Nominated Company: VMware

Nomination Title: VMware NSX Virtualizes the Network to Transform Network Operations

VMware NSX is the network virtualization platform that delivers the operational model of a VM for the network to transform data center operations and economics.

Capabilities:

- Agility: NSX reduces the time it takes to provision custom, multi-tier network topologies and enterprise class security services from weeks to seconds.
- Cost: NSX reduces both OPEX and CAPEX. Automation eliminates manual configuration from the network provisioning process and simplifies network hardware requirements. - See more at:
- Choice: The NSX network virtualization platform operates on any hypervisor, any network hardware and integrates with any cloud management platform, with choice of partner services
- Virtual Networks: Similar to a virtual machine for compute, a virtual network is a fully functional network in a software container, provisioned independent of underlying hardware.
- Distributed Security NSX delivers a new model for network security. Security profiles are distributed to and enforced by virtual ports and move with VMs.
- Scale & Performance: NSX is deployed in production today by several of the largest service providers, global financials and enterprise data centers in the world.

Programmatically create, provision, snapshot, delete and restore complex networks all in software. VMware NSX breaks through current physical network barriers, enabling data center operators to achieve order of magnitude better speed, economics and choice.

Key distinguishing features:

- A transformation, not a transition: NSX delivers a completely new operational model for networking that breaks through current physical network barriers allowing data center operators to achieve order of magnitude better speed, economics and choice. Just like server virtualization enables IT to treat physical hosts as a pool of compute capacity, the NSX approach allows IT to treat their physical network as a pool of transport capacity that can be consumed and repurposed on demand. A virtual machine is a software container which presents logical CPU, memory and storage to an application. Similarly, a virtual network is a software container that presents logical network components – logical switches, logical routers, logical firewalls, logical load balancers, logical VPNs and more – to connected workloads. Logical networks are programmatically created, provisioned and managed, utilizing the underlying physical network as a simple packet forwarding backplane. Network and security services are distributed and attached to VMs within a network. As a VM is moved to another host, these services stay attached to the VM and move with it. In addition,

as new VMs are added to a network to scale an application, policy can be dynamically applied to the new VMs.

- Businesses want to go fast: Businesses want to increase the speed of innovation, reduce time-to-market and drive the velocity of their business. NSX removes the operational barrier the network has become as IT strives to respond the business needs. Programmatic provisioning reduces service delivery times from weeks to seconds. NSX transforms the operational model of networking, which combined with compute and storage virtualization delivers never before possible IT speed for the business.
- The most disruptive, non-disruptive technology…Again!: Just like VMware for compute virtualization, NSX deploys non-disruptively on top of any existing physical network infrastructure and supports next generation fabrics and topologies from any vendor. Because virtual networks reproduce the networking model in software, existing applications and workloads operate unmodified and operators use existing network monitoring tools. Troubleshooting tools can view and process virtual network traffic just as they would physical network traffic.
- Proven NSX has been deployed in full production, at scale, by several of the largest cloud service providers, global financials and enterprise data centers in the world. Companies like AT&T, NTT, Rackspace, eBay, and PayPal have virtualized their networks with NSX and are benefiting from the speed and efficiency the NSX network virtualization platform delivers.

The only competition NSX has is the old model of networking. NSX does not specifically compete with any single network hardware vendor, NSX views all network hardware as having the capability to forward IP packets, which is all NSX requires. NSX competes at a certain level with Juniper Contrail, Alcatel-Lucent Nuage and PLUMGrid. VMware's competitive differentiators are that VMware NSX is a third generation product that is currently deployed at major customers including CITI, eBay, NTT Com and others, has integrations with more than a dozen Tier 1 networking and security solutions, and has advanced network visibility and security features. VMware NSX was built to help customers leverage previous investments in best-in-class IT infrastructure while delivering a new operational model that will advance IT.

Why nominee should win

- VMware assembled an all-star team responsible for many foundational innovations toward network virtualization.
- VMware architected NSX to ensure the services on NSX virtual networks are as co-existent, transparent, and effective as those deployed on physical networks.
- NSX delivers the entire networking and security model in software representing a transformative leap forward in datacenter networking architecture.
- NSX, leveraging advancements in x86, server virtualization, distributed systems and cloud application development frameworks, ushers in a new generation of networking in the datacenter.
- NSX allows businesses to deploy applications with greater speed and efficiency, delivering secure network services to applications running in the datacenter.