Insurance Provider Broadens Customer Experience, Boosts Security with Integrated F5 Solution

Pekin Insurance, a large Midwestern insurance policy provider with 1,200 agencies and 7,500 independent agents, is always striving to better serve its customers. Pekin wanted to give its growing number of tech-savvy customers direct online access to policy and billing information. To do that, Pekin launched a new web application, called My PI that would deliver a self-service customer portal. To provide the high availability and security My PI needed, the company implemented F5 BIG-IP Local Traffic Manager (LTM), BIG-IP Application Security Manager (ASM), and BIG-IP Access Policy Manager (APM).

Now, Pekin Insurance offers strong security for its web application and can attract and serve the needs of tech-savvy policyholders. The organization also saved almost $50,000 by not having to implement a new server cluster, and used its new F5 products to take advantage of load balancing and a streamlined user interface. Additionally, the company now has the right technology in place to expand functionality in the future.

Business Challenges

Since 1921, Pekin Insurance has been one of the most successful insurance providers in the United States with combined assets of $2 billion. Based in Pekin, Illinois, the organization offers auto, home, life, health and business insurance to individuals and organizations.

To differentiate itself and meet customer demands, as well as attract new, younger customers, Pekin wanted to offer its policyholders the convenience of instant access to their policy and billing information online. "Our tagline is 'Beyond the Expected,' and one of the ways we want to demonstrate that is by getting information to our customers faster and more securely," says Davin Miller, Senior Technical Services Lead Analyst for Pekin Insurance. "We wanted our policyholders to be able to access their insurance claims and billing information directly online. Previously, they could only get this information by contacting an agent or personnel at Pekin Insurance's home office."

To provide these services, Pekin Insurance wanted to introduce a new online application, My PI, in early 2011 that would deliver a self-service portal. My PI would give policyholders access to billing information details, as well as the ability to open a claim and pay their bills online. With this new application, policyholders would be able to instantly view policy and account information.

Because My PI would be accessed by thousands of policyholders, Pekin needed to ensure high security. "We wanted to require authentication before exposing any components of the application which provide sensitive data," says Miller.

Customer: Pekin Insurance

Products:

Application Security Manager

Access Policy Manager

Local Traffic Manager

Benefits:

Secured critical web application

Attracted new customers

Saved almost $50,000

Optimized network, streamlined administration

Provided foundation for future growth

Challenges:

Ensure high security

Broaden online user experience

Optimize the network

Minimize costs and prepare for future growth

However, implementing My PI promised to be a challenge because the infrastructure supporting the new application was complex; it used a traditional DMZ network where the user interface servers are set up between an inner Cisco ASA firewall appliance and an outer firewall. The organization also utilizes a virtualized back-end environment, with a five-server virtual cluster based on the VMware vSphere virtualization solution. My PI would reside within this virtualized environment, and its user interface would be hosted on Microsoft Internet Information Services (IIS), Microsoft's web server.

My PI would require a two-node virtual web server cluster to be built between Pekin's edge firewall and its internal Cisco firewall, as the company wanted it to provide authentication before users reached the internal web servers.

"To provide authentication, the new application required us to build a new server cluster in the DMZ, but that was going to be expensive and time-consuming to install," says Miller. Pekin also wanted to optimize its new application and ensure high availability by balancing the network load across its virtual servers.

As Pekin implemented its new web application, it wanted to ensure that, in addition to minimizing costs, the technology it chose to support My PI would also support future growth.

Solution

In July 2011, Pekin began evaluating appliance-based security solutions that would allow the company to push its IIS servers back to the internal VMware cluster—a much quicker and less expensive implementation than housing them in the DMZ. After considering solutions from several vendors, Pekin chose F5. "We decided to pursue F5, based on its great reputation in the marketplace," says Miller.

In November 2011, Pekin implemented two F5 BIG-IP LTM devices to intuitively load balance traffic for My PI on the company's back-end VMware servers. To enhance security, Pekin then leveraged the BIG-IP ASM add-on module, a web application firewall that secures web applications in physical and virtual environments. Pekin also implemented the BIG-IP APM module, which offers further support and management of security authentication. BIG-IP APM provide two-factor authentication and enabled Pekin to apply specific access policies to different types of users.

Pekin's new F5 solution sits at the front end of its VMware environment, which contains 150 virtual machines. The F5 solution sits behind a Cisco ASA HA pair. The F5 technology uses VMware APIs and SDKs to provide strong integration between the two product lines. For example, administrators can use the F5 iControl API to bring new servers online and offline as needed, give priority to critical traffic during traffic spikes, and distribute software updates without affecting service.

During the implementation of the solution, Pekin received guidance and other technical support from F5 Professional Services. "We're a very busy IT department, and we didn't have a lot of time to plan for this project," Miller remarks. "Professional Services really helped us out in terms of a knowledge transfer on BIG-IP LTM, APM, and ASM."

The new Pekin Insurance web application was initially tested by 200 Pekin employees who are also policyholders with the company. Now, over 3,500 policyholders are using it.

Benefits

With its F5 solution, Pekin Insurance has secured its new web application and is attracting a growing market of younger, more tech-savvy customers. The solution also helps Pekin save money by not having to create a new server cluster, and it provides load balancing and easier IT administration. Further, the solution gives Pekin a secure yet flexible foundation for future applications.

Secured critical web application

Pekin Insurance now has an integrated solution that provides the security it needs for its new web application. "Security today is everything, and BIG-IP LTM, APM, and ASM give us the web application firewall, redundancy, and secure authentication we need," says Miller. "By reputation, F5 Networks is one of the best security solution providers, and this technology is a major piece of our overall security strategy at Pekin Insurance."

Attracted new customers

The flexibility of its new solution helps Pekin meet the demands of tech-savvy customers. "We want to attract new customers, and many new policyholders prefer doing business online," Miller says. "This solution gives them the option of doing that, so we feel it will help us reach new customers, while still offering the advantages of working with one of our independent agents."

Saved almost $50,000

With the combination of BIG-IP LTM, APM, and ASM, Pekin avoided having to implement a new physical or virtual server cluster in its traditional DMZ. "Between the cost of the virtual servers and the VMware licensing, it would have cost close to $40,000 for us to create a new VMware cluster in the DMZ," says Miller. "And because of the F5 solution's capabilities, we could repurpose the internal-facing ASA failover cluster, which saved another $7,000. We saved close to $50,000 just by leveraging our internal VMware cluster and fronting it with F5 technology."

Optimized network, streamlined administration

Pekin's new BIG-IP LTM devices gave it a strategic point of control for optimizing the network, so it could provide high availability for My PI. "BIG-IP LTM gives us the ability to balance the load to back-end virtual machines, providing the availability we need," says Miller.

Pekin IT administrators can use a single user interface to view and manage BIG-IP LTM, APM, and ASM, so IT administration is streamlined and simplified. "The look and feel of the load balancing, authentication, and web application firewall technologies is the same, so that's a huge advantage to us," says Miller. "Time and money for training are tight for our IT department, so being able to manage a lot of functionality from the same UI cuts back on training overhead and saves time for us."

Provided foundation for future growth

The F5 solution also gives Pekin Insurance a solid technology foundation on which to build future applications and other projects. "This new structure works very well for us, and we are confident that we can use it for all of the web applications we build going

forward," says Miller. "We plan to use this infrastructure to roll out new mobile application support in our BIG-IP 3900 cluster this year. With F5 as our application delivery solution and authentication solution, we have the right foundation to make that happen."

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