hosted applications with as little administration and integration as possible.



Solution

In short, FMR had dual challenges. It needed a solution that would provide a high level of security, but also advanced network management tools to help improve service delivery for its clients.

After a thorough evaluation process, FMR selected F5 BIG-IP Local Traffic Management (LTM) with the Application Security Manager (ASM) Module, which offers advanced security features, together with Application Delivery Networking capabilities, in a modular architecture. FMR purchased three units—two for use in its core IT infrastructure, and one to support the development and testing of future services.

“BIG-IP LTM with ASM stood out from the other products we evaluated because it allows you to combine performance and security modules on a single platform,” explains Sliwowicz. “The alternative would have been to integrate three or four separate products into the network, which would have been much more complicated. Additionally, other products did not appear to support application flows as well as F5’s BIG-IP solution.”

Most significantly, BIG-IP LTM enabled FMR to undertake a huge, strategic IT infrastructure change. At the time, the company operated a number of discrete systems. Each client was allocated its own servers, firewall, and communications line; however, with the implementation of BIG-IP LTM, FMR was able to create a single system for all its clients’ services, while using BIG-IP LTM to separate communications relating to different clients. This new network infrastructure paved the way for service improvements.

F5 worked closely with FMR throughout the infrastructure change and implementation. “F5 was a strong and supportive partner for our change process,” says Sliwowicz.

To address the challenge of connecting clients to hosted applications, FMR implemented F5 FirePass SSL VPN. FMR chose FirePass because of its ability to provide extremely secure, remote access to applications using a standard web browser as well as its ease of use and superior scalability.

Benefits

Following the implementation of BIG-IP LTM with ASM, FMR commissioned a series of tests led by external experts. It also conducted tests using automated tools to try to expose weaknesses in its security. Several of the company’s clients also carried out their own security checks to satisfy their own rigorous security standards. “The results of all of the tests were excellent,” says Sliwowicz.

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In addition to strong security, FMR also benefits from the network management capabilities of BIG-IP LTM. Since the company migrated to one infrastructure, it has been able to provide its clients with a truly on-demand service.

Previously, when clients’ systems were separate from each other,

companies had to notify FMR in advance if they were likely to need more capacity. For example, if one client had a successful marketing campaign and suddenly attracted many more users to its system, FMR might have had to install a new server. It could have taken a few months to increase capacity, by which time it would have been too late. Now, with the new infrastructure, FMR can flick a switch and instantly double bandwidth in a virtual manner.

BIG-IP LTM directs traffic between web servers and performs traffic shaping to control the amount of bandwidth that each client consumes. The result is better network performance and overall system availability. “We now have a solution that enables us to quickly react to our clients’ needs,” says Sliwowicz.

Clients no longer have to invest upfront in new servers based on anticipated future demand. Rather, they can expand their capacity as required and pay for what they need, when they need it. “Our customers can now save 50 to 90 percent depending on their size,” calculates Sliwowicz.

And it is not just FMR’s clients that have benefited. FMR itself has won business with additional banks and brokers and grown its system since the implementation of BIG-IP products.

“Use of our system has increased by more than 50 percent,” says Sliwowicz. “This is partly due to the fact that our system now works with less bottlenecks than before. It also reflects the fact we have been able to expand our service to new customers and there has been a general rise in the stock market.”

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