MailControl Delivers Better Security Using F5 on AWS

Security company MailControl needed more visibility into the email traffic flowing through its application. Using virtualized F5 services on Amazon Web Services (AWS), the organization increased its application monitoring capabilities and improved security for its customers, while automating processes to support its agile DevOps process.

Business Challenges

Based in Chicago, MailControl secures enterprises against the ever-increasing danger of privacy breaches and information loss. The company's anti-spymail product line helps its customers defend against emails containing hidden tracking codes that send recipient metadata such as location and system information to the sender. MailControl also helps organizations comply with regulatory requirements such as the upcoming General Data Protection Regulation (GDPR), which prohibits companies from using email tracking without recipients' express consent. "We protect employees from being spied on through their corporate email, and we also protect companies from fines and liabilities stemming from unaware or rogue employees who use email tracking to illegally spy on external recipients," says MailControl founder Paul Everton.

MailControl has based its operations on AWS since its inception. "Treating infrastructure as a utility that can be consumed when needed brought down costs and barriers to entry," says Everton, "which allowed even the smallest companies to compete with the large, established players." In addition, MailControl's founder appreciates the continued evolution of the platform and the versatility it brings to the organization. "We operate on AWS due to its innovation in databases, compute, storage, content delivery and more, which have allowed us to dramatically increase the functionality of the applications we build," says Everton.

After conferring with the AWS team, Everton decided to look for additional traffic management functionality to provide the visibility required to ensure the security of its customers. The company has a complex networking environment, and needed a product that could handle all its routing, networking, and load balancing. "One of the main reasons we considered moving to the F5 BIG-IP platform was because of its superior networking capabilities and the security that they provide," says Everton. "When you're dealing with email, you need to know the IP addresses of whoever is attempting to connect to your infrastructure, but we had no visibility into our email traffic—so all that vital information was hidden away from us."

In addition, MailControl operates an automated infrastructure using DevOps methodologies, so the company wanted a full-featured traffic management platform that would integrate with their automated development and testing processes. "Email sounds simple," says Everton, "but there are 60 different vendors that we have to test against and tons of different variations. Without automating that testing, we couldn't provide services to our customers." The organization needed a solution that would support the business imperatives to shorten release cycles and speed time to market.

We can provide better security for our customers based on the visibility that F5 gives us.

—Paul Everton, Founder and CTO, MailControl

Solution
After defining their requirements, the MailControl team began looking for a product that would help them continue to grow, while keeping their customers secure. "I had deployed F5 devices before for some of the largest companies in the world," says Everton, "so I had confidence in the solution working for us."

The organization decided upon F5 BIG-IP virtual editions (VEs), deployed the software from AWS Marketplace, and selected the utility licensing model. "We have a lot of development environments that get dynamically created and then shut back down," says Everton. "The utility licensing model ensures that we're not being charged for that infrastructure when we're not using it."

In addition, utility licensing gives the young company additional flexibility as it plans for growth. "With the growth that we're anticipating, we didn't want to get locked into a specific type of license," says Everton. "It's easier for us to just continually upgrade without having to factor in a bunch of sunk costs."

MailControl was fully up and running within a week, thanks to the fast and simple deployment of BIG-IP VEs on MailControl's AWS environment. "We're happy," says Everton. "And as our environment continues to take on more and more traffic, being able to quickly allocate new resources behind a new BIG-IP instance makes it easy to deliver the stability and security our customers require."

Using F5 on AWS has been a great experience.

—Paul Everton, Founder and CTO, MailControl

Benefits
MailControl supported its agile DevOps process by deploying BIG-IP VEs on AWS, leading to improved confidence in the high availability of its services, greater application visibility, and enhanced security for its customers.

Ensures security and compliance

By protecting its customers' email metadata against spymail breaches, MailControl contributes to overall operational security. The company uses BIG-IP Local Traffic Manager (LTM) to route and secure all the email traffic that flows through its application. "We also use F5 for outbound NAT connectivity and spread that NAT across multiple IP addresses to boost performance," says Everton.

In addition, BIG-IP LTM's application visibility features make it easy for the organization to monitor exactly how its application is performing based on response times, network conditions, and user context. "We can provide better security for our customers," says Everton, "because of the visibility that F5 gives us."

Supports a DevOps environment

Everton and his team at MailControl appreciate how seamlessly the BIG-IP platform integrates with the company's DevOps process. "We have a fully automated deployment process," says Everton, "so as we commit code to our environment, that code is automatically rebuilding new infrastructure, placing it behind a BIG-IP instance, testing it, and pushing it into production."

MailControl employs the simple, lightweight iControl REST API to give the team full programmatic access to the BIG-IP platform. "We use F5 APIs to automatically provision and de-provision servers as they're being built by our automated infrastructure," says Everton. This automation both integrates with and augments MailControl's agile DevOps process. "When we cross certain network traffic thresholds," says Everton, "we can automatically allocate more infrastructure to handle it."

Delivers exceptional stability

As a SaaS provider of next-generation email security, MailControl must ensure that its service remains highly available for its business customers. "The main reason that I was so comfortable choosing F5 on AWS is that I've seen BIG-IP devices in data centers stay up for extraordinarily long periods of time with no problems," says Everton. "On AWS, we've got the same code base in a virtual environment; to me, that's a no brainer."

Having a familiar and trusted brand available in the cloud was a big factor in MailControl's adoption of F5 technology. "Using F5 on AWS has a been a great experience," says Everton. "We were able to stand it up really quickly, and now we have confidence that it's going to run for a long period of time without any outages. That's what you want."

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