

VMware Cross vCenter Workload Migration Utility & NSX-T Spanned Segments

XVM v3.1 does not allow NSX-T v3 **spanned segments** to be selected as the destination network mapping. This is akin to the previous issue of not being able to migrate networks with the same name (fixed in v3.0).

Configuration Overview.

- vCenter Server v7.0 b16749670
- ESXi v7.0 b15843807
- NSX-T 3.0.2 b16887538 Local & Global Managers
- vSphere Replication v8.3.1.10316 b16877246
- Site Recovery Manager v8.3.1.4685 b16878573

2 Sites – A & B

2 vCenter Servers - 1 Per Site. Each vCenter Server is 'standalone' – i.e. No Enhanced Linked Mode (Hence the need for XVM to migrate VM's between sites)

2 NSX-T Local Managers - 1 Per Site.

1 NSX-T Global Manager (3rd site). Providing Federation between the 2 Local Managers with Spanned T0 & T1 routers and spanned segments.

XVM v3.1 Screenshot

vm

Cross vCenter vMotion Utility

?

Enter task information

MigrateRegister

Operation Type

☒ Relocate ☐ Clone ☒ Advanced options

Source Site

Site-A (mc-vcsa-v-201a.momusconsulting.com)

Target Site

Site-B (mc-vcsa-v-201b.momusconsulting.com)

Source Datacenter

Momus DC Site-A

Virtual Machine(s)

W2K19_Server_DB

Placement Target

Management Cluster (Momus DC Site-B)

Target Resource Pool

Select

Target VM Folder

Select

Target Datastore

Site-B_Management_vsanDatastore

Network Mapping(s)

seg-db-spanned (Distrit) → Select

SubmitCancel

Select
vDS1-Management--DVUplinks-6066 (DistributedVirtualPortgroup)
vDS2-Workload-B-DVUplinks-6071 (DistributedVirtualPortgroup)
VLAN0201_Management (DistributedVirtualPortgroup)
VLAN0202_vMotion (DistributedVirtualPortgroup)
VLAN0203_vSAN (DistributedVirtualPortgroup)
VLAN_Trunk (DistributedVirtualPortgroup)

I expected to see the same “seg-db-spanned” port-group/network as a destination.

vCenter Server vDS's

The screenshot shows the vSphere Client interface for Site A. The left sidebar displays a tree view of the environment: mc-vcsa-v-201a.momusconsulting.com > Momus DC Site-A > none > vDS1-Management-A > vDS1-Management--DVUplinks-8018 > VLAN0101_Management, VLAN0102_vMotion, VLAN0103_vSAN, and vDS2-Workload-A > seg-app-spanned, seg-db-spanned (selected), seg-web-spanned, vDS2-Workload-A-DVUplinks-8023, and VLAN_Trunk. The main pane shows the configuration for 'seg-db-spanned'. The Summary tab is active, displaying a table with network details: Port binding (Ephemeral - no binding), VNI (71689), Segment ID (/global-infra/segments/seg-db-spanned), and Transport Zone (mc-tn-overlay-tz). Below this, the Details section shows a table with properties: Distributed switch (vDS2-Workload-A), Network protocol profile (--), Network resource pool (--), Hosts (3), Virtual machines (1), and NSX Manager (https://10.10.1.40:443).

Summary	
Port binding	Ephemeral - no binding
VNI	71689
Segment ID	/global-infra/segments/seg-db-spanned
Transport Zone	mc-tn-overlay-tz

Details	
Distributed switch	vDS2-Workload-A
Network protocol profile	--
Network resource pool	--
Hosts	3
Virtual machines	1
NSX Manager	https://10.10.1.40:443

Site A – vDS's - Both Version 7.0

vDS1-Management0-A is a standard vDS.

vDS2-Workload-A is a converged vsphere/nsx-t vDS

The screenshot shows the vSphere Client interface for Site B. The left sidebar displays a tree view of the environment: mc-vcsa-v-201b.momusconsulting.com > Momus DC Site-B > none > vDS1-Management-B > vDS1-Management--DVUplinks-6066 > VLAN0201_Management, VLAN0202_vMotion, VLAN0203_vSAN, and vDS2-Workload-B > seg-app-spanned, seg-db-spanned (selected), seg-web-spanned, vDS2-Workload-B-DVUplinks-6071, and VLAN_Trunk. The main pane shows the configuration for 'seg-db-spanned'. The Summary tab is active, displaying a table with network details: Port binding (Ephemeral - no binding), VNI (71691), Segment ID (/global-infra/segments/seg-db-spanned), and Transport Zone (mc-tn-overlay-tz). Below this, the Details section shows a table with properties: Distributed switch (vDS2-Workload-B), Network protocol profile (--), Network resource pool (--), Hosts (3), Virtual machines (0), and NSX Manager (https://10.20.1.40:443).

Summary	
Port binding	Ephemeral - no binding
VNI	71691
Segment ID	/global-infra/segments/seg-db-spanned
Transport Zone	mc-tn-overlay-tz

Details	
Distributed switch	vDS2-Workload-B
Network protocol profile	--
Network resource pool	--
Hosts	3
Virtual machines	0
NSX Manager	https://10.20.1.40:443

Site B – vDS's - Both Version 7.0

vDS1-Management-B is a standard vDS.

vDS2-Workload-B is a converged vsphere/nsx-t vDS

NSX-T Global Manager Spanned Segments

vm NSX-T

Momus Global Manager
Global Manager

Home

Networking

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Segments

Segment Profiles

ADD SEGMENT

EXPAND ALL

Filter by Name, Path and more

	Segment Name	Connected Gateway	Traffic Type	Subnets	Ports	Admin State	Status	Alarms						
>	left-uplink-61-a	None	VLAN	Not Set	0	Up	Check Status	0						
>	left-uplink-62-b	None	VLAN	Not Set	0	Up	Check Status	0						
>	seg-app-spanned	T1-GW-Spanned Tier1	Overlay	172.16.20.254/24	1	Up	Check Status	0						
>	seg-db-spanned	T1-GW-Spanned Tier1	Overlay	172.16.30.254/24	1	Up	Check Status	0						
<div>Locations</div> <table><thead><tr><th>Location</th><th>Transport Zone</th></tr></thead><tbody><tr><td>Site-A</td><td>mc-tn-overlay-tz</td></tr><tr><td>Site-B</td><td>mc-tn-overlay-tz</td></tr></tbody></table> <div><div>VLAN</div><div>Not Set</div><div>Uplink Teaming Policy</div><div>Not Set</div></div> <div><div>Domain Name</div><div>Not Set</div><div>Replication Mode</div><div>Hierarchical Two-Tier replication</div></div> <div><div>Address Bindings</div><div>Not Set</div><div>Tags</div><div>0</div></div> <div><div>Connectivity</div><div>On</div></div> <div><div>Description</div><div>Not Set</div></div>									Location	Transport Zone	Site-A	mc-tn-overlay-tz	Site-B	mc-tn-overlay-tz
Location	Transport Zone													
Site-A	mc-tn-overlay-tz													
Site-B	mc-tn-overlay-tz													

VIEW STATISTICS

VIEW RELATED GROUPS

Network Overview

Connectivity

Tier-0 Gateways

Tier-1 Gateways

Segments

Network Services

NAT

IP Management

DNS

DHCP

Settings

Networking Settings

vCenter Server Hosts & Clusters

Site-A vCenter Server

vmvSphere ClientMenuSearch in all environments

mc-vcsa-v-201a.momusconsulting.com

Momus DC Site-A

Management Cluster

mc-esxi-v-201a.momusconsulting.com

mc-esxi-v-202a.momusconsulting.com

mc-esxi-v-203a.momusconsulting.com

MC-NSXTEDG-V-201A

MC-NSXTEDG-V-202A

MC-VRMA-V-201A

Workload Cluster

mc-esxi-v-204a.momusconsulting.com

mc-esxi-v-205a.momusconsulting.com

mc-esxi-v-206a.momusconsulting.com


W2K19_Server_App

W2K19_Server_DB

W2K19_Server_Web

W2K19_Server_DB

SummaryMonitorConfigurePermissionsDatastoresNetworks



Guest OS:Microsoft Windows Server 2019 (64-bit)

Compatibility:ESXi 6.7 and later (VM version 14)

VMware Tools:Running, version:11269 (Current)


More info

DNS Name:DB-Server

IP Addresses:172.16.30.30

View all 2 IP addresses

Host:mc-esxi-v-206a.momusconsulting.com



Launch Web Console

Launch Remote Console

VM Hardware

> CPU	2 CPU(s)
> Memory	8 GB, 6.4 GB memory active
> Hard disk 1	40 GB
> Network adapter 1	seg-db-spanned (connected)
CD/DVD drive 1	Disconnected
> Video card	8 MB
VMCI device	Device on the virtual machine PCI bus that pr the virtual machine communication interface
> Other	Additional Hardware
Compatibility	ESXi 6.7 and later (VM version 14)

Site-B vCenter Server

vmvSphere ClientMenuSearch in all environments

mc-vcsa-v-201b.momusconsulting.com

Momus DC Site-B

Management Cluster

mc-esxi-v-201b.momusconsulting.com

mc-esxi-v-202b.momusconsulting.com

mc-esxi-v-203b.momusconsulting.com

MC-NSXTEDG-V-201B

MC-NSXTEDG-V-202B

MC-VRMA-V-201B

Workload Cluster

mc-esxi-v-204b.momusconsulting.com

mc-esxi-v-205b.momusconsulting.com


mc-esxi-v-206b.momusconsulting.com

W2K19_Server_App

W2K19_Server_Web

mc-esxi-v-206b.momusconsulting.com

SummaryMonitorConfigurePermissionsVMs



Hypervisor:VMware ESXi, 7.0.0, 15843807

Model:VMware7,1

Processor Type:Intel(R) Xeon(R) CPU E5-2690


Logical Processors:2

NICs:4

Virtual Machines:0

State:Connected

Uptime:7 hours



Hardware

Assigned Tag	Category
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Tags

Assigned Tag	Category
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