



NET ONE SIMPLIFIES MULTICLOUD ONBOARDING AND OPERATION WITH CONTRAIL ENTERPRISE MULTICLOUD

Summary

Company:
Net One Systems

Industry:
Technology

Business Challenges:
Deliver superior customer experience by automating and streamlining management of multitenant cloud environment.

Technology Solution:

- Contrail Enterprise Multicloud

Business Results:

- Improved customer experience for multitenant environments
- Reduced time needed to onboard new customers into cloud environment
- Reduced human errors when setting up new cloud tenants
- Introduced a more stable system to support customers' mission-critical environments

Net One Systems is Japan's leading independent integrator, providing secure network and cloud platforms with a focus on advanced networking technology. To create optimal environments for customers, Net One uses best-in-class technologies and provides expertise and full services for ICT planning, implementation, operation, and optimization. It relies on Juniper Networks® Contrail® Enterprise Multicloud to orchestrate its multicloud environment.

Like elsewhere around the world, the cloud services adoption rate in Japan has been steadily rising. Fifty-eight percent of business enterprises in Japan have fully or partially implemented cloud, according to market researcher Statista.

Hundreds of customers rely on Net One to operate and manage their cloud environments, but as the number of customers have grown, their diverse needs have put a strain on network operations. For Net One, managing multiple cloud services was becoming exponentially more difficult with each new customer. Growing complexity created challenges in building, establishing, and efficiently operating cloud services.

Setting up new customers and maintaining their cloud environments was taking too many resources. The Net One network engineering team wanted to automate processes and add an advanced cloud management platform to reduce operational workload and minimize service outages resulting from human error.

"Many things need to be configured when adding a tenant, such as the platform, network, authentication, and monitoring," says Kunitoshi Hirukawa, head of Second Applied Technology at Net One Systems Co., Ltd.'s Business Pose Development Department. "Automation is essential in order to provide the service quickly, but the costs and workloads required by our in-house development team were growing too large."

"Contrail Enterprise Multicloud has excellent stability, meaning we don't have to worry in any environment, even mission-critical environments. All Juniper products are carrier-grade quality and used by telecommunications carriers, so that gives a sense of how extremely reliable they are."

- Aki Inoue, part of the service-sharing platform team, Net One Systems

Multitenant Environments Pose Unique Challenges

When Net One first began offering cloud services, the network team could easily handle new customer requests. The engineers relied on a service-sharing cloud platform created with virtualization technology that assessed the networks, servers, and storage that Net One had implemented for its customers.

At a certain point, manually managing the large number of customer environments became too difficult. Creating customer environments in OpenStack or VMware platforms required a lot of work. Multiple tenants configured with virtual LANs (VLANs) and network address translation (NAT) tended to become complicated, and VLAN resource management became cumbersome.

Adding to the problem, each platform's network was independent, requiring the design of a separate external connection for each tenant. When extending the platform or data center, the intricate designs required rework. The service-sharing platform had many points that needed to be configured each time a tenant was added, and very little could be automated.

"We wanted to introduce automation to decrease workload, reduce operational errors, and minimize service outage times," says Hirukawa.

Contrail Enterprise Multicloud Makes Automation Simple

To gain the automation and flexibility that Net One needed, an executive team began reviewing multicloud management platforms. The team defined four main goals for a new service-sharing platform:

- Maximize the automation of network creation and operation
- Enable seamless, multitenant support across a diverse set of integrated environments
- Interconnect networks using standardized technologies
- Provide safe and secure external connections with consistent policies.

After researching and testing products, Net One decided that Contrail Enterprise Multicloud best fulfilled its requirements.

"Juniper Networks allows for the core network and the data center network to be built with the same architecture," says Masahiro Imazono, service-sharing platform team expert in the Second Applied Technology Division of the Business Development Department. "Also, the architecture is based on standardized technology, has excellent interconnectivity, and is easy to maintain. Juniper also fit our concept of providing customers with platforms and services via multiple vendors."

Using Contrail Enterprise Multicloud, Net One can create seamless end-to-end multitenant environments by separating from physical networks using overlay models and managing tenants from a centralized controller. With multicloud support, the platform can centrally manage a variety of public clouds, in addition to OpenStack and VMware.

"Contrail Enterprise Multicloud was simply the best product to automate our processes," says Imazono. "Trying to do what Contrail Enterprise Multicloud achieves using separate products gets overly complicated. We determined that it could reduce our in-house development workload, reduce the labor required for operations, and even lead to increased service quality."

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Faster Onboarding, Fewer Errors, Better Customer Experiences

Now that customer onboarding is automated, Net One has greatly reduced the amount of time it takes for new customers to move into their cloud-based environments. Net One also expects to see a reduction in the design work required to expand the platform in the future, and the multicloud management platform will minimize human errors that can occur during setups and configurations.

"I like the fact that Juniper Networks' architecture is consistent, and that it allows us to effectively use shared knowledge in various areas and products," says Aki Inoue, part of the service-sharing platform team in the Second Applied Technology Division of the Business Development Department. "Contrail Enterprise Multicloud has excellent stability, meaning we don't have to worry in any environment, even mission-critical environments. All Juniper products are carrier-grade quality and used by telecommunications carriers, so that gives a sense of how extremely reliable they are."

Net One plans on expanding into other virtual platforms, including containers, and the network team aims to introduce Contrail Enterprise Multicloud into data centers in other locations and to various public clouds. Specifically, it plans to introduce an OpenStack platform that effectively uses Contrail Enterprise Multicloud at other sites and to create a disaster recovery environment.

“We expect that Contrail Enterprise Multicloud will help us improve our support services for customers switching to multicloud and other virtual platforms. Our primary goal is ensuring an excellent customer experience, and Contrail Enterprise Multicloud provides exactly what we need to better serve our multitenant cloud environments,” Hirukawa says.

For More Information

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

About Juniper Networks

Juniper Networks brings simplicity to networking with products, solutions and services that connect the world. Through engineering innovation, we remove the constraints and complexities of networking in the cloud era to solve the toughest challenges our customers and partners face daily. At Juniper Networks, we believe that the network is a resource for sharing knowledge and human advancement that changes the world. We are committed to imagining groundbreaking ways to deliver automated, scalable and secure networks to move at the speed of business.

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