



NTT Chooses VMware NSX for Global Cloud Infrastructure

NTT is one of the largest providers of telecommunications services in the world. NTT leverages an extensive global infrastructure and a Tier 1 IP backbone to deliver secure private networks, to businesses around the world.

Challenges

Deliver a global cloud that leverages an extensive global IP fabric and allows cloud resources to be extended beyond individual data center boundaries. Allow enterprise-class customers to move applications and data on-demand anywhere in the global cloud network, without interruption, in the event of a disaster.

Before VMware, NTT used a combination of VLANs, specialized hardware and expensive, manual provisioning processes to deliver network services. However, it still could not deliver key services such as virtual machine mobility between availability zones or on demand provisioning for virtual private clouds. As the transformation to cloud began, NTT put a strategy in place to leverage network virtualization for its extensive network assets, increase operational efficiency, reduce network hardware costs and eliminate vendor lock-in.

Use Case

Virtualize the network.

NTT virtualized its network and achieved almost immediate benefit. Following the earthquake and tsunami in March 2011, NTT was able to provide live migration of applications between any of its data centers ahead of mandated power conservation “brown-outs,” without service interruption or specialized hardware.

Operationally, VMware NSX™ provides an open API that allows NTT to leverage open source cloud management solutions like OpenStack to automate network provisioning and reduce operational costs.

Results

- NTT customers are able to develop, test and deploy complete application clusters (multiple application workloads that work together) and provide live migration of the entire cluster between data centers on demand.
- Independent physical network environments are now viewed as a pool of network capacity, on top of which secure virtual networks provide the flexibility required for a dynamic, global cloud infrastructure.
- Virtual networks provide isolation between tenants in a multi-tenant cloud, without the need for VLANs.

“The integration of cloud computing with network virtualization is the key for providing competitive cloud services which maximizes NTT group assets, worldwide data centers and carrier-grade, high-quality networks. Nicira’s platform [VMware NSX] is scalable and has high affinity with OpenStack, which led us to work with Nicira [Now part of VMware]. Software-defined networking is the future of our industry and Nicira’s platform [VMware NSX] transcends anything else we’ve seen.”

— Eiji Kuwana,
Vice President,
NTT R&D Labs

