Large U.S. Local Government Uses Gigamon for Reliable and Cost-Effective Hybrid Network

Traffic Monitoring





We're doing things that we wouldn't be able to do without Gigamon. There's definitely a lot of time saved."

DWAYNE

Network Engineer, Large U.S. Local Government

CHALLENGES

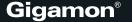
- + Eliminate gaps in network monitoring visibility, including between VMs
- + Obtain reliable traffic acquisition in a VMware virtual environment
- + Increase cost-efficiency of network monitoring and security solutions
- + Perform packet de-duplication to avoid overloading tools

SOLUTIONS

- + GigaVUE® TA Series for physical datacenter
- + GigaVUE Cloud Suite for VMware vCenter **Environment with NetVUE** (De-duplication, NetFlow)

CUSTOMER BENEFITS

- + Reliable traffic monitoring of East-West VM-to-VM communications
- + Time and cost savings when evaluating network monitoring tools
- + Surprisingly low cost
- + Ability to get full ROI from the Gigamon implementation



ABOUT THE CUSTOMER

Fernando is the network team supervisor for a large U.S. county government that spans about 8,000 square miles and is home to a city of about three million. With a background in fiber optic and copper installation project management, Fernando shifted into his current role about four years ago. He manages a team of nine network engineers who manage the county's network. Using microwave and wide area network (WAN) connections, they manage close to 200 sites and support 38 departments, including the county's fire, criminal justice, public safety, and parks and recreation departments.

One of the network engineers is Dwayne, an IT veteran of 20 years, who has been with the county for over a decade. Dwayne explains that, in addition to managing the county's network, the team also has a role in security. They support the security team by getting the traffic to their tools and by providing firewalls, packet brokers, and other tools to monitor their virtual environment. They also send the traffic to their own performance monitoring tools for managing the network.

The county has avoided migrating to the cloud for a number of reasons, with concerns about security, firewall functionality, and logging among them. On the cost side, a lack of clarity about the potential costs involved and concerns about switching costs if they wanted to change cloud providers are additional reasons they haven't made the move. Instead the county's choice of servers are private virtual machines (VMs) from VMware, which it uses for 95–98 percent of the server environment, with two internet connections to big data centers.

BUSINESS CHALLENGE

About six or seven years ago, before the county had Gigamon in place, it relied on Cisco products — specifically a Cisco core switch, network analysis module (NAM) products, and a Network as a Service (NaaS) module that worked with their switch to serve as the gateway to a WAN. With that technology on its way out and coming up for renewal, Dwayne wanted to replace it with something that would capture packets. Since the county's servers are mostly virtual machines running on VMware ESXi and NSX-T hypervisors,

getting visibility into the VM-to-VM traffic was the top priority. It also turned out to be the most complicated part of the system to support. The other big feature that Dwayne was looking for was the ability to do packet de-duplication, "to make sure we don't overload the tools."

Reliability is also an important aspect for Dwayne. "When I have an issue, I want to go to my tools to troubleshoot it," he shares. "But the tools need the traffic. So, if I'm looking at the tool and there's a gap, and the traffic's not getting fed to the tools, all that investment I have in my tools doesn't matter. I need to get the traffic reliably. I need to know that it's going to be there."

At the time, Dwayne's team had received some unexpected funding that needed to be used quickly. He needed to purchase the packet broker solution on a tight time frame. He looked at a few different solutions, but ultimately chose Gigamon.

RESOLUTION

"The Gigamon sales rep was super responsive. They got an engineer on the line with me to understand what I was asking for," says Dwayne. Starting out with two GigaVUE-TA40 chassis, Dwayne was pleasantly surprised at the product's price when the quote arrived. "I thought they were going to be a lot more," he recalls. "It was totally within budget."

Now the county has the reliable traffic packet brokering solution it needs for its VMware environment. "The biggest thing for us is getting the traffic for VMs. There's a lot of traffic that doesn't ever hit the wire, so we can't get it with a SPAN or a TAP. Because it's VM-to-VM traffic, that's where we have our biggest blind spots. So that's a huge advantage of GigaVUE Cloud Suite," says Dwayne.

As due diligence, Dwayne occasionally reaches out to other vendors to see if they can do what the Gigamon deployment does. "I haven't been compelled to use a different product," he shares. "One of the first things I ask when I talk to another vendor is, 'Can you do something similar to this so we can get our VM traffic?" They can't. "I feel like we've got the best product that we can get at this point," he asserts.

BENEFIT

In addition to the cost savings and accessing visibility into VM-to-VM traffic, another benefit of the Gigamon deployment is that it has enabled the network team to do proof-of-concepts with other tools that they could not have done without it. "It would've taken us a lot of time to set up all the SPAN ports and network TAP, and we wouldn't have been able to see the same amount of traffic," says Dwayne. He adds, "We're doing things that we wouldn't be able to do without Gigamon. There's definitely a lot of time saved. We have it ready to send to the tools easily so we can compare."

ABOUT GIGAMON

Gigamon offers a deep observability pipeline that harnesses actionable network-level intelligence to amplify the power of observability tools. This powerful combination enables IT organizations to assure security and compliance governance, speed root-cause analysis of performance bottlenecks, and lower operational overhead associated with managing hybrid and multi-cloud IT infrastructures. The result: Modern enterprises realize the full transformational promise of the cloud. Gigamon serves more than 4,000 customers worldwide, including over 80 percent of Fortune 100 enterprises, 9 of the 10 largest mobile network providers, and hundreds of governments and educational organizations worldwide. To learn more, please visit gigamon.com.

© 2023 Gigamon. All rights reserved. Gigamon and the Gigamon logo are trademarks of Gigamon in the United States and/or other countries. Gigamon trademarks can be found at gigamon.com/legal-trademarks. All other trademarks are the trademarks of their respective owners. Gigamon reserves the right to change, modify, transfer, or otherwise revise this publication without notice.

