

CASE STUDY

FortiFlex Licensing Enables Efficient Firewall Provisioning in Fluid Security Environment

Water is a basic human need, but providing the world with clean and safe hydration requires a complex global business. Today, a water treatment company operates retail stores, warehouses, manufacturing facilities, logistics centers, and offices across the Americas and Europe. The number of locations and those sites' operational scope both continue to grow as the company is in a period of significant merger and acquisition (M&A) activity.

"We engaged in 60 acquisitions last year," says the company's network engineer. "In that environment, anything that makes it easier to integrate the other organization into our business is a win for our team."

FortiGate VMs to Secure Transition to Azure

The company operates decentralized, with business units mostly making their own decisions about which applications they use. Those applications and all their data formerly resided in corporate data centers worldwide. Two years ago, it began requiring many applications to move into the Microsoft Azure cloud.

"Our environment is a layered set of hub-and-spoke networks, and our move to the cloud is reducing network complexity," the company's spokesperson says. "Companies we acquire typically continue to operate as standalone business units. In the past, most had their own domain, so we had more than a dozen domains in the Americas alone. This complicated tech support and network management. We saw that moving to the Azure cloud would enable us to consolidate down to one domain, which would make everything a lot easier."

"In addition, we wanted to get out of the business of maintaining hardware at all our disparate sites, and in a few cases, we wanted to reduce costs by ending our relationships with our co-location providers," he adds. "We called the transition our 'remediate, consolidate, and optimize' project."

For years, the company had used FortiGate Next-Generation Firewalls (NGFWs) to protect its on-premises environments and provided impressive security, reliability, and performance. "The throughput with the FortiGates has always been far-and-away better than what I have seen with other vendors," he says, "especially when you consider the cost. In a company where I worked previously, I used a different vendor's firewalls, and the cost-to-performance ratio was much, much higher for the same mix of security services that we now have with Fortinet."

Thus, as the company started planning the transition from an on-premises-only environment to a primarily Azure-based network, its networking team wanted to deploy FortiGate virtual machines (VMs) to protect its new cloud environment. A key challenge was properly sizing the cloud-based firewalls.





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Network Engineer, Water Treatment Company

Details

Industry: Power and Utilities

Business Impact

- 15% cost savings on FortiGate VMs by right-sizing
- 30 minutes to deploy a new firewall vs. more than a week previously
- Efficient integration of acquired companies into the corporate cloud environment
- Discovery of shadow IT environment when firewalls showed up as a FortiFlex points expenditure
- Cost-effective approach to spinning security testing environments up and down

"We had no way to estimate the size of the VMs that we would need because we were gathering so many disparate servers and putting them into one environment," he explains. "We were concerned that we might deploy with a certain number and size of FortiGate VMs, but then realized after they were provisioned that we needed to scale up further. Making that change after the fact would have taken a long time and impacted the business. So, we were looking at overprovisioning our firewalls, just to be sure we would not have to replace them down the line."

FortiFlex Lowers FortiGate VM Costs by 15%

The company was working with a value-added reseller (VAR) on a quote for the FortiGate VM license, and the reseller presented an interesting idea: FortiFlex usage-based licensing. With FortiFlex, rather than buying VMs directly, an organization purchases points that it consumes according to the Fortinet solutions it is using day by day. This means companies can dynamically scale their FortiGate, FortiManager, FortiAnalyzer, FortiWeb, and FortiADC VMs as well as other Fortinet services and solutions supported in the FortiFlex catalog up or down to fully and efficiently secure its digital initiatives, no matter how those projects evolve or shift.

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The company began rolling out its new cloud environment. "Everything that is in Azure today was in one of our on-premises sites two years ago," he says. "We are constantly moving more and more assets as we try to consolidate all our data centers down to the cloud."

Throughout this move, the company has leveraged FortiFlex licensing to provision FortiGate VMs and FortiManager VMs for managing the security environment. "When we first bought FortiFlex points, we purchased enough additional points on day one to size up all our VMs," he says. The benefit of slightly overprovisioning in terms of points rather than firewall licenses is that the company's FortiGate NGFWs are right-sized and use points only as needed. When more points are needed, they can be added at any time. Plus, unused points can be rolled over to following years with a valid subscription.

"We ran the numbers and showed that by not overprovisioning the FortiGates, we are spending 15% less, thanks to the FortiFlex licensing," he adds.

Solutions

- FortiGate Next-Generation Firewall
- FortiGate VM
- Fortinet Secure SD-WAN
- FortiWiFi
- FortiManager

Services

- FortiFlex Security Licensing
- FortiGuard Al-Powered Security Services Unified Threat Protection Bundle

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Streamlined Security and Network Management

FortiGate NGFWs and FortiWiFi devices still protect the network edge in every company location around the world, while FortiGate VMs secure the cloud environment. All its resources sit in one of three domains: one for the Americas, one for Europe, and one for Azure. The team manages configurations and policies for all the firewalls via FortiManager.

"FortiManager streamlines configuration management," its spokesperson says. "It is very nice that I can click into the Americas VDOM [virtual domain] and see, at a glance, the specific sites that have a problem I need to take a look at."

The FortiGuard Al-Powered Security Services Unified Threat Protection (UTP) Bundle enhances the NGFWs' security. "We require business units to use the web filter and intrusion prevention system [IPS] on all outgoing traffic, as well as the IPS and application filters internally," he says. "We are also using the antivirus companywide. And we are using Fortinet Secure SD-WAN, which is integrated into the physical firewalls, to do load balancing for our internet service providers."



Better Business Agility through Accelerated Firewall Provisioning

The company continues to use FortiFlex licensing mostly for the FortiGate NGFWs because, "As we move more and more services into Azure, we are not really sure what our network's final state will look like," he says. The company's propensity for M&A adds to the uncertainty.

"As we acquire companies, we are moving them into our cloud environment and our domains," he says. "There is no good way to forecast for it because when we do budgeting at the beginning of the year, we do not know how many companies the company is going to acquire or how much infrastructure we will need to move into the cloud. We do not have a solid view of how much throughput we will need on the firewalls by the end of the year. The FortiFlex program fits our needs perfectly, letting us size firewalls up or down as needed."

Another benefit of the FortiFlex approach is that corporate IT has single-pane-of-glass visibility into security licensing, so the IT team manages and provisions all FortiFlex points companywide. That has helped them pinpoint some shadow IT work. "One of our EMEA regions spun up two firewalls without telling anyone about it," he says. "We discovered the firewalls when they started consuming FortiFlex points. Because we saw the new environment through the FortiFlex dashboard, we were able to bring it out of the shadows and deal with it."

The centralization of the management of FortiFlex points and FortiGate VMs, and the flexibility delivered by FortiFlex, also enables the team to directly provision new NGFWs on-demand without needing to work through a third party for licenses. "One time, when several of our physical FortiGates came up for relicensing, it took our VAR more than a week to provide a quote," he says. "Then we had to get the firewalls through purchasing before we had the license in hand. With the FortiFlex points approach, I can spin up a new firewall in half an hour."

This saves time that staff would otherwise spend dealing with firewall provisioning. The benefit would be particularly significant if the team under provisioned a firewall. "With the traditional approach to licensing, we might have to rely on our original FortiGate VM for more than a week, which means that the firewall would be in a conservative mode, possibly impacting people's ability to do their jobs, for that time. With FortiFlex, if we realize we have undersized a virtual firewall, we can replace it with one that is the right size, very quickly and on our own."

FortiFlex also enables the IT team to launch NGFWs very quickly to protect development environments, then decommission them as soon as they are no longer needed. "For example, we wanted to test our FortiManager backups. We used FortiFlex points to spin up another instance of FortiManager temporarily and load it from backups. When we saw everything was running properly, we were very happy. And then, we were able to shut down that instance rather than continuing to pay for a second FortiManager."

Next, the company is considering using FortiFlex points to acquire a virtual version of FortiAnalyzer. "The combination of our Azure infrastructure and the security environment provisioned through FortiFlex licensing makes our business more agile and sets our company up for success, whatever the future may hold," he concludes.



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