![Juniper Networks logo]

ISPrime Offers Cloud Services and Prepares for Rapid Growth with SDN

Summary

Company:
ISPrime

Industry:
Web hosting/IT services

Business Challenge:
Upgrade network to accommodate rapid customer growth and expansion into private cloud services

Technology Solution:
- Contrail
- MX960 3D Universal Edge Router
- EX3300 and EX4300 Ethernet Switches
- QFX3500 Switch
- Junos Space Network Management Platform

Business Results:
- Expanded into profitable cloud services
- Preserved 100 percent uptime guarantee with highly resilient, high-performance network
- Saved months of deployment time with automation and orchestration
- Simplified management with network virtualization

When companies need the ultimate in reliable hosted Web services, they come to ISPrime. Founded in 1998 by three entrepreneurs, Weehawken, NJ-based ISPrime is a premier Web hosting company specializing in managed clusters, firewalls, backups, databases, custom applications, and programming.

Business Challenge

The business of providing network services changes constantly, and ISPrime works hard to change along with customer needs. Most recently, cloud computing has been a disruptive trend for hosting providers, as more and more business customers find themselves looking to take advantage of the flexibility, speed, and low deployment costs of private and hybrid clouds. As a result, ISPrime needed a more flexible and cost-effective infrastructure on which to deliver its growing portfolio of cloud services.

"We had developed a portfolio of cloud services that was really gaining traction with old and new customers alike," says Phil Rosenthal, CTO of ISPrime. "With more of our revenue coming from the cloud, we needed to make major changes that would help us deliver those cloud services more efficiently."

ISPrime's opportunity to sell cloud services was growing fast, but the team lacked software-based control over its network and compute resources. Software-based orchestration would be essential in helping the company manage and optimize its virtualized IT assets quickly and efficiently. In addition to flexibility, the network had to be highly reliable to meet the company's exceptionally high standard for redundancy and reliability.

"We haven't had any downtime in 10 years and that reputation for reliability is a competitive differentiator that we protect passionately," says Rosenthal. "Our previous network had served us well, but for our new network, we needed a solution that would provide the best combination of reliability and innovation."

"Our new Juniper network has opened new vistas for the development of the business. We now have the elasticity to meet any customer's service needs and we can set up the environment in hours, not days."

Phil Rosenthal, Chief Technology Officer, ISPrime

Technology Solution

ISPrime replaced the networks in its data centers with solutions from Juniper. Two fully redundant Juniper Networks® MX960 3D Universal Edge Routers act as the backbone of the 150 Gbps network connecting its data centers. ISPrime also deployed Juniper Networks QFX3500 Switch for top-of-rack switching in all of its data center facilities, while EX3300 and EX4300 Ethernet Switches are being used for access switching. And critically, Juniper Contrail provides the SDN capabilities that integrate the backbone with ISPrime's virtualization services and help the team orchestrate resources to easily manage customers' public, private, and hybrid clouds.

"ISPrime is a leading hosting provider, and we pride ourselves on the performance and availability of all our systems, including the network," says Rosenthal. "When we were evaluating a virtual networking solution to enable our new cloud services, we required a level of performance and agility that was not available with traditional solutions. We found that Juniper Contrail delivers the advanced networking capabilities we require, while working together with our existing MX Series platforms to offer rich networking capabilities that span both the physical and virtual network."

Copper River IT, a premier provider of IT services, worked closely with ISPrime throughout the sales and implementation cycle. Copper River IT used its extensive knowledge to help ISPrime select the right combination of Juniper solutions to meet its requirements for flexibility, resiliency, network virtualization, and orchestration.

"With ISPrime, we were given an opportunity to work with an extremely innovative and competitive company looking for a disruptive technology to increase its ability to quickly deploy services at scale," says Boladji Agueh, Director of Commercial Sales at Copper River IT. "After analyzing different market options, we helped ISPrime validate the use case for Juniper's Contrail controller and the MX Series and QFX Series switch architecture. Our understanding of the Juniper portfolio, combined with our access to Juniper resources, allowed us to drive an architecture that was yet to be fully available in the marketplace and provide ISPrime with a cutting-edge solution that met the company's business and technical objectives."

Business Results

ISPrime now has a high-performance, switched network fabric with SDN providing an overlay orchestration control plane. To increase redundancy, the company created diverse paths among its points of presence, with each path having enough capacity to serve 100 percent of customer traffic.

The SDN capabilities of Contrail let ISPrime easily manage its physical and virtual network and compute resources as needed. ISPrime administrators use a software-based control pane to pool, move, and connect compute resources to the network quickly and easily. This facilitates a cost-effective, agile response to new customer needs, which is helping the company exploit fully the growing revenue potential of hosted clouds.

"The advanced orchestration and integration capabilities of Contrail are exactly what we needed to make cloud services a cost-effective service offering for the company," says Rosenthal.

ISPrime appreciates the platform-oriented nature of Juniper's SDN offering. With SDN functionality built in, the MX960 routers mesh seamlessly with ISPrime's virtualization toolkit. This ease of integration, combined with Contrail's integrated network and compute resource orchestration, helped ISPrime shave several months off the deployment timeline.

The combination of QFX3500 switches and MX960 routers delivers an unbeatable architecture through its scalability, density, and services. In addition, using MX Series routers allows ISPrime to absorb very large distributed denial of service (DDoS) attacks and guarantee a high quality of service to premium customers.

Juniper Networks Junos® Space Network Management Platform provides a consistent network operating system across all of the switches and routers in the network, which adds to the efficiency of the network. Junos operating system will help ISPrime's IT managers create new services quickly, which is critical to the expansion of its cloud services portfolio as well as the company's next major venture: a content delivery network.

Next Steps

"Our new Juniper network has opened new vistas for the development of the business," says Rosenthal. "We now have the elasticity to meet any customer's service needs and we can set up the environment in hours, not days. It was important that we develop a more agile architecture without any compromise in resiliency, and Juniper technology delivered both."

ISPrime is developing a content delivery network, which will be a new revenue stream that would have been cost-prohibitive to build using its old, hardware-centric network environment. The company is also responding in stride to its new and existing customers as their cloud requirements increase.

For More Information

To find out more about Juniper Networks products and solutions, please visit www.juniper.net.

About Juniper Networks

Juniper Networks is in the business of network innovation. From devices to data centers, from consumers to cloud providers, Juniper Networks delivers the software, silicon and systems that transform the experience and economics of networking. The company serves customers and partners worldwide. Additional information can be found at www.juniper.net.

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