# NETWORKING SERVICES

## SOFTWARE DEFINED DATA CENTRE PROOF OF CONCEPT (PoC)

Server virtualization alone may not be enough to optimize data centre performance. As demands continue to increase, you should consider a software-defined data centre (SDDC), which virtualizes server, storage and network assets together. At CDW Canada, we can help you map out a unified plan to maximize your data centre performance.



#### Why Perform a PoC?

- Validate Micro-Segmentation for VM security with NSX
  - Control traffic between groups within a network
  - Secure traffic based on logical grouping rather than physical topology
  - Create network segment flexibility even between systems on the same VLAN
  - Advanced services insertion dynamic actions respond to changing security conditions

#### Validate Data Centre Extension with NSX

- Extend L2 East-West segments using existing DCI
- Egress localization and ingress optimization
- VXLAN to VXLAN connectivity
- VXLAN to VLAN connectivity
- <sup>D</sup> L2VPN Server and standalone client

#### Validate NSX Routing

- 1 tier of routing
  - Distributed routing for east-west traffic
  - Designated interface for north- south traffic
  - Dynamic routing to advertise logical networks OSPF/BGP
- 2 tiers of routing
  - Distributed routing for east-west traffic
  - Perimeter gateway for north-south traffic
  - Dynamic routing to advertise logical networks OSPF/BGP

### **POC Requirements**

- Hardware
  - A minimum of 1 physical server for management & Edge Cluster that meets the following spec:
    - 2Ghz or greater CPUs
    - 32 GB or RAM or greater
  - A minimum of 2 physical servers for compute clusters that meet the following spec:
    - 2Ghz or greater CPUs
    - 16GB or RAM per server
  - 300 GB of shared storage for management VMs
  - 200GB or greater of shared storage for customer workload VMs
- Network
  - VLANs for
    - ESXi Server & VMManagement
    - vMotion & IP Storage
    - VXLAN Transport
    - Routed Datacentre netowrks used for workloads in PoC
  - IP address details for all networks used on the NSX. PoC
  - NTu of 1600 or greater on VXLAN transport networks
  - Forward and reverse DNS resolution for all VMs
  - NTP service for time sync scross management VMs

#### Software

- vSphere 5.5 or higher
- vSphere licenses (alternatively 60 day evaluations can be used during a PoC)
- vCenter Server 5.5.0 U2
- vCenter Server Appliance 5.5.0 U2

- Deliverables
  - Prepare physical environment for NSX
  - Build vSphere environment
  - Provide PoC documentation
  - Include 1 customer use case/test plan
  - Customer can modify use case with limited scope



To learn more about Networking Services, contact your CDW Canada account team or visit CDW.ca/networking

