

ServerCentral Builds a Better Network to Deliver Superior Managed Data Center Services

Summary

Company:

ServerCentral

Industry:

Data Center and IT Infrastructure Services

Business Challenge:

Leverage virtualization and automation for custom IT infrastructure configurations, and allow customers access to the same capabilities via a self-service portal

Technology Solution:

- QFX5100 switches
- EX Series Ethernet Switches
- MX Series 3D Universal Edge Routers
- SRX Series Services Gateways
- vSRX virtual firewall

Business Results:

- Improved performance and simplified network using virtual private LAN service (VPLS)
- Unmatched colocation, managed services, and cloud services for customers
- Groundwork for service customization using Junos OS NETCONF and Ansible modules
- Superior levels of control and insight into IT infrastructure services and network assets with customer self-service portal

Modern data centers must move beyond racking, stacking, and cabling. Customers want access to their data instantly, anywhere in the world. And that's exactly what ServerCentral delivers. ServerCentral offers colocation, cloud, and network infrastructure services with unwavering uptime to customers large and small, along with 24/7 live support from real people. As a provider's provider, ServerCentral is innovative in how it builds a next-generation data center network and uses network automation to enable new levels of service that allow its customers to thrive.

Business Challenge

Businesses increasingly recognize that their customers and workers are engaging in ways that were inconceivable when their essential applications were first architected, according to Chris Rechtsteiner, vice president of marketing for ServerCentral. "A group in one country has to have the exact same service levels as a location in another country, and half the people are internal end users, while the other half are external customers," he says. As their businesses have globalized, their most strategic applications have struggled to keep pace. "Companies are coming to us, asking 'How do we do this? How do we solve this problem?' That's really what it comes down to."

On the technical side, customers are also experiencing a proliferation of virtual machines (VMs), the hypervisors to manage them, and the need for high availability. The wide embrace of virtualization drives the need for any-to-any connectivity, so that everything, from VMs in different racks in a data center to branch office workers, can be effectively connected as if they were local.

"Customers want to move VMs in the data center without any constraints. They don't want to worry about having a block of IP addressing in one place," says Dan Houtz, senior network engineer for ServerCentral. "There's a big demand for a next-generation overlay capability."

"We want the ability to deliver private cloud as efficiently as swiping a credit card and getting access to a hyper-scale platform. We want our platform to be that clean. By building a Juniper network, we can do that."

Chris Rechtsteiner, Vice President of Marketing, ServerCentral



Given the exploding demand for data center and cloud services, it was essential for ServerCentral to automate as many IT processes as possible with a self-service portal for customers. “We want the ability to deliver custom private cloud as efficiently as getting access to a hyper-scale platform,” says Rechtsteiner. “We want our platform to be that clean. By building a Juniper network, we can do that.”

Technology Solution

ServerCentral needed an easy way to deliver intelligent, high-performance Layer 2 connectivity for its eight global data centers to satisfy the demands of customers with high-performance, global connectivity requirements. ServerCentral has used Juniper solutions since the company’s inception in 1999, and when it needed to build a next-generation data center, it embraced the Juniper portfolio for routing, switching, and security.

ServerCentral uses Juniper Networks® MX Series 3D Universal Edge Routers, ranging from the MX960 to the MX80, to deliver high-performance, highly available data center interconnect, core, and edge routing. “The capabilities of the MX Series line are tops in our book and are very important to providing the services our customers request,” Houtz says. “If we need to mitigate distributed denial-of-service attacks, the MX Series responds great where others would fall over. That’s important when you’re getting an escalation at 3 a.m.”

ServerCentral uses Ethernet VPN (EVPN) for the Layer 2 overlay network to connect geographically dispersed sites. With EVPN, ServerCentral can build an intelligent data center interconnect network that’s optimized for virtualization, while preserving its investment in its existing WAN. EVPN is ideal for long-distance VM mobility.

With Juniper Networks Virtual Chassis Fabric (VCF), ServerCentral has a low-latency, high-performance data center fabric that can be managed as a single device. IT can interconnect multiple devices into a single logical device, inside of the fabric architecture. It uses the Juniper Networks QFX5100 line of L2/L3 data center switches as leaf and spine devices. With a flexible fabric architecture, ServerCentral can easily expand capacity to 80 Gbps and beyond as needs grow. ServerCentral also uses the QFX5100 as part of its managed switch service offering, and Juniper Networks SRX Series Services Gateways as part of its managed security services.

ServerCentral is an innovator in using network automation to deliver services faster and more efficiently to customers. It is using the automation capabilities in Juniper Networks Junos® operating system, including Network Configuration Protocol (NETCONF) and the Ansible modules, to automate infrastructure configuration management. ServerCentral is also using virtual

route reflector (VRR) for route reflection. ServerCentral can make network maintenance changes with certainty and ease. And with the commit and rollback features in Junos OS, if something isn’t right, the operations center can roll back to the last known good state. “The automation capabilities behind Junos OS are amazing,” says Houtz. “Other vendors are starting to offer automation, but Juniper is years ahead of the game.”

Business Results

Working with the automation tools in Junos OS, ServerCentral was able to activate a self-provisioning network in a few days—a far cry from the two weeks it typically takes. “Our operations staff can boot and configure with the push of a button,” says Rechtsteiner. “Customers need services quicker. Waiting 14 days is not acceptable to customers anymore.”

ServerCentral has built a better network to deliver unmatched colocation, managed services, and cloud services to customers. The company plans to take it a step further by offering customers access to many of the same automation tools used by its own operations team. Customers can create their own firewall filters or configure other services just the way their business needs. “With a Juniper network, we can open up and provide an increased level of control and capabilities to customers,” Rechtsteiner says. “When customers can access base-level configuration, that’s a whole new opportunity. Customers are really excited, because they have a much cleaner and more efficient sandbox.”

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Dan Houtz, Senior Network Engineer, ServerCentral

Next Steps

ServerCentral envisions automated provisioning of bare-metal servers for customers, to which it can add virtual firewall capabilities using the high-performance, next-generation Juniper Networks vSRX virtual firewall to secure the environment using customized rules—all from the customer’s self-service portal. “We’re heavily invested and focused on Juniper technology and we believe it’s going to lead to a strong platform to present to customers over the next few years,” Houtz says.

For More Information

To find out more about Juniper Networks products and solutions, please visit <http://www.juniper.net>.

To find out more about Elite Limited’s products and solutions, please visit <https://elite.net.uk>

About Juniper Networks

Juniper Networks challenges the status quo with products, solutions and services that transform the economics of networking. Our team co-innovates with customers and partners to deliver automated, scalable and secure networks with agility, performance and value. Additional information can be found at [Juniper Networks](#) or connect with Juniper on [Twitter](#) and [Facebook](#).

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