VMware NSX-V to NSX-T (V2T) Migration Options
Live / No Downtime Migration of VM's Cross vCenter

Date: 6/24/2021

SPJ's Webinar Series – VMware NSX-V to NSX-T Migrations

- ~~June 9th – NSX-V to NSX-T (V2T) Migrations – A Real World Education~~

- June 24th – NSX V2T Options Live / No Downtime Migration of VM's Cross vCenter

- July 8th – NSX V2T Migration Multi-DC NSX-V Micro-Segmentation to NSX-T Federated Using cITopus

- July 28th – TBD

- August 11th - TBD

During This Session

- About SPJ Solutions

- Overview of NSX-V to NSX-T Migrations

- SPJ's NSX V2T Migration Practice

- Introduction to NSX V2T Automation Tools – cITopus

- Two Demonstrations Live / No Downtime Migration, VM's Cross vCenter

- NSX V2T Migration Resources:
  - Free NSX V2T Migration Readiness Assessment
  - YouTube Channel
  - Websites & Resources

$100 Amazon Gift Card Drawing

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How To Contact Us

Email: nsx@spjsolutions.com

SPJ's NSX V2T Migration Practice Website: https://vmwarensxmigrationexperts.com/

(vmware nsx migration experts)

SPJ Solutions Website: spjsolutions.com

cITopus Website: citopus.com

We can send you this presentation deck, request in chat

SPJ Solutions

Overview

Delivering SDDC, SDN, Cloud, VMware NSX Solutions

- Founders
  - Sudhansu "Suds" Pati - CTO
  - Paul Wong – President

- Located in Sacramento, CA

- 15+ year experience with VMware technologies

- 7+ years delivery consulting experience with VMware NSX

- VMware's #1 NSX Consulting Partner Worldwide
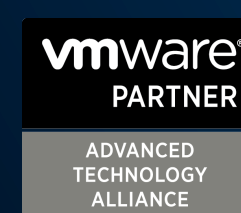
SPJ Solutions − <u>VMware's Top</u> NSX Implementation Partner Globally

1. 350+ NSX Engagements Successfully Delivered Worldwide

2. 50+ NSX-V to NSX-T (V2T) Migrations

    - **<u>More Than Any Other Organization, Including VMware</u>**

    - Large, Complex, Multi-data center

3. Highly Experienced and Certified NSX Delivery Team

    - SPJ CTO: VCDX #255, CCIE, Oracle Master

    - Engineer Certs: VCP-NV, VCIX-NV, CCIE, CCNA, CCNP, PAN, F5,…

4. All Industries and Vertical Markets

5. Deep NSX Ecosystem Experience

    - NSX V & T, VCF, VMC on AWS, vRA, vRNI, vRO, vCD, SRM, Horizon, …

    - Cisco, Palo Alto Networks, Check Point, f5, UCS, Dell, HPE, Trend Micro, Nutanix, …

    - AWS, Google Cloud, Azure, IBM Bluemix, OVHCloud, …

SPJ Solutions at VM World 2021

Two Sessions On NSX-V to NSX-T Migrations

<u>Session# 1244</u> – NSX-V to NSX-T Migration – Simon Fraser University Case Study

<u>Session# 1208</u> - NSX-V to NSX-T Migration Expert Panel – Customer Success Stories

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What Is cITopus?

Our Magic

Cito (**cĭtō**)   +   Opus (**ŏpŭs**)

Fast   Work

cITopus

IT Work Fast

NSX Automation for Management and Migrations

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cITopus Technology
NSX Automation for Management and Migrations

- The <u>Most Widely Used</u> NSX V2T Migration Technology

- Supports 100+ NSX V2T Use Cases

- Simplifies the complex for NSX – Day 0, 1, 2 and V2T Migrations

- The Most NSX V2T Migration automation and functionality

- Intuitive / Graphical / Drag & Drop / WYSIWYG

- VMware best practices built-in – Endorsed by the NSBU

- Light weight

- Full Stack Developed App – U.S. Based Development Team

- cITopus Increases Engineer Scalability

  - Enable Jr. Engineers To Do More

  - 2019 SPJ delivered as many NSX engagements as VMware

What cITopus Migrates From NSX-V to NSX-T (partial list)

- ESXi hosts
- ESGs
- DLRs
- UDLRs
- Logical Switches
- Universal Logical Switches
- Transport Zones
- Logical Control VMs
- VxLAN
- ESG Uplink Interfaces
- Transit Logical Switches
- ECMP ESG Clusters
- vCenter Clusters
- VDS
- NVDS
- Distributed Port Groups
- VM Network Adapters or vNICs
- Distributed Firewall Rules
- Gateway Firewall Rules
- Security Groups
- Universal Security Groups
- NSX-V Security Tags
- Universal Security Tags

- vCenter Tags
- Services (L4 and L7)
- Service Groups (L4 and L7)
- Service Composers
- Partner Services (Palo Alto, Trend Micro, McAfee, f5)
- Dynamic Inclusions
- Static Inclusions
- Global Exclusions
- vCenter Objects, i.e. Clusters, Data Centers, Folders, Resource Pools
- IP Addresses
- IP Set
- Sections
- Universal Sections
- OSPF Dynamic Routing
- BGP Dynamic Routing
- Route Redistributions from ESGs and DLRs
- Static Routing
- LIF (Logical Interfaces)
- NSX-V HA-Proxy or Native Load Balancer (NLB) - In-Line and One-Armed
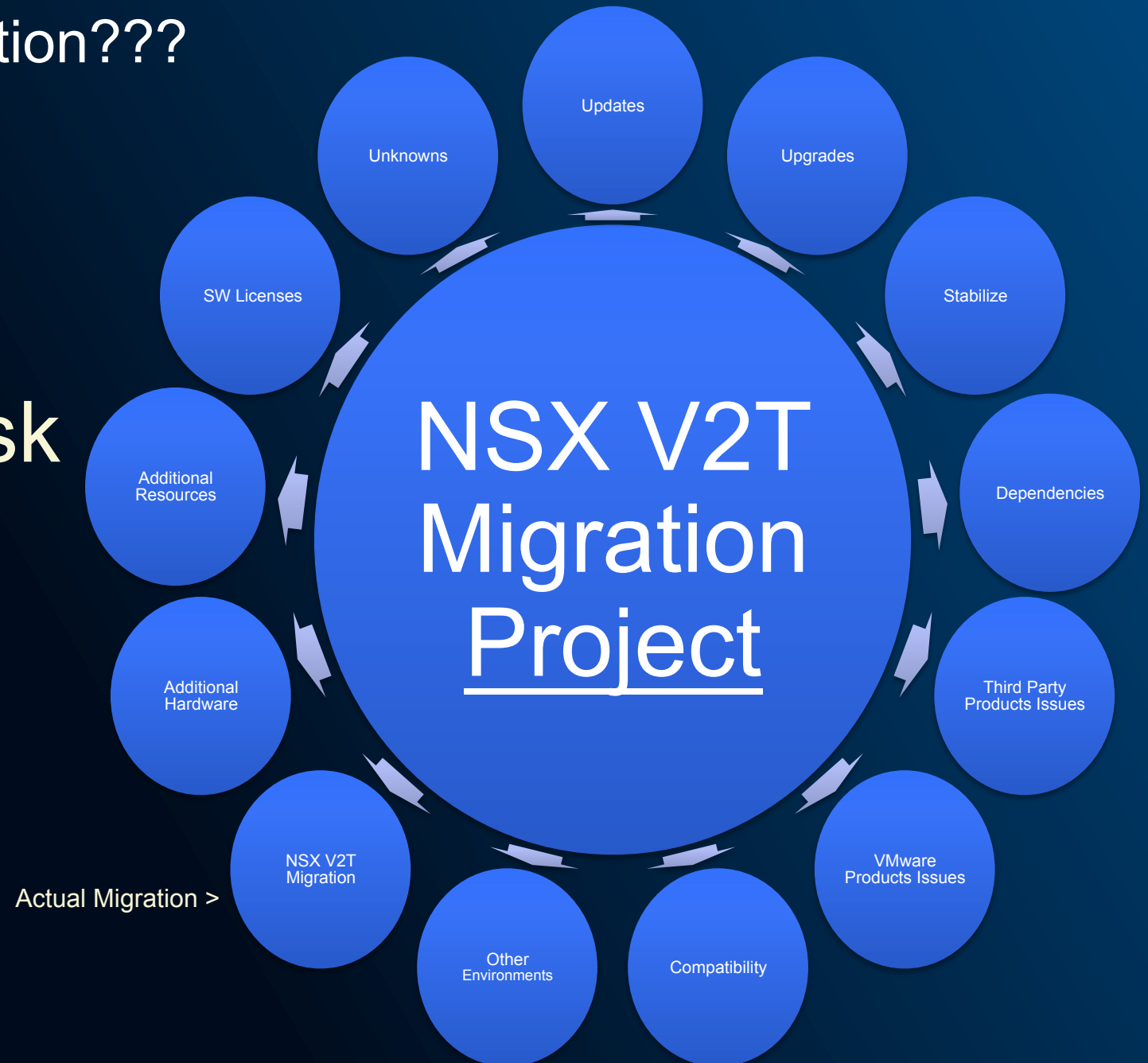- Multi-Tenancy Network Topologies
- L2 Bridges

What Is An NSX V2T Migration?

1. End of Support of NSX-V: 1/16/2022

2. Lots of Misinformation or Lack of Information

3. Challenging:
   - Complex
   - Unknowns: How Complex, Duration, Resource Needs, Dependencies, etc.
   - Few VMware Partners Globally Able To <u>Competently</u> Deliver V2T Migrations (per VMware)
   - Hundreds Use Cases and Iterations of Those Use Cases

4. Difficult to Perform 100% Manually, Need Automation: cITopus, Migration Coordinator, HCX

5. There is **<u>NO</u>** one tool that performs 100% of NSX V2T migrations

6. **<u>Requires Experienced NSX and V2T Migration Engineers</u>** To Deliver Manual Tasks, Or When Problems Arise

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SPJ Solutions NSX V2T Migration Practice

1. Professional Service Engagement

   - Pre-SOW Requirements –> Planning –> Design –> Implementation -> Support
   - T&M - Fixed Price

2. cITopus NSX V2T Migration Kits – SPJ Supports Your Team

   - Profiles: Very Small – Small – Medium
   - cITopus Limited Use License
   - Bucket of Hours – Expert NSX V2T Engineers
     - Guidance: Planning, Design
     - Assessment of Environment: Identify risks, upgrades, compatibility, etc
     - Conversion of ESXi Hosts from NSX-V to NSX-T
     - Test Migration in SPJ's Migration Lab
     - Validation of NSX-T Migration

3. Free NSX V2T Migration Readiness Assessment

4. Website: vmwarensxmigrationexperts.com

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cITopus NSX-V to NSX-T (V2T) Migration Kits

1. Developed Based on SPJ's V2T Migration Experience

2. Flexible and Low-Cost Approach to NSX V2T Migration Projects

3. Identifies Migrations Risks and Level of Effort

4. SPJ Will Be There To Guide You

5. The cITopus NSX V2T Migration Kit Includes:

- <u>cITopus License</u>: Upgrades and Patches
  - o 3 Months for Very Small
  - o 6 Months for Small
  - o 12 Months for Medium

- Migration Architecture

- Implementation Plan

- Roll-Back Plan

- <u>"Bucket of Hours" of NSX V2T Expert Consulting</u>:
  - o 20 Hours for Very Small
  - o 40 Hours for Small
  - o 100 Hours for Medium

- Configuration Workbooks

- Testing and Validation Procedures

NSX V2T Migration Process using cITopus

NSX V2T Migration Approaches: In-Place and Lift-n-Shift

V2T Migration Kit

V2T Migration Kit

V2T Migration Kit

No Cost to Customer

No Cost to Customer

Analyze NSX-V

Using cITopus "Pre-Migration Analyzer", analyze NSX-V Environments.

Export Pre-Migration Analysis Reports, NSX-V Specs and Design Diagrams

Perform Manual Analysis

(Optional)Test V2T Conversion

Using cITopus "Lift-n-Shift Migration tool", export Micro-Segmentation from NSX-V environment.

Using cITopus "Lift-n-Shift Migration" tool, convert NSX-V to NSX-T at SPJ Data Center.

Migrate Management and Control Plane

Using cITopus "Single-Click NSX-T install", install NSX-T Global and Local Managers, Edge Clusters, T0/T1, and Segments.

Using cITopus, deploy AVI Controllers and Service Engines.

Using cITopus "Edge Cluster Deployment Wizard", deploy additional Edge Clusters and T0.

NSX-V to NSX-T (Co-Existence)

Use cITopus "Propagation Utility", propagate NSX-V Micro-Segmentation into NSX-T.

cITopus keeps the state of NSX-V and NSX-T in sync by propagating NSX-V Sections, Rules, Security Groups, Security Tags, IP Sets and Custom Services to NSX-T.

Migrate ESXi, VM, Micro-Seg (Data Plane)

Using "cITopus In-Place Migration Utility", remove NSX-V VIBs, install NSX-T VIBs, migrate VDS to N-VDS, configure NSX-T Networks, and migrate VMs to NSX-T.
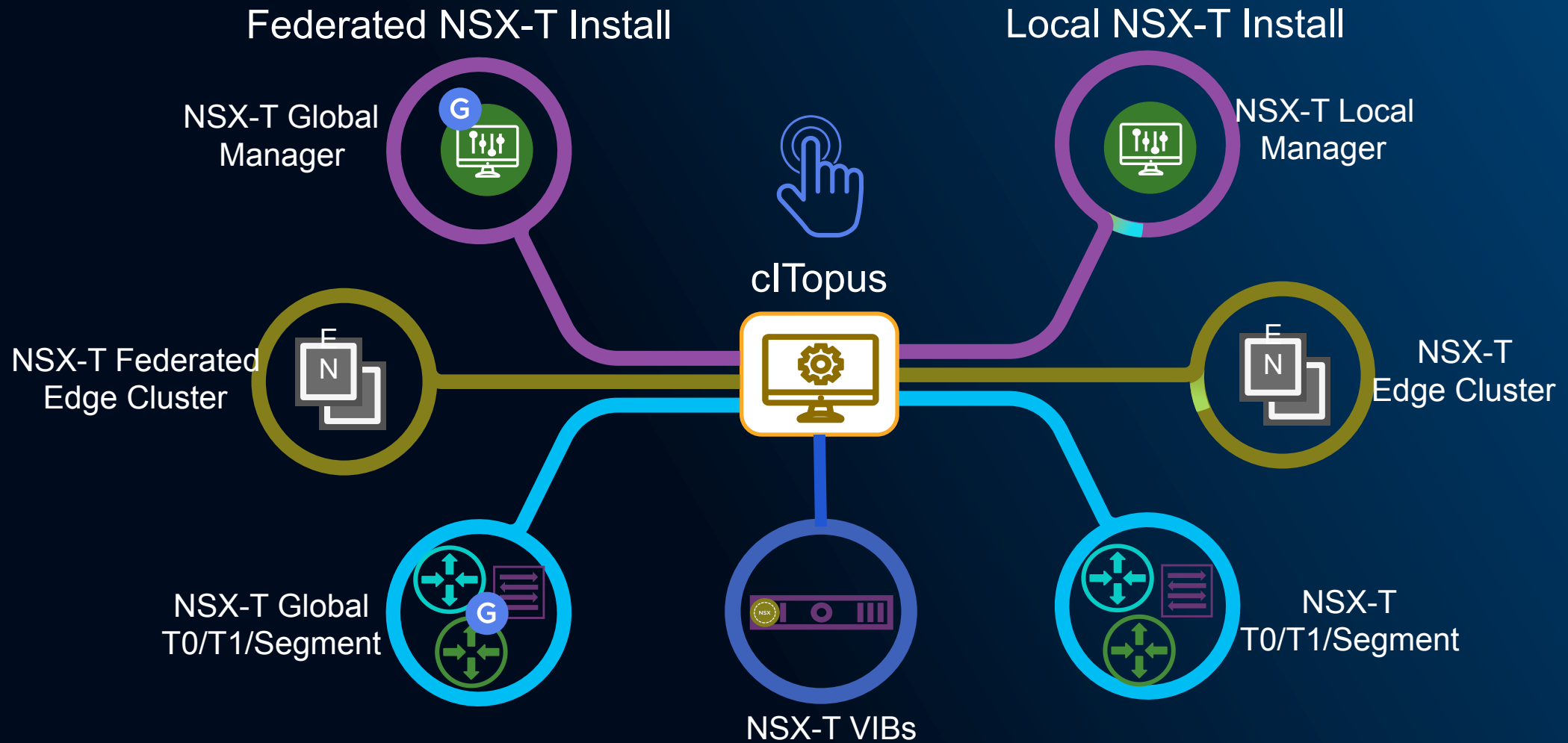
In Lift-n-Shift Scenarios, use "VM Migration Utility" to migrate VMs from source to target vCenters while migrating Tags, Networks, and Micro-Segmentation.

Use Stage 2 Micro-Segmentation Import for batch migration of VM-Specific Micro-Segmentation.

Use "Single-Click NSX-T Install" Network Virtualization and Micro-Segmentation export (Excel) and import (Excel) to customize NSX-T objects, i. e. Object Name and association.

NSX V2T Migration Demo

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NSX V2T Migration Resources

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SPJ's Free NSX V2T Migration Readiness Assessment

- Plan to have proper expectations

- Pre-assessment Questionnaire

- 45 – 90 min Review of Your Environment

- Findings and Recommendations Session

- How To Request:

  - Website: vmwarensxmigrationexperts.com

  - Email: nsx@spjsolutions.com

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SPJ's VMware NSX V2T Migration Webinar Series

- June 6th – NSX V2T Migration - A Real World Education

- June 24th – NSX V2T Migration Options
  - Live / No Downtime Migration of VM's Cross-vCenter

- July 8th – NSX V2T In-Place Migration

  - One to Many Clusters

  - Propagation from V2T for Co-Existence Strategy

How To Register:

  - Email: nsx@spjsolutions.com

  - Website: vmwarensxmigrationexperts.com

How To Purchase cITopus

1. cITopus License Only
- Deployments, Day 0, 1, 2 Management, Migrations
- CPU Based License (Match the NSX CPU count)
- Your own engineers or partner resources can use cITopus
- Purchase Through Resellers or Direct From SPJ

2. cITopus NSX V2T Migration Kits
- Your own engineers or partner resources can use cITopus
- Purchase Through Resellers or Direct From SPJ

3. cITopus Evaluation License
- Email: NSX@spjsolutions.com

cITopus

IT Work Fast

NSX Automation for Management and Migrations

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SPJ Solutions NSX V2T Migration Resources

SPJ's NSX-V to NSX-T Migration Practice: https://vmwarensxmigrationexperts.com/
(vmware nsx migration experts)

VMware SPJ VM World 2020 Session *NSX-V to NSX-T Migration: Real World Experience*
https://www.vmworld.com/en/video-library/video-landing.html?sessionid=158653784616801TJW7

VMware's NSX-V to NSX-T Migration Book - SPJ Authored Two Chapters:
https://www.vmware.com/learn/740054_REG.html?cid=7012H000001YrER&src=af_5fe23685efdbd

VMware's NSX V2T Expert Panel: https://www.youtube.com/watch?v=rjcAIlWBDcI

VMware NSX Tech Zone (nsx.techzone.vmware.com)

VMware LiveFire Training – SPJ's NSX V2T Migration Product and Service Offerings

cITopus Website: https://citopus.com/

SPJ's cITopus YouTube Channel w/ 50+ NSX V2T Videos and Training
https://www.youtube.com/channel/UCUgWeQwq5q1P5H5BoSu2sZA/videos

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Q&A

Amazon $100 Gift Card Drawing – We will contact the winner directly after the webinar

How To Contact Us

Email: nsx@spjsolutions.com

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(vmware nsx migration experts)

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