Healthcare Transparency Leader Connects Customers to Cloud

Executive Summary

- **Customer Name:** HealthSparq
- **Industry:** Healthcare Technology
- **Location:** Portland, Oregon
- **Number of Employees:** 110

Challenge
- Give customers easy-to-deploy, flexible VPN gateway
- Improve transparency and diagnostic capabilities
- Contain costs by avoiding need to deploy hardware in customer data centers

Solution
- Deployed CSR 1000V dedicated virtual routers in cloud for insurance provider customers
- Established data feeds from customers' private networks into Amazon Web Services via secure VPN
- Managed virtual routers with familiar, industry-standard Cisco IOS

Results
- Accelerated customer VPN deployments threefold
- Improved competitive positioning and customer service
- Support infrastructure offering consumers potential savings of US$50 million

HealthSparq uses Cisco solutions to provide secure VPN connectivity to public cloud for insurance provider customers.

Challenge

HealthSparq is a Portland, Oregon-based cloud services provider dedicated to helping leading insurers and their 30 million customers experience the power of transparent healthcare. The concept of healthcare transparency is simple: inform and empower healthcare consumers so they can make better choices, improving outcomes and patient satisfaction while lowering the cost of care. HealthSparq offers a suite of transparency solutions delivered via public cloud on Amazon Web Services (AWS), including provider search and reviews, a social media community, and a comprehensive health cost estimator.

To provide the most accurate cost estimates, HealthSparq needed to allow its HealthSparq Cost service to securely access data from the company's large insurance provider customers. Due to the sensitive nature of the personal health information (PHI) being transmitted, this connection required a point-to-point virtual private network (VPN) gateway for each customer. At first, HealthSparq used standard VPN services offered by AWS, but ran into issues with customer deployments.

"Our customers and business partners are used to configuring VPNs in very specific ways, because protecting PHI is so important to them," says Russ Wilson, devops manager at HealthSparq. "Some wanted VPN tunnels configured with IPsec parameters that we could not set up using the standard AWS VPN tools. We needed a full-fledged software router capability in the cloud that we could configure as needed, while still saving us the cost of deploying a hardware router at each customer site."

Lack of transparency was also an issue, making it difficult for HealthSparq to diagnose problems with customer VPNs. "Our goal is to get customers up and running quickly and avoid any hassles or significant time investment on their end," says Wilson. "But that's difficult to do if you can't see into the log files to troubleshoot configuration issues, which was the situation we were in with the previous solution."

Solution

A Flexible, Full-Featured Cloud Networking Platform

HealthSparq turned to the Cisco® Cloud Services Router 1000V Series, a virtual router solution that brings enterprise-class networking features to the AWS cloud. The Cisco CSR 1000V is powered by the Cisco IOS® XE operating system, the same system that runs the industry-leading Cisco Aggregation Services Router (ASR) 1000 and Integrated Services Router (ISR) 4451-X. The familiar IOS XE command line and simple-to-use RESTful API streamline deployment, monitoring, troubleshooting, and service orchestration.

Unlike similar products that offer just gateway or security features, the Cisco CSR 1000V is a complete multiservice cloud networking platform with VPN, stateful firewall, application visibility, and performance monitoring features. The solution is available in the Amazon AWS Marketplace and can be deployed either in Bring Your Own License (BYOL) mode or by adding hourly usage to monthly Amazon AWS statements.

"The Cisco CSR 1000V was really the only choice that made sense for us," says Wilson. "Our other options were to either buy a physical device for each customer and incur significant hardware costs, or continue to use the native AWS VPN toolset, which has limited configuration options and would have driven up labor costs. Either way, payback on a Cisco CSR instance is nearly instantaneous for us."

Results

HealthSparq can choose from a wide variety of VPN technologies supported on the CSR 1000V, including full-mesh routed designs, to meet individual customer requirements. This flexibility has reduced average deployment times threefold. "The fastest we were previously able to set up a VPN with a customer was three weeks," says Wilson. "Now we can get everything configured in two or three days. With the Cisco CSR 1000V, we're able to prototype things a lot faster, and get VPN connections up and running quickly and reliably."

HealthSparq also has a new level of diagnostics and visibility. "We can look at the log files and see exactly what's happening with the traffic," says Wilson. "That helps us troubleshoot and easily fix configuration issues that would have held us up in the past."

Using a virtual router with no per-tunnel fees reduces costs for HealthSparq and its customers alike, while fast deployment improves the customer experience. "Anything we can do to make it easier and more cost effective for customers to use our services is important to growing our business," says Wilson. "The Cisco CSR 1000V helps in both areas, making us more competitive."

Each HealthSparq Cost customer will now have three VPN tunnels: two for redundancy and a third to isolate test/development traffic from production. "We'll be able to test more and not impact VPN performance for customers," says Wilson. "Compared with the cost of a hardware router, I can deploy three Cisco CSR 1000V instances for a customer and not even think twice."

Next Steps

HealthSparq plans to expand its use of the Cisco CSR 1000V, making it the standard VPN deployment model for customers going forward. In the future, HealthSparq may leverage additional features such as the stateful zone-based firewall, potentially replacing AWS Security Group rules to control inbound and outbound traffic.

Product List

Security/VPN
- Cisco Cloud Services Router 1000V Series

Services
- Cisco SMARTnet™

"The flexibility we get with the Cisco CSR 1000V has made a big difference in customer satisfaction," says Wilson. "Instead of asking customers to make their VPN configurations conform to the limitations of public cloud tools, we can just do it their way. It doesn't get any easier than that."

For More Information

To find out more about the Cisco Cloud Services Router, please visit: www.cisco.com/go/cloudrouter.

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