VMWARE NSX-T™ MENTORED INSTALL

Service Overview:

At Netnology, we specialize in VMware Network Virtualization Platform (NSX-T™) enablement and implementation services. As part of this VMware NSX-T™ Mentored Install service offer, our subject matter experts (SME) partner with your team to ensure a smooth deployment of the VMware NSX-T™ solution and provide knowledge transfer to equip your staff with the necessary skills to configure and manage the VMware NSX-T™ environment.

Solution Oerview:

VMware NSX-T™ is the network virtualization and security platform that extends software-defined approach to Data Center networking. It provides an infrastructure where security and networking are deployed closer to the applications. With NSX-T™ Data Center, networks can be provisioned and managed independent of underlaying hardware. Being a software-defined in nature, any network topology can be deployed faster. It provides wide rich feature which includes logical switching, routing, VPN, L4-L7 services like firewalling, load balancing, QoS and monitoring. These services are provisioned in virtual network and provides several key benefits to customers including the following:

- Network overlay across the host across on-prem Data Center and cloud.
- Micro-segmentation of applications at workload level.
- Accelerate operational efficiency with the use of automation.
- Brings network provision time from days to seconds.
- Provides granular application topology view and real time flow monitor.
- Built-in advance threat prevention mechanism on east-west traffic.

Service Benefits:

Netnology has a team of world class engineers who specialize in VMware NSX-T™ solution and are passionate about customer success. Netnology will partner with you to provide:

- Step-by-step guidance from an SME on VMware NSX-T™ solution deployment.
- Configuration and documentation of VMware NSX-T™ solution.
- Knowledge transfer to ensure customer is ready to configure and manage the environment.

Service Scope:

As part of the 10-days Mentored Install engagement, Netnology will help with the following:

- Project Kickoff
- NSX Solution Overview
- NSX-T Data Center Deployment – Multi-Site (up to 2 sites)
  - o VMware vCenter integration (up to 4 per site)
  - o Management and Compute Cluster Preparation
  - o NSX-T Manager node deployment (3 per site)
  - o NSX-T Global Manager Node deployment (up to 1)
  - o Transport Zone Creation (up to 2 per site)
  - o Transport Node Profile Creation – N-VDS and VDS (up to 6 per site)
  - o Uplink profile Creation (up to 2 per site)
  - o IP Pool Creation
- Logical switching
  - o Geneve tunnel encapsulation
  - o Logical Segment Creation (up to 20 per site)
  - o VM attachment (up to 20 VMs)
  - o L2 unicast packet flows
- Logical Routing
  - o Edge node deployment (up to 4 per site)
  - o Edge cluster Creation
  - o Logical routing use cases discussion
  - o VRF creation (up to 4 per site)
  - o Tier-0 and Tier-1 gateway creation
  - o Service Routing and Distributed Router
  - o Routing protocol (BGP) configuration and packet flows
- Bridge cluster and Profile creation
- Micro-segmentation – Native FW
  - o Distributed FW architecture discussion
  - o Planning micro-segmentation
  - o Distributed firewall section and rule creation (up to 24 per site)
  - o Gateway firewall section and rule creation (up to 24 per site)
- L4-L7 Services – Native Services
  - o Load Balancer deployment and Configuration (up to 6 per site)
  - o NAT, DNS, DHCP, IPsec VPN configuration
- Role-Based Access and Backup Management
  - o Functions of VMware Identity Manager
  - o VMware Identity Manager Integration
  - o LDAP integration
  - o Assign roles to various types of users
  - o Back up Management and restoration

- Federation
  - Use case discussion
  - Global Manager Configuration
  - Stretched T0/T1 Gateway Configuration
  - Site Failover testing
- Monitoring
  - Installation of NSX Intelligence
  - Discover the flows
  - Recommendation process for firewall rule recommendation
  - Publish the recommended rules to security policy
- Firmware Upgrade – If Applicable
- Knowledge Transfer

Target Audience:

This service is designed for Network Architects, Network Engineers and Administrators configuring, deploying, and managing the VMware NSX-T™solution.

Pre-requisites:

Customer needs to ensure that all network devices, hosts are rack & stacked, cabled and powered-up , connectivity is established and required firewall port should be opened prior to the kick-off. Customer also needs to acquire the necessary hardware, software, and licenses for the deployment of VMware NSX-T™ solution.

Service Deliverables:

No	Deliverable	Service Details
1.	Project Kickoff	• Project Overview • Solution Overview
2.	Manager & Host Preparation	• Install and setup NSX-T Manager • Discover and prepare the host for NSX-T
3.	Switching	• Create Logical Segment • Attach VMs to Logical Segment • L2 Unicast traffic testing over routed (layer 3) underlay
4.	Routing	• Edge node deployment and edge cluster configuration • Create Tier-0 and Tier-1 gateway • Configure BGP Routing protocol • Layer 3 packet flow analysis • Configure Edge HA, failure detection
5.	Bridging	• Create Bridge profiles • Create Bridge cluster
6.	Security	• Implementation of Micro-segmentation use cases

		• Creation of Security groups • Creation of Security rules • Creation of Gateway firewall sections and rules
7.	Services	• Deploy L4-L7 load balancer • Configure load balancing policy • Configure NAT • Configure IPsec VPN • Configure DNS/DHCP
8.	Role Management	• VMware Identity Manager integration • LDAP integration • Addition and role definition of users • Configure role-based access control to restrict user access
9.	Configuration Backup	• Schedule/Create Backup policy • Test Rollbacks from Backup • Configure External Backups
10.	Federation	• Configure Global Manager • Configure Site 2 • Stretch T0/T1 gateway across the site • Packet walk across the stretch sites • Site failover
11.	Monitoring	• Install and NSX Intelligence Appliance • Flow discovery of VMs • Recommendation process for firewall rule recommendation • Analyze and publish the firewall rule recommendation
12.	Firmware Upgrade	• NSX Manager upgrade • NSX Edge Cluster Upgrade • Post upgrade validation checks
13.	Knowledge Transfer	• Explain to the customer how to configure and manage the solution in the lab environment • A walkthrough of the customer's environment