Fujitsu Cloud Technologies (FJCT) is one of the leading Cloud Service Providers in Japan with multiple data centers nationwide. Their service, NIFTY Cloud, since its launch in 2010 as a pioneering presence in domestic IaaS, NIFTY Cloud has seen more than 5,000 deployments. A VMware vCloud® Air™ Network (vCAN) partner, the NIFTY Cloud infrastructure makes it easy for customers to link to on-prem systems for hybrid use.

With the accelerated pace of change spurred by evolving customer needs and the move to the cloud, FJCT has focused on technological innovation to develop services that leverage new capabilities. FJCT adopted VMware NSX to enable a more secure, scalable, software-based solution in support of its service offerings to tenants.

**The Challenge**

Public cloud migration continues to grow, and with it, FJCT customers seek new, advanced capabilities from NIFTY Cloud. At the same time, the increase in targeted attacks and ransomware create new risks for customer resources, applications and data. In response, many companies are deploying DaaS environments to protect against these threats. In addition, FJCT recognized that the resources and investment in physical systems required to ensure the on-going security of multiple data centers and protect hundreds of workloads was both technically and economically inefficient with hardware-based firewalls.

FJCT wanted a scalable, secure solution that would enable software-based networking and security while providing data center agility with network virtualization. The ability to deploy seamless micro-segmentation in its existing VMware environment, as well as offer additional services such as VPN and load balancing, would enable NIFTY Cloud to add new services and create growth opportunities.

**The Solution**

FJCT evaluated software-based solutions and selected VMware NSX for its high operational efficiency, flexible scalability, and API interoperability. By enabling a software-defined data center (SDDC), and applying network virtualization and micro-segmentation to the network, NSX could provide the foundation for secure growth that FJCT sought.

"We started the vendor selection when our former firewall and load balancing products came to end of service," explains Tomoharu Mukaidaira, Cloud Marketing Manager.
NIFTY CLOUD ADOPTS VMWARE NSX TO SUPPORT GROWTH WITH NEW SOFTWARE-BASED FIREWALL, VPN AND LOAD BALANCING SERVICES

BUSINESS BENEFITS
• 33% reduction in software-based load balancing costs
• 80% reduction in troubleshooting time
• Flexibility to deploy new capabilities that support business growth
• More secure, agile and scalable service offerings to tenants

VMWARE FOOTPRINT
• NSX®
• vSphere
• vCloud Availability for vCloud Director

Manager. “NSX was the option that met our needs for advanced scalability for VPN and load balancing services. We were looking for a solution with more than just firewall capabilities, and NSX was able to deliver the additional features we were after.”

NSX provides a complete set of logical networking elements and services that includes switching, routing, firewalling, load balancing, VPN, quality of service (QoS), and monitoring. NIFTY Cloud provisions these services in virtual networks through a cloud management platform leveraging the NSX APIs, which seamlessly integrates into any cloud management platform or custom automation.

Business Results and Benefits
With NSX, FJCT could begin providing new value-added services, such as load balancing and VPN, as software. The ability to offer these new services creates additional revenue opportunities for FJCT, while its customers benefit from the enhanced security of VPN, and a 33% reduction in software-based load balancing costs. Today NIFTY Cloud provides software-based, VPN, and load balancing for its Infrastructure-as-a-Service (IaaS) customers, as well as leveraging micro-segmentation to enhance security in combination with Trend Micro Deep Security for its DaaS customers.

Because NSX builds networks in software, NIFTY Cloud can achieve levels of agility, security, and economics that were previously unattainable with physical networks. VMware NSX runs on top of existing network hardware, which meant that FJCT didn’t have to buy or replace any appliances. In addition, there’s no disruption to the networking infrastructure or workloads.

NSX delivers the operational model of a virtual machine for the entire network, which significantly reduced the time and resources previously needed to resolve issues in a customer’s network. Before NSX, FJCT needed to perform troubleshooting for the network, servers and storage – both from a physical and virtual perspective.

“After deploying NSX, we can now isolate and identify the root cause quickly by leveraging the monitoring functionality of NSX, which visualizes the VMs and reduces our time to resolve issues,” notes Tomoharu Mukaidaira. “We were able to reduce the amount of time by 80 percent in some cases, which is a dramatic improvement.”

The micro-segmentation capabilities of NSX enable FJCT to isolate each VM on a shared network of public cloud services, with granular security delivered to the individual workload.

NSX also offered a performance advantage for NIFTY Cloud because the solution is architected to embed security functions right into the hypervisor, delivering micro-segmentation and granular security to the individual workload. This results in a fundamentally more secure data center because security policies travel with the workloads, independent of where workloads are in the network topology.
Looking Ahead

NSX provides the scalable, secure foundation NIFTY Cloud required to continue innovating and keep pace with customer needs. NIFTY Cloud anticipates developing additional value-added services to increase new revenue opportunities while leveraging the reduction in operational demands to apply resources to these offerings.

“NSX delivers the speed and agility to support NIFTY Cloud innovation and growth while optimizing total cost of ownership,” concludes Tomoharu Mukaidaira. “Thanks to NSX, we can continue growing our business.”