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Welcome to the St. Louis UserCon!

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Try Before You Buy!

Ways to try out new VMware by Broadcom products before you renew

Scan QR Code for download
Link to the presentation

VMUG
VMware User Group

In the introduction video, Broadcom CEO said they were making it easier for customers to deploy the Software-Defined Datacenter.

Let’s put that to the test!

Who am I?

Matt Heldstab
10x VMware vExpert – Double VCP (Datacenter and Desktop)
Systems Engineer – Minnesota State Colleges and Universities
VMUG Leader – Minneapolis, MN
Current VMUG Vice President
Contact: mheldstab@vmug.com -- @mattheldstab on X

What we will cover

- Level-set – What are the new licensing levels?
- How to get the software?
- Setting up the test environment
- Deploying VCF (consolidated architecture)
  - Cloud Builder Appliance
  - Filling out the Deployment Parameters Workbook
  - Executing the Bringup using Cloud Builder
  - Deploying an Edge Cluster
  - Deploying Application Virtual Networks
  - Deploying Aria Lifecycle Manager
  - Additionally:
    - Connecting to your VMware Account / using an offline repository
    - Installing Bundle Updates
    - Expanding your Management Domain

How to get the software

- VMware's Website Start an evaluation (one-time)
- Reach out to your account team
- Install the software without a license (60 day evaluation)
- VMUG Advantage – EvalExperience – 365 day evaluations - $210
  - Talk to the VMUG Staff for a 10% Discount today!
- vExpert – More info at https://vexpert.vmware.com
- Other Deployment Mechanisms
  - William Lam's Deploy Script
  - Holodeck 2.0

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What are the differences between some of the new products offered by VMware by Broadcom

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VCF

VMware Cloud Foundation

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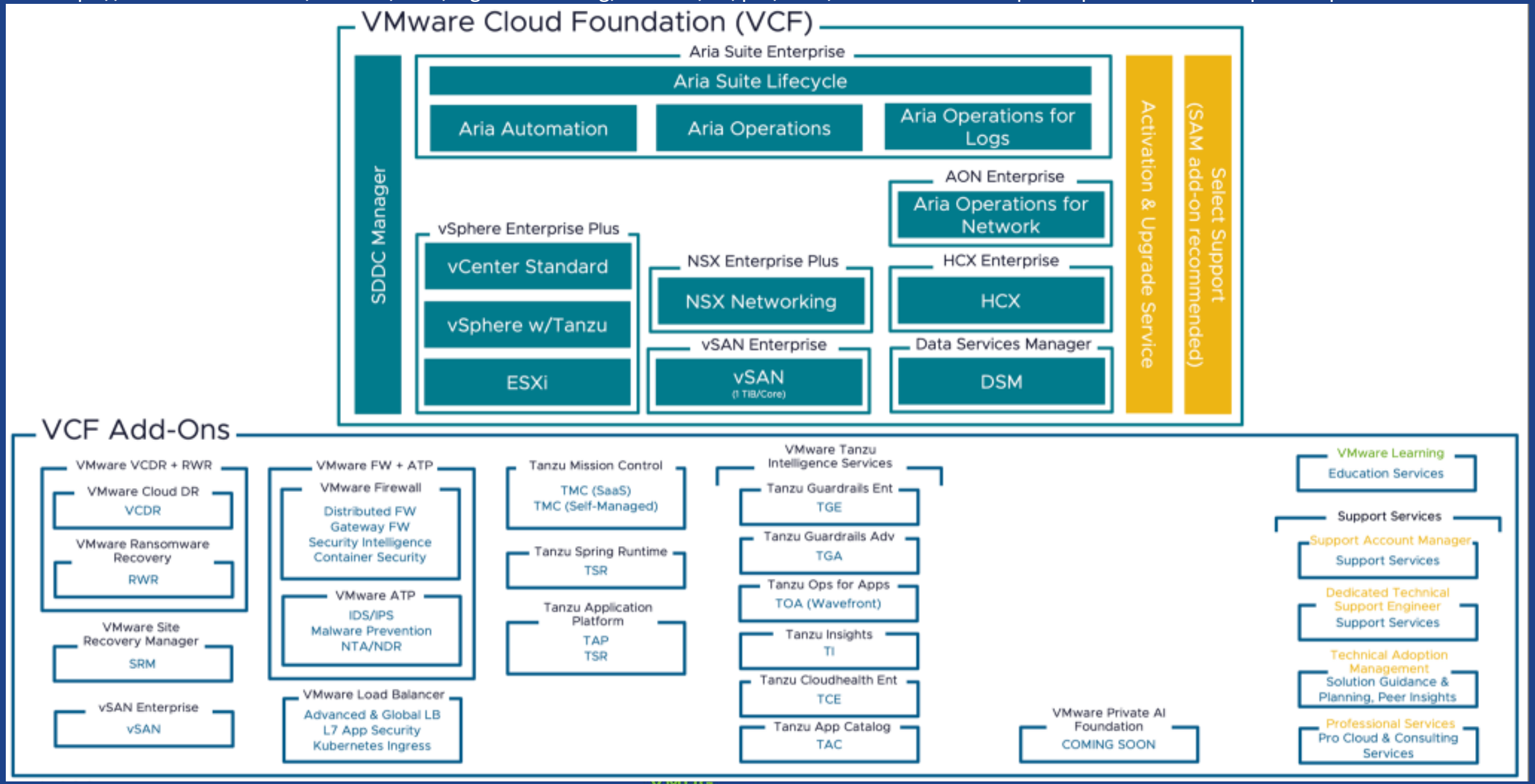
Entire feature list available at:
https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-datasheet-vsphere-product-line-comparison.pdf



Graphic from WilliamLam.com

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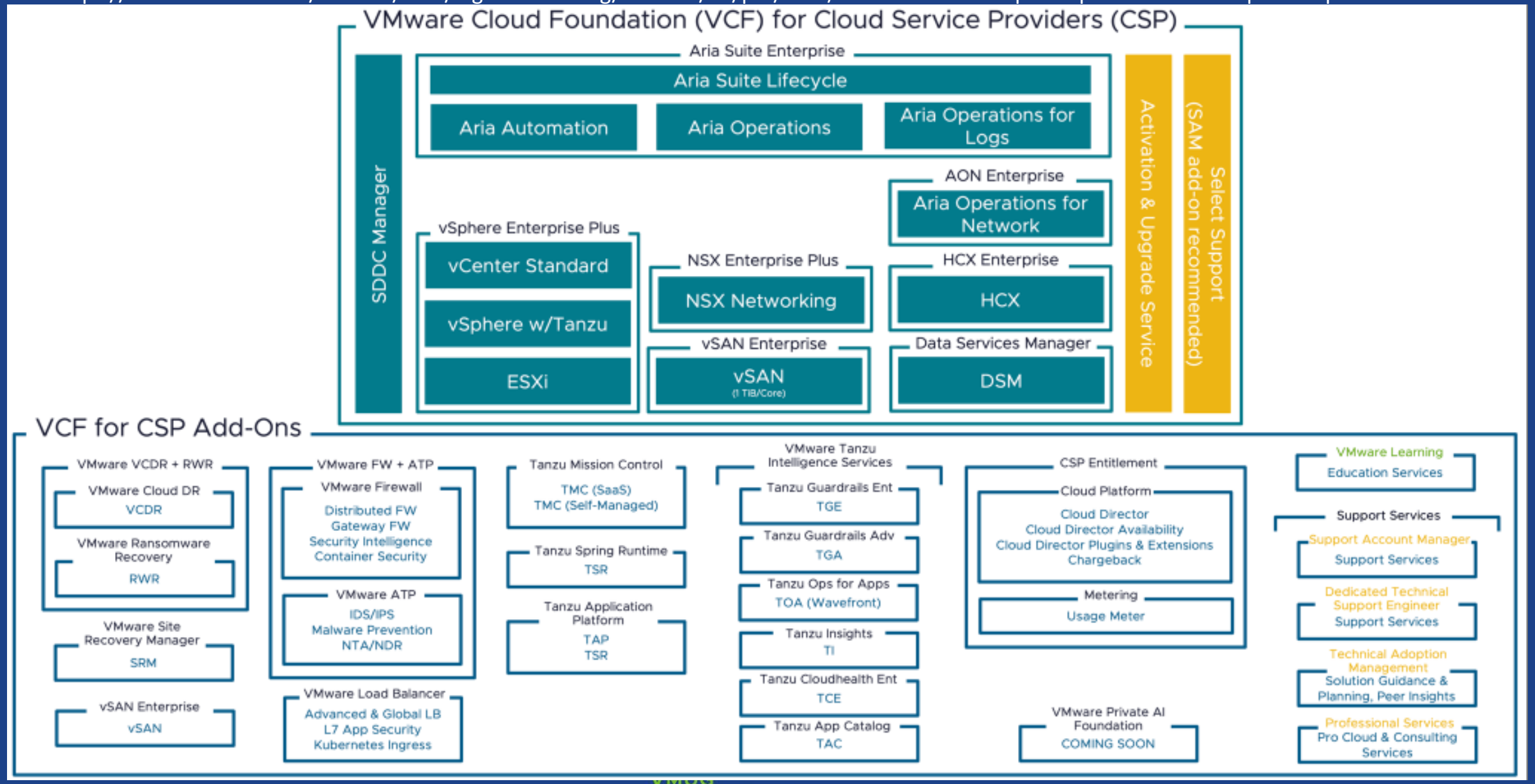

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VVF

VMware vSphere Foundation

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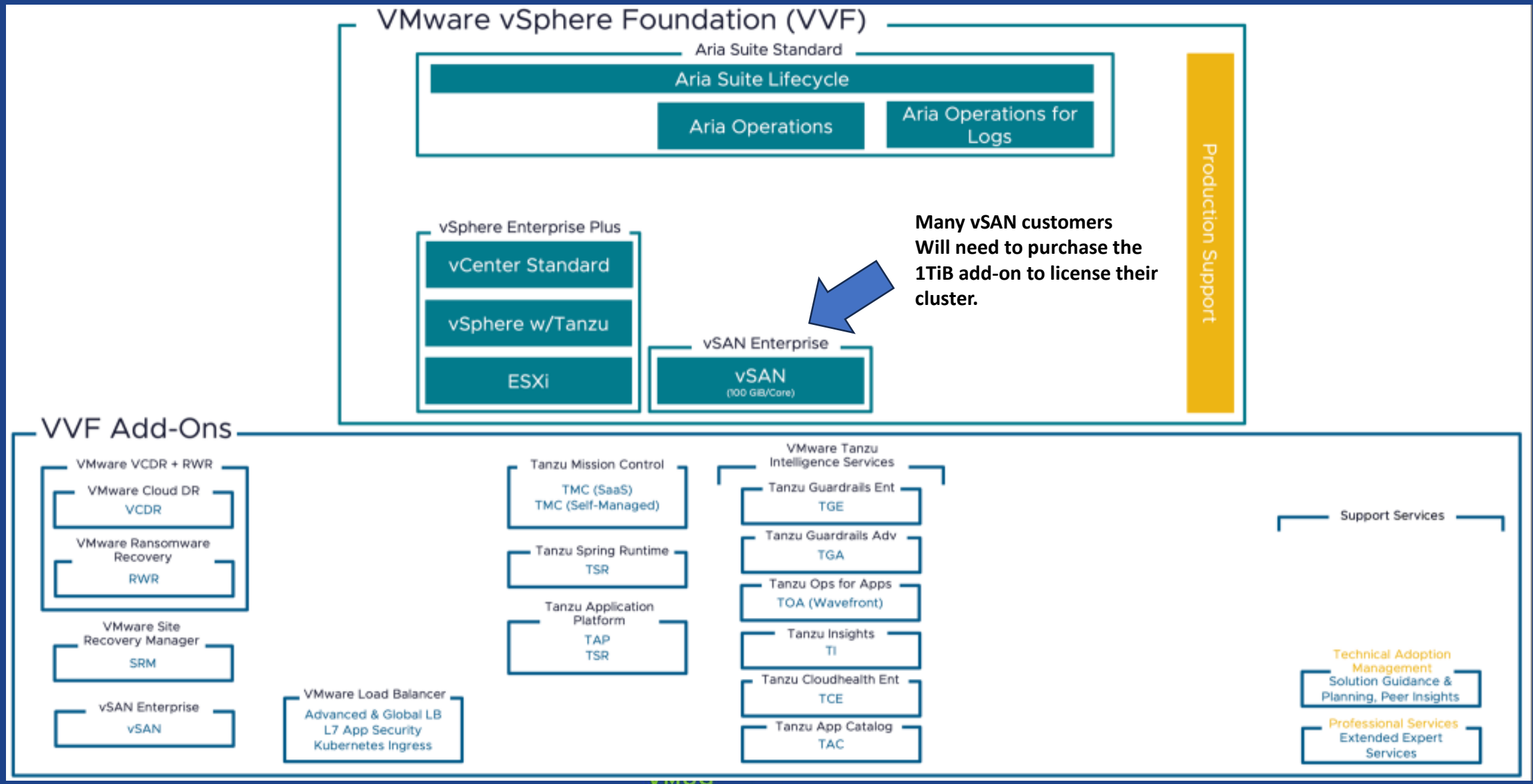
Entire feature list available at:
https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-datasheet-vsphere-product-line-comparison.pdf



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VVS

VMware vSphere Standard

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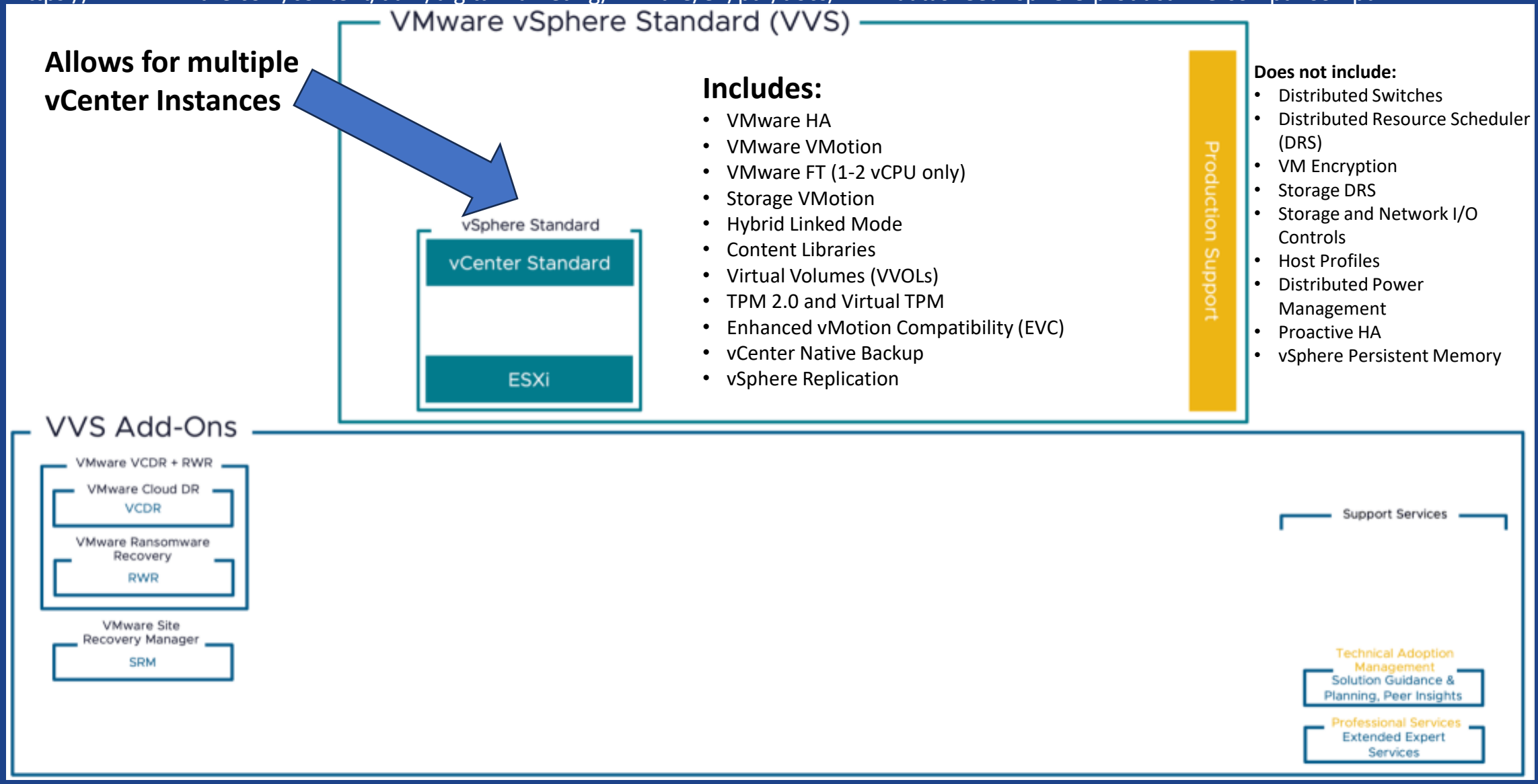
Entire feature list available at:
https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-datasheet-vsphere-product-line-comparison.pdf



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VVEP

VMware vSphere Essentials Plus

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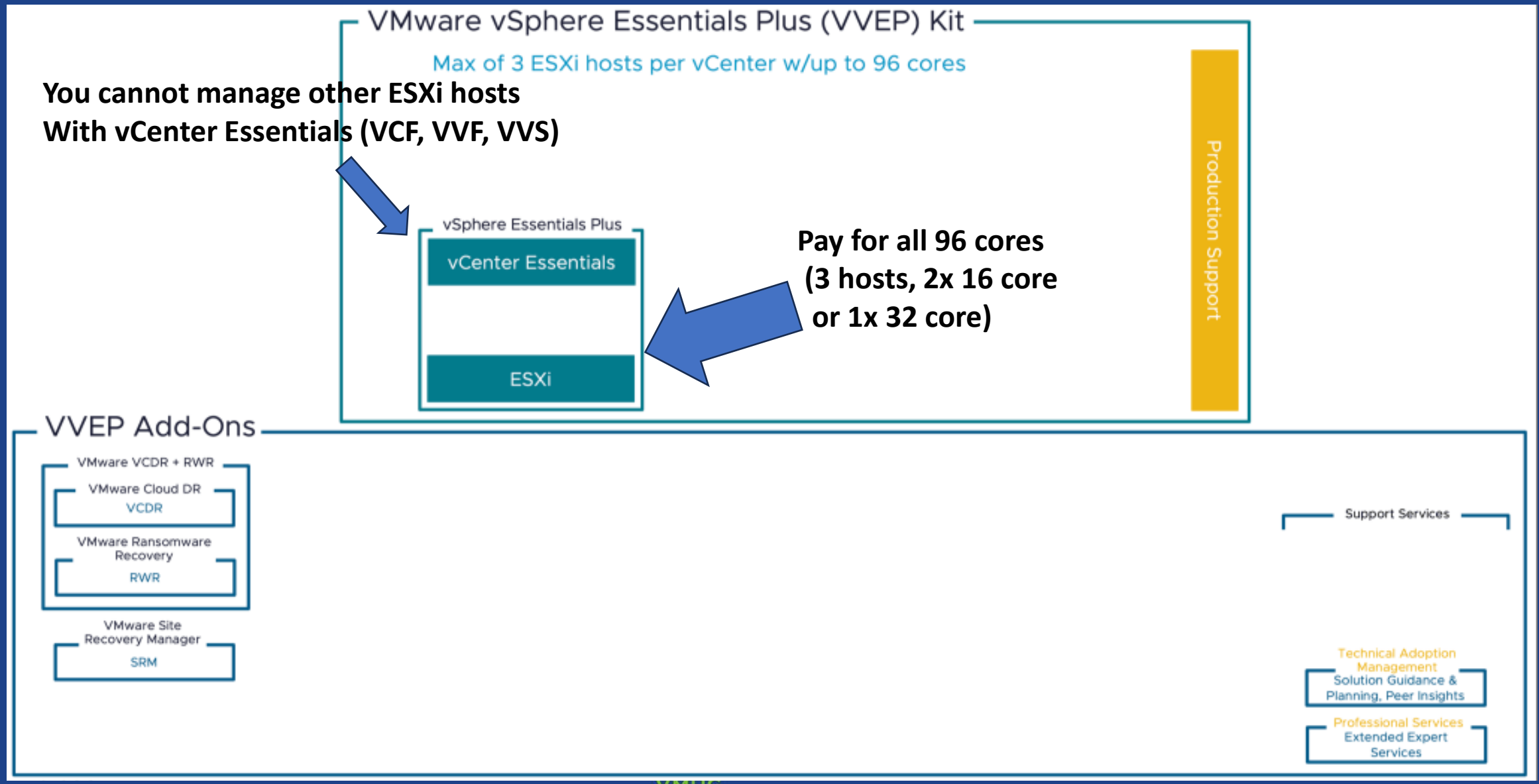
Entire feature list available at:
https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-datasheet-vsphere-product-line-comparison.pdf



Graphic from WilliamLam.com

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Let’s Chat about the newer products

VCF and VVF

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If I purchase VCF, do I need to run the entire Software-Defined Datacenter?

NO. Purchasing VCF gives you the software keys for products such as:

- vSphere
- vCenter
- NSX-T
- VSAN (with up to a 1TiB per physical core entitlement)
- Aria Suite – etc…

If I am a vSphere Enterprise Plus customer, how do I keep all my features?

VMware vSphere Foundation is the product that compares most closely. It also includes these products:

- vSAN – 100GiB per physical core or 1TiB with add-on
- Aria Lifecycle
- Aria Operations (Advanced)
- Aria for Logs

If I am a vSphere Enterprise Plus customer who also uses NSX, what edition do I need to retain my products?

VMware Cloud Foundation is the product that compares most closely. The same rule applies for users of:

- Aria Automation
- Aria Operations (Enterprise)
- Aria Operations for Networks
- HCX

How can I get the software to try it out?

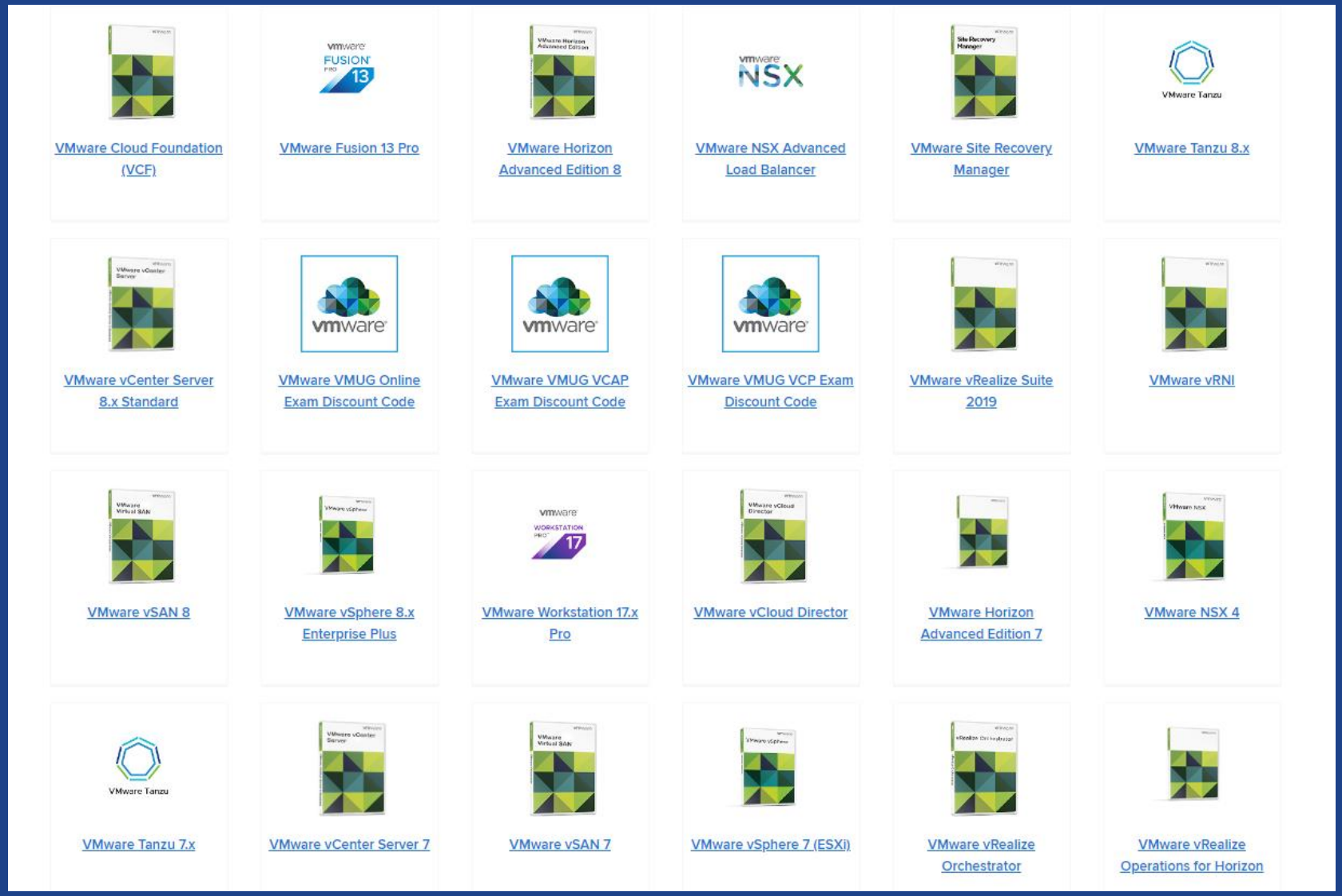
- The most powerful way to get evaluation licenses is via VMUG Advantage – EvalExperience
- 365-day Evaluation Licenses

VMUG Advantage

EvalExperience

365-day Eval Licenses for
The products you see here

Non-production use only



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VMUGAdvantage

Product Search

VMUG Advantage

VMware Cloud Foundation (VCF)

Manufacturer
VMware, Inc.

Delivery Type
Download

Free

Add to Cart

Are you eligible?

Description | Are you eligible?

VMware Cloud Foundation (VCF) is an integrated software platform that automates the deployment and lifecycle management of a complete software-defined data center (SDDC) on a standardized hyper-converged architecture.

This complete SDDC solution includes, vSphere, vSAN, NSX, and the vRealize Suite. VCF is the fastest path to building the hybrid cloud in your private datacenter. Installing VCF into your lab you will quickly see the powerful automation built into the SDDC manager, making it easy to deploy, create, expand, patch, upgrade, delete, entire workload domains with just a few simple clicks.

VMUGAdvantage

English (United States)

Order Summary

Order Number:	100747788771
Order Date:	2024-01-02

Download Your Software

Need Help?

VMware Cloud Foundation (VCF)

File: vcf-ems-deployment-parameters.xlsx

Download

Size: 79 KB

File: VMware-Cloud-Builder-5.0.0.0-21822418_OVF10.ova

Download

Size: 27 GB

vmware CUSTOMER CONNECT by Broadcom | Products and Accounts | Support | Knowledge | Communities | Success | Learning

VMware Cloud Foundation | Download Product | Drivers & Tools | Get Training

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Download VMware Cloud Foundation

Select Version:

5.1

VMware Cloud Foundation is VMware's unified SDDC platform for the hybrid cloud. Based on VMware's compute, storage, and network virtualization, it delivers a natively integrated software stack that can be used on premises for private cloud deployments or run as a service from the public cloud. VMware Cloud Foundation establishes a common foundation between private and public cloud.

Read More

Product Resources

View My Download History
Product Information
Documentation

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Product	Release Date	
VMware Cloud Foundation 5.1		
VMware Cloud Foundation 5.1.0	2023-11-07	GO TO DOWNLOADS

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Download Product

Version	5.1
Documentation	Release Notes
Release Date	2023-11-07
Type	Product Binaries

Product Resources

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Documentation

Product Downloads | Drivers & Tools | Open Source | Custom ISOs | OEM Addons

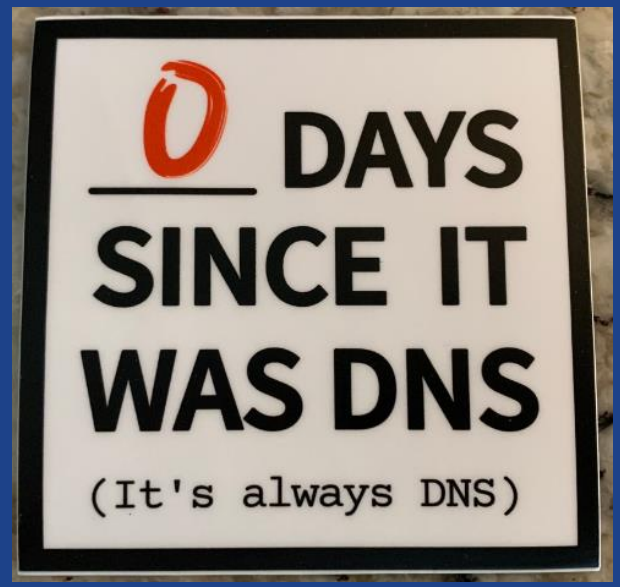
File	Information	
VMware Cloud Builder	File size: 29.48 GB File type: ova Read More	DOWNLOAD NOW
Cloud Builder Deployment Parameter Guide	File size: 81.04 KB File type: xlsx Read More	DOWNLOAD NOW
Cloud Builder Deployment Parameter Guide for VxRail	File size: 74.45 KB File type: xlsx Read More	DOWNLOAD NOW

← 29GB DOWNLOAD!

Each major version of Cloud Builder has its own Parameter Guide Spreadsheet

Important Prerequisites:

- Make sure NTP is functional (NTP servers, ESXi hosts, Cloud Builder Appliance)
- DNS Forward and Reverse for all hosts is functional
- If things blow up, have an easy way to revert
  - Cloud Builder Appliance Snapshot
  - Nested ESXi Hosts



https://www.etsy.com/listing/855353025/zero-0-days-since-it-was-dns-its-always

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Setting up a test environment

Nested Environment

- At least 24 cores (48 logical)
- Minimum of 386GB RAM
- Find a server that can give you at least 8 – 300GB SSD drives – Dedicate two drives per virtual ESXi host
- Optionally, add some extra disk to host the Physical ESXi host boot and dependent infrastructure (DNS, Cloud Builder VM, Linux Utility VM, Certificate Authority, etc)
- 12 vCPU, 96GB RAM per virtual ESXi host (DON'T SKIMP ON CPU)
- Each VM should have three disks – I choose a 32GB Boot, 100GB Cache and 250GB Capacity disk (VSAN OSA)

Setting up a test environment

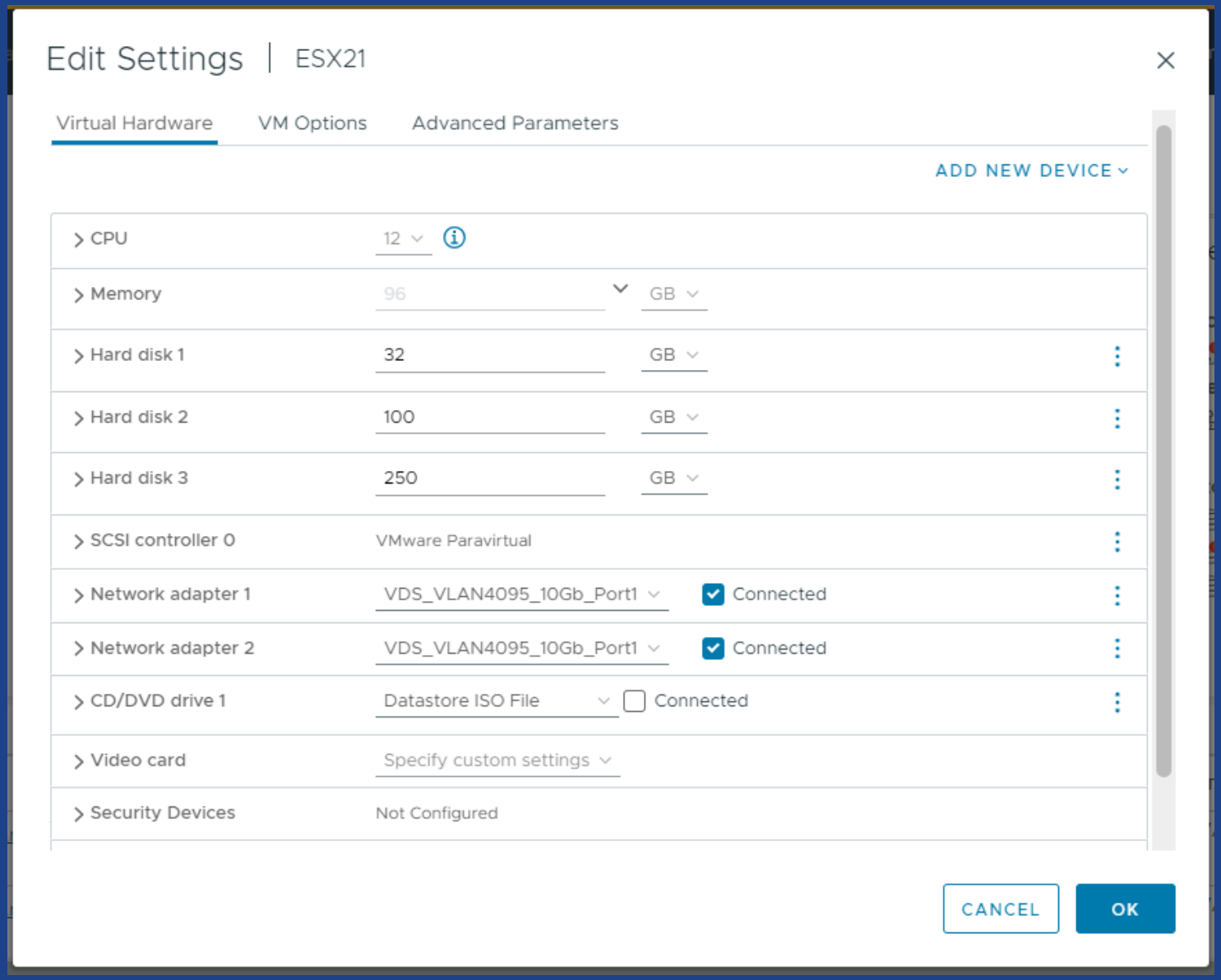
Network Infrastructure

- **Ubiquiti Dream Machine Pro**
- **Ubiquiti Unifi 10Gb Aggregation Switch**

- **Alternatively, you can use a managed switch that does 802.1q VLAN's and a software firewall appliance.**

- **VLAN's that I have built**
  - **VLAN for ESXi hosts and vCenter**
  - **VLAN for critical infrastructure (Domain Controllers/DNS**
  - **VLAN for VMotion**
  - **VLAN for VSAN**
  - **VLAN for NSX Host TEP's (DHCP-enabled)**
  - **VLAN for NSX Edge TEP's**
  - **VLAN for First NSX Edge Node Tier-0 Uplink**
  - **VLAN for Second NSX Edge Node Tier-0 Uplink**
  - **VLAN for NSX Region-A AVN Applications (Aria for Logs)**
  - **VLAN for NSX X-Region AVN Applications (Aria Ops, Auto, Identity)**

Setting up a test environment



Creating Nested ESXi Boot Media

mount -o loop VMware-VMvisor-Installer-8.0U2-22380479.x86_64.iso /esxi_cdrom_mount

Custom Kickstart /KS.CFG on the Install media

```
#
#
#
# Accept the VMware End User License Agreement
vmaccepteula

# Set the root password for the DCUI and Tech Support Mode
rootpw YourKick@$$Password

# Install on the first local disk available on machine
install --firstdisk --overwritevmfs

# Set the network to static on the first network adapter
network --bootproto=static --ip=192.168.201.31 --netmask=255.255.255.0 --gateway=192.168.201.254
 --hostname=esx31.vmuglab.local --nameserver=192.168.202.1 --vlanid=201 --device=vmnic0

reboot

%firstboot --interpreter=busybox
esxcli system ntp set -s 192.168.202.1
esxcli system ntp set -e 1
```

```
bootstate=0
title=Loading ESXi installer
timeout=5
prefix=
kernel=/b.b00
kernelopt=runweasel ks=cdrom:/KS_CUST.CFG
modules=/jumpstrt.gz --- /useropts.gz --- /features.gz --- /k.b00 --- /uc_intel.b00 --- /uc_amd.
b00 --- /uc_hygon.b00 --- /procfs.b00 --- /vmx.v00 --- /vim.v00 --- /tpm.v00 --- /sb.v00 --- /s.
v00 --- /atlantic.v00 --- /bcm_mpi3.v00 --- /bnxtnet.v00 --- /bnxtroce.v00 --- /brcmfcoe.v00 ---
 /cndi_igc.v00 --- /dwi2c.v00 --- /elxiscsi.v00 --- /elxnet.v00 --- /i40en.v00 --- /iavmd.v00 --
- /icen.v00 --- /igbn.v00 --- /intelgpi.v00 --- /ionic_cl.v00 --- /ionic_en.v00 --- /irdman.v00
--- /iser.v00 --- /ixgben.v00 --- /lpfc.v00 --- /lpnic.v00 --- /lsi_mr3.v00 --- /lsi_msgp.v00 --
- /lsi_msgp.v01 --- /lsi_msgp.v02 --- /mtip32xx.v00 --- /ne1000.v00 --- /nenic.v00 --- /nfnic.v0
0 --- /nhpsa.v00 --- /nipmi.v00 --- /nmlx5_cc.v00 --- /nmlx5_co.v00 --- /nmlx5_rd.v00 --- /ntg3.
v00 --- /nvme_pci.v00 --- /nvmerdma.v00 --- /nvmetcp.v00 --- /nvmxnet3.v00 --- /nvmxnet3.v01 ---
 /pvscsi.v00 --- /qcnic.v00 --- /qedentv.v00 --- /qedrntv.v00 --- /qfle3.v00 --- /qfle3f.v00 ---
 /qfle3i.v00 --- /qflge.v00 --- /rdmahl.v00 --- /rste.v00 --- /sfvmk.v00 --- /smartpqi.v00 --- /
vmkata.v00 --- /vmksdhci.v00 --- /vmkusb.v00 --- /vmw_ahci.v00 --- /bmcal.v00 --- /clusters.v00
--- /crx.v00 --- /drivervm.v00 --- /elx_esx_.v00 --- /btldr.v00 --- /esx_dvfi.v00 --- /esx_ui.v0
0 --- /esxupdt.v00 --- /tpmesxup.v00 --- /weaselin.v00 --- /esxio_co.v00 --- /infravis.v00 --- /
loadesx.v00 --- /lsuv2_hp.v00 --- /lsuv2_in.v00 --- /lsuv2_ls.v00 --- /lsuv2_nv.v00 --- /lsuv2_o
e.v00 --- /lsuv2_oe.v01 --- /lsuv2_sm.v00 --- /native_m.v00 --- /qlnative.v00 --- /trx.v00 --- /
vdfs.v00 --- /vds_vsip.v00 --- /vmware_e.v00 --- /hbrsrv.v00 --- /vsan.v00 --- /vsanheal.v00 ---
 /vsanmgmt.v00 --- /tools.t00 --- /xorg.v00 --- /gc.v00 --- /imgdb.tgz --- /basemisc.tgz --- /re
svibs.tgz --- /esxiodpt.tgz --- /imgpayld.tgz
build=8.0.2-0.0.22380479
updated=0
```

Reference custom Kickstart file in /efi/boot/boot.cfg

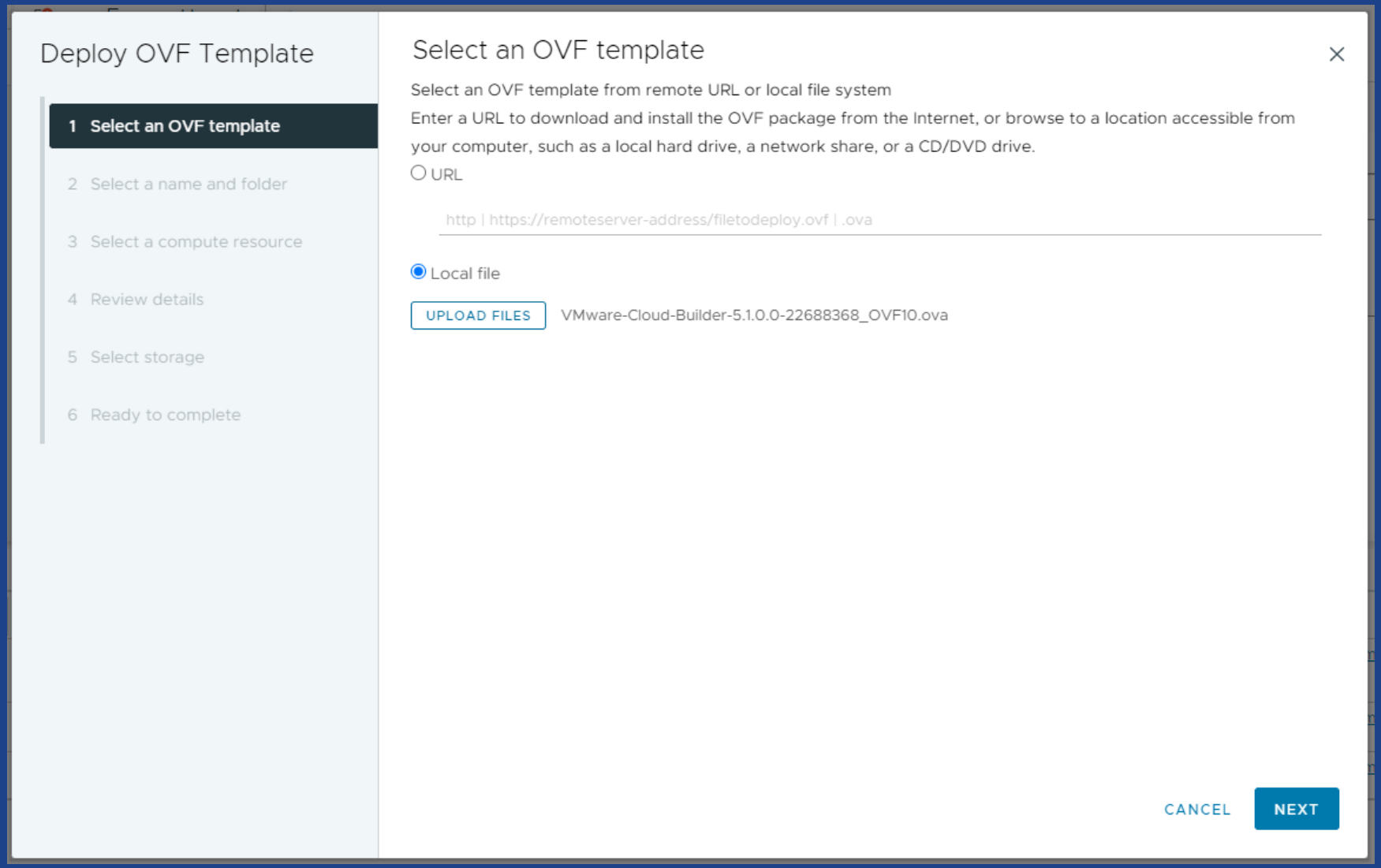
(Highlighted text) ks=cdrom:/KS_CUST.CFG

Generate custom ISO's
SCP the ISO's to your host datastore

```
genisoimage -relaxed-filenames -J -R -o /ESX21_vSphere8U2.iso -b isolinux.bin -c BOOT.CAT -no-emul-boot -boot-load-size 4 -boot-info-table -eltorito-alt-boot -e efiboot.img –no-emul-boot /esxi_cdrom
genisoimage -relaxed-filenames -J -R -o /ESX22_vSphere8U2.iso -b isolinux.bin -c BOOT.CAT -no-emul-boot -boot-load-size 4 -boot-info-table -eltorito-alt-boot -e efiboot.img –no-emul-boot /esxi_cdrom
genisoimage -relaxed-filenames -J -R -o /ESX23_vSphere8U2.iso -b isolinux.bin -c BOOT.CAT -no-emul-boot -boot-load-size 4 -boot-info-table -eltorito-alt-boot -e efiboot.img –no-emul-boot /esxi_cdrom
genisoimage -relaxed-filenames -J -R -o /ESX24_vSphere8U2.iso -b isolinux.bin -c BOOT.CAT -no-emul-boot -boot-load-size 4 -boot-info-table -eltorito-alt-boot -e efiboot.img –no-emul-boot /esxi_cdrom
```

```
scp /ESX21_vSphere8U2.iso root@esx5.vmatt.net:/vmfs/volumes/65d986b8-09d9d051-0b87-1402ec93dae8/ISO/.
scp /ESX22_vSphere8U2.iso root@esx5.vmatt.net:/vmfs/volumes/65d986b8-09d9d051-0b87-1402ec93dae8/ISO/.
scp /ESX23_vSphere8U2.iso root@esx5.vmatt.net:/vmfs/volumes/65d986b8-09d9d051-0b87-1402ec93dae8/ISO/.
scp /ESX24_vSphere8U2.iso root@esx5.vmatt.net:/vmfs/volumes/65d986b8-09d9d051-0b87-1402ec93dae8/ISO/.
```

Deploy Cloud Builder Appliance



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Deploy OVF Template

1 Select an OVF template

2 **Select a name and folder**

3 Select a compute resource

4 Review details

5 Select storage

6 Ready to complete

Select a name and folder

Specify a unique name and target location

Virtual machine name: VCFCB

Select a location for the virtual machine.

- vcen-a.vmatt.net
  - NESTLAB
  - PROD-LAB

CANCEL BACK NEXT

Deploy OVF Template

1 Select an OVF template

2 Select a name and folder

3 **Select a compute resource**

4 Review details

5 Select storage

6 Ready to complete

Select a compute resource

Select the destination compute resource for this operation

- PROD-LAB
  - DL360Gen9
    - esx5.vmatt.net
  - PROD-NUCLAB

Compatibility

✓ Compatibility checks succeeded.

CANCEL BACK NEXT

Deploy OVF Template

1 Select an OVF template

2 Select a name and folder

3 Select a compute resource

4 **Review details**

5 License agreements

6 Select storage

7 Select networks

8 Customize template

9 Ready to complete

Review details

Verify the template details.

Publisher	No certificate present
Product	VMware Cloud Foundation Cloud-Builder Appliance
Version	5.1.0.0
Vendor	VMware Inc.
Download size	29.5 GB
Size on disk	33.0 GB (thin provisioned) 253.8 GB (thick provisioned)

CANCEL BACK NEXT

Deploy OVF Template

1 Select an OVF template

2 Select a name and folder

3 Select a compute resource

4 Review details

5 **License agreements**

6 Select storage

7 Select networks

8 Customize template

9 Ready to complete

License agreements

The end-user license agreement must be accepted.

Read and accept the terms for the license agreement.

VMWARE GENERAL TERMS

Last updated:16 June 2022

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☑ I accept all license agreements.

CANCEL BACK NEXT

Deploy OVF Template

1 Select an OVF template
2 Select a name and folder
3 Select a compute resource
4 Review details
5 License agreements
6 Select storage
7 Select networks
8 Customize template
9 Ready to complete

Select storage

Select the storage for the configuration and disk files

Encrypt this virtual machine

Select virtual disk format Thin Provision

VM Storage Policy Datastore Default

← CHOOSE THIN IN A LAB Environment to save space

Disable Storage DRS for this virtual machine

	Name	Storage Compatibility	Capacity	Provisioned	Free
◉	INTERNAL-SSD-ESX5	--	803.25 GB	1.42 GB	801.83 GB
○	INTERNAL-SSD2-ESX21	--	279.25 GB	251.41 GB	27.84 GB
○	INTERNAL-SSD2-ESX22	--	279.25 GB	251.41 GB	27.84 GB
○	INTERNAL-SSD2-ESX23	--	279.25 GB	251.41 GB	27.84 GB

Manage Columns Items per page 10 10 items

Compatibility

✓ Compatibility checks succeeded.

CANCEL BACK NEXT

Deploy OVF Template

1 Select an OVF template

2 Select a name and folder

3 Select a compute resource

4 Review details

5 License agreements

6 Select storage

7 Select networks

8 Customize template

9 Ready to complete

Select networks

Select a destination network for each source network.

Source Network	Destination Network
Network 1	VSS_VLAN1022_192-168-102-0-27

Manage Columns

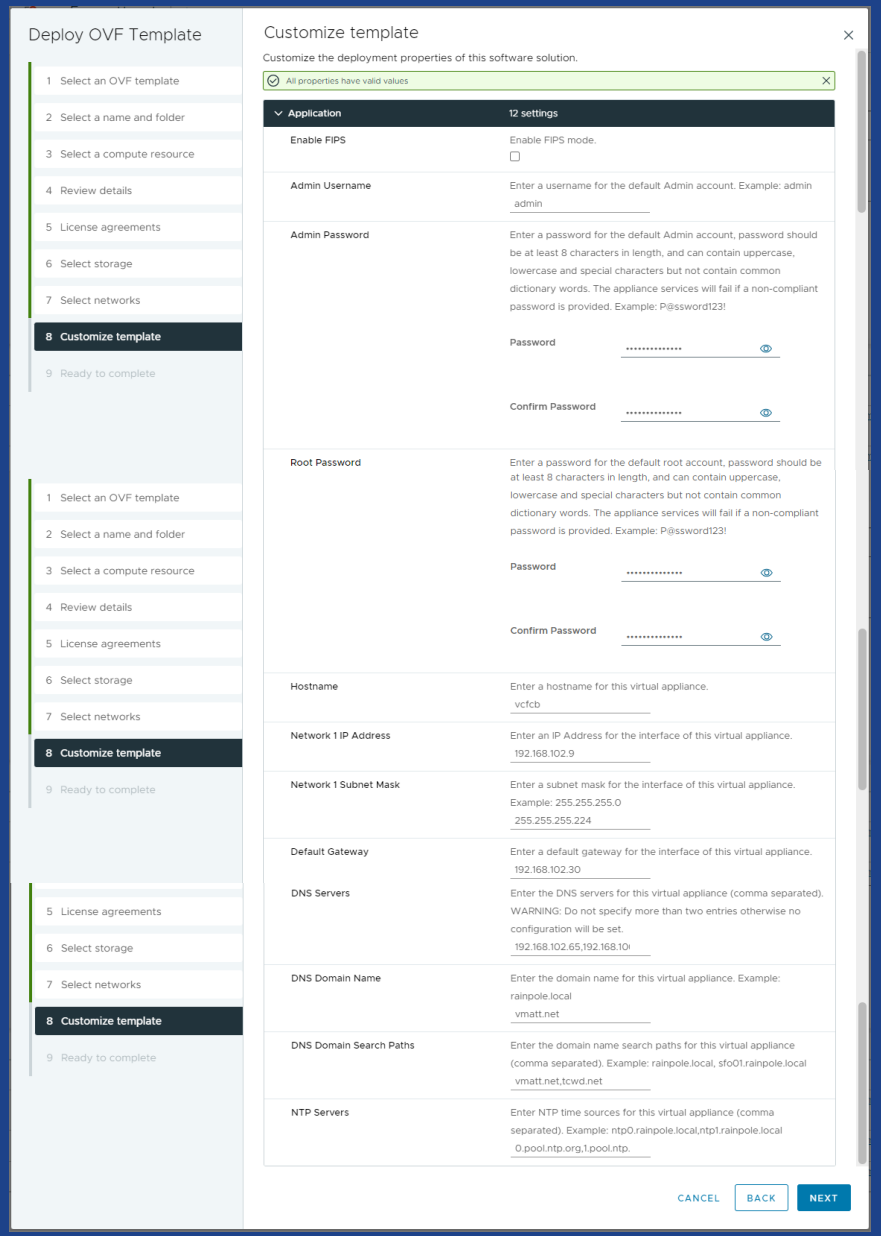
1 item

IP Allocation Settings

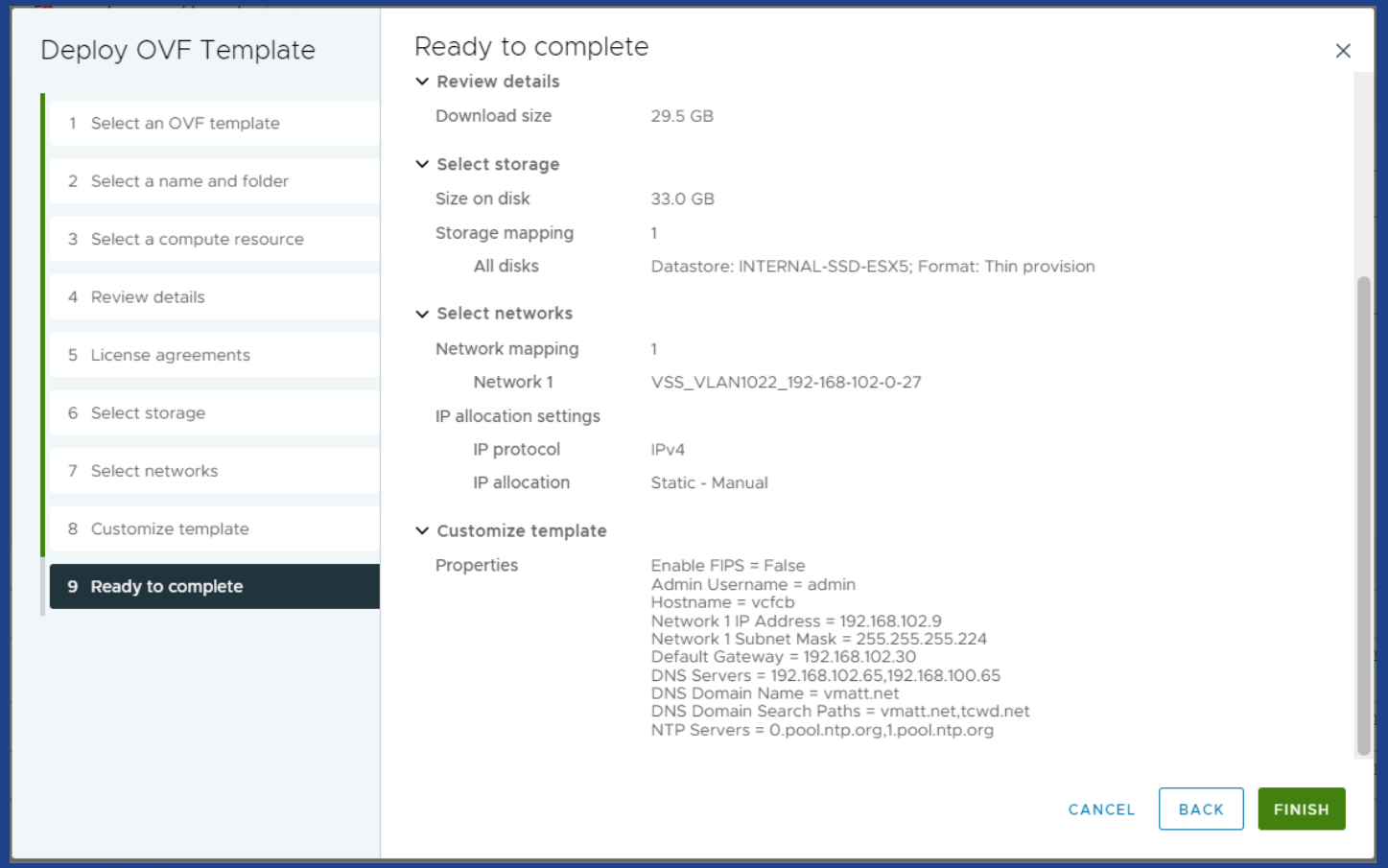
IP allocation: Static - Manual

IP protocol: IPv4

CANCEL BACK NEXT



PROTIP: Before you power on the Cloud Builder appliance
Create a snapshot to be able to restart the bringup easily



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VMware Cloud Foundation

v5.1.0

About

This **Deployment Parameter Workbook** contains worksheets categorizing the information required for deploying **VMware Cloud Foundation**. The information provided is used to create the management domain using the **VMware Cloud Builder** appliance.

The fields in **YELLOW** contain sample values that you should replace with the information as it relates to your environment. If a cell turns **RED**, the required information is either missing where its required, or some kind of validation input has failed.

The **Deployment Parameters Workbook** is not able to fully validate all inputs due to formula limitations of Excel and so some validation issues may only be picked up once you upload the workbook to the **VMware Cloud Builder** appliance.

NOTE: Using copy and paste between cells can also create problems so try to avoid, if you do use this capability ensure you select Paste Special > Values only

For further information see the following **VMware Cloud Foundation** documentation (https://docs.vmware.com/en/VMware-Cloud-Foundation/index.html) :

- For prerequisites of the management domain, see the Prerequisite Checklist worksheet of the **Planning and Preparation Workbook.**
- For information on deploying the management domain, see **VMware Cloud Foundation Deployment Guide**.

Worksheet Descriptions

Credentials - Used to input default passwords that will be used for built-in accounts for each component.

Credentials

Instructions: Use the Users tab to input the default passwords used for built-in accounts for each component, these will be used to implement the Management Domain. - Grey cells are for information purposes and cannot be modified. - Red cells mean the input data is either missing and required or some type of validation of the input data has failed. Password Policy: Each password has its own password policy typically a minimum number of characters in length and at least one uppercase, lowercase, number and special character (must be of the following @!#$%?^).

Users

Username	Default Password	Description
ESXi		
root	Hudson11!	ESXi Host Root Account (Same for all ESXi hosts)
vCenter Server		
administrator@vsphere.local	Pengu!nP0w3r	Default Single-Sign On Domain Administrator User
root	Pengu!nP0w3r	vCenter Server Virtual Appliances Root Account
NSX		
root	AwesomePassw0rd	NSX Virtual Appliance Root Account - NSX Manager and Edge Nodes
admin	AnotherAwesomePassw0rd	NSX User Interface and Default CLI Admin Account - NSX Manager and Edge Nodes
audit	YetAnotherFantasticPassw0rd	NSX Audit CLI Account - NSX Manager and Edge Nodes
SDDC Manager		
root	Pa$$w000rd	SDDC Manager Appliance Root Account
vcf	FantasticV0yag3	SDDC Manager Super User
admin@local	LastCr3d4VCF!	SDDC Manager Local Account

Hosts and Networks

Instructions: Use the *Hosts and Networks* tab to input network details, hostname and IPs for the ESXi hosts to be used to implement the Management Domain.
- Grey cells are for information purposes and cannot be modified.
- **Red cells mean the input data is either missing and mandatory or some type of validation of the input data has failed.**
- Yellow cells indicate input data, default values are included to help illustrate the formatting to be used and align to the VMware documentation. **If a value is not required enter 'n/a', if it turns red then its mandatory.**

Network Type	VLAN #	Portgroup Name	CIDR Notation	Gateway	MTU
VM Management Network					
Management Network	201	VLAN0201_192-168-201-0-24	192.168.201.0/24	192.168.201.254	9000
vMotion Network	203	VLAN0203_192-168-203-0-24	192.168.203.0/24	192.168.203.254	9000
vSAN Network	204	VLAN0204_192-168-204-0-24	192.168.204.0/24	192.168.204.254	9000

esx21	esx22	esx23	esx
192.168.201.21	192.168.201.22	192.168.201.23	192.168.
vMotion Start IP	192.168.203.1	vMotion End IP	192.168.
vSAN Start IP	192.168.204.1	vSAN End IP	192.168.

Virtual Networking	Value
vSphere Standard Switch Name	vSwitch0
Primary vSphere Distributed Switch	**Value**
Primary vSphere Distributed Switch - Name	NESTED-VCF-VDS1
Primary vSphere Distributed Switch - pNICs	vmnic0,vmnic1
Primary vSphere Distributed Switch - MTU Size	9000
Primary vSphere Distributed Switch - Transport Zone Type	Overlay/VLAN
Secondary vSphere Distributed Switch (Optional)	Value
Secondary vSphere Distributed Switch - Name	n/a
Secondary vSphere Distributed Switch - Transport Zone Type	n/a
Secondary vSphere Distributed Switch - pNICs	vmnic2,vmnic3
Secondary vSphere Distributed Switch - MTU Size	9000

Security Thumbprints	Validate Thumbprints	No
ESXi Hosts	SSH RSA Key Fingerprints (SHA2	
Example Input	SHA256:RBA2O5XlmupEfJSaoBcYYzc0aR9gWjlkY	:B3:CF:
esx21		
esx22		
esx23		
esx24		

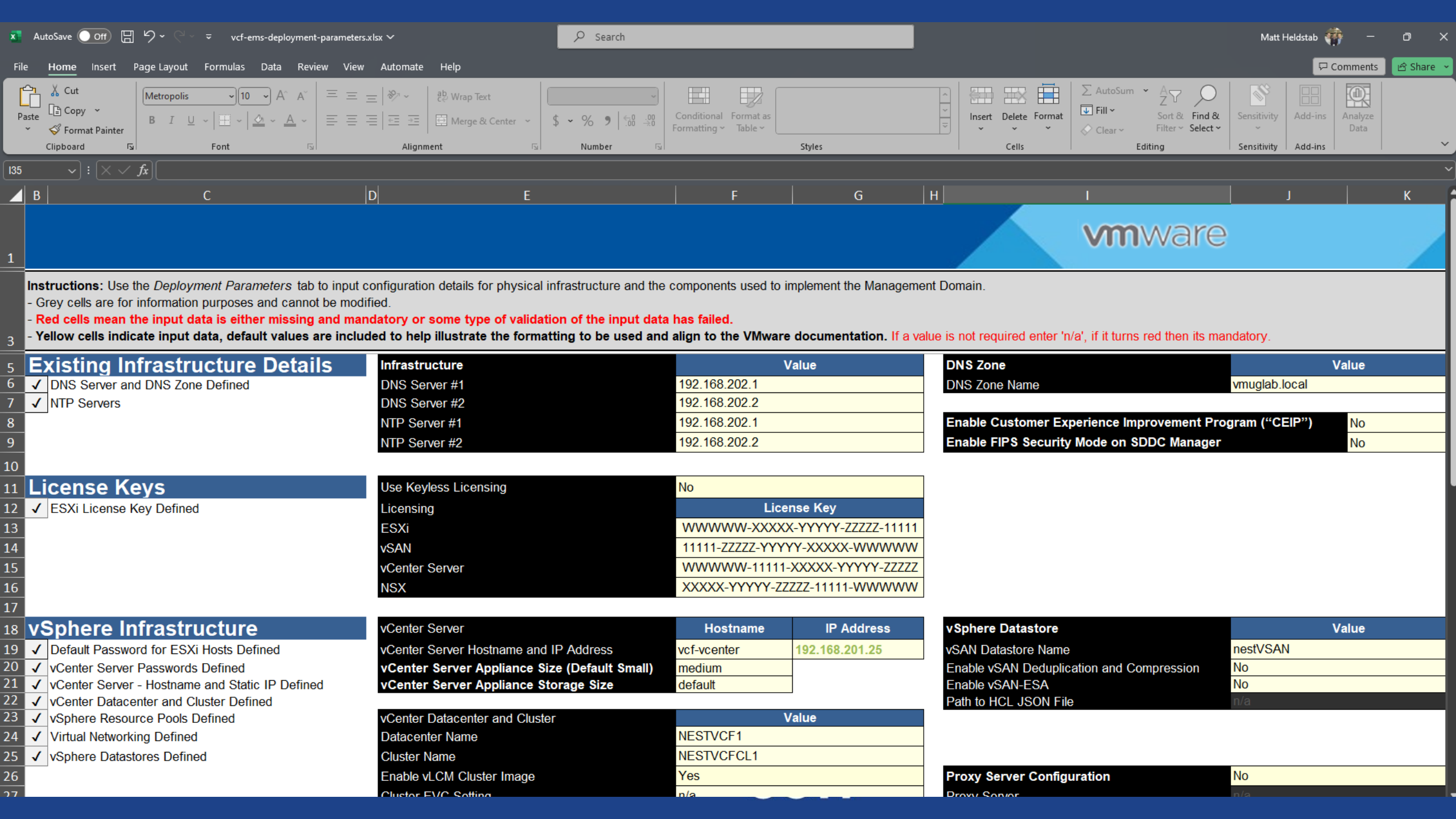
Validate Thumbprints
Choosing not to validate the Security Thumbprints results in the initial connection to not be trusted, subsequent communication is then trusted. To ensure all communication including the initial connection is trusted provide the SSH and SSL

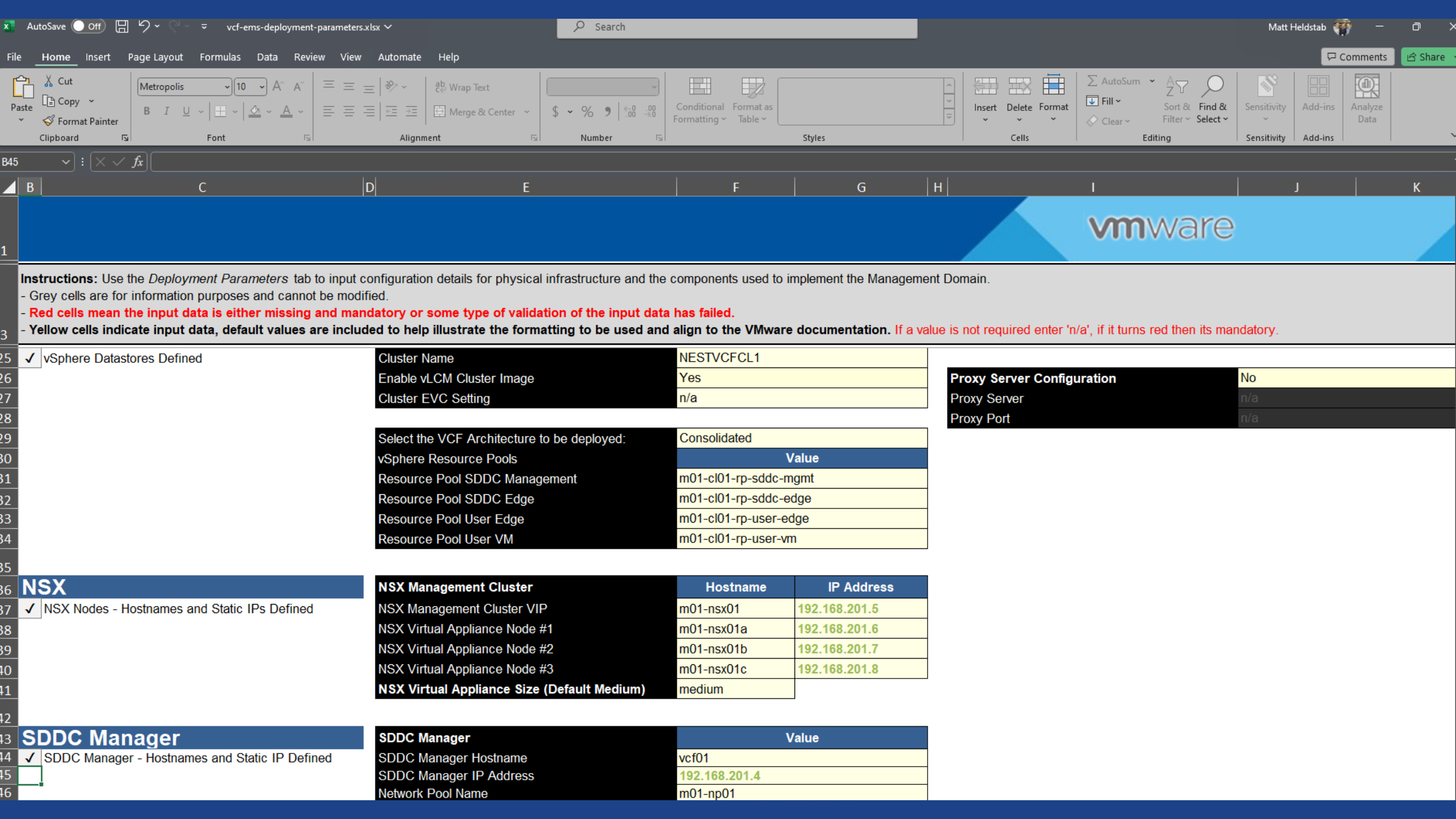
NSX Host Overlay Network - DHCP	
VLAN ID	205

Configure NSX Host Overlay Using a Static IP Pool	No		
Pool Description	ESXi Host Overlay TEP IP Pool		
Pool Name	sfo01-m01-cl01-tep01		
CIDR Notation	172.16.14.0/24	Gateway	172.16

vSphere Distributed Switch Profile	Profile-1

vSphere Distributed Switch = One (1) / Physical NICs = Two (2) or Four (4)


AutoSave Off
vcf-ems-deployment-parameters.xlsx
Search
Matt Heldstab
File Home Insert Page Layout Formulas Data Review View Automate Help
Comments Share
Cut Copy Format Painter Paste
Metropolis 10
Wrap Text Merge & Center
Conditional Formatting Format as Table
Insert Delete Format
AutoSum Fill Clear
Sort & Filter Find & Select
Sensitivity Add-ins Analyze Data
Clipboard Font Alignment Number Styles Cells Editing Sensitivity Add-ins
I35
vmware
Instructions: Use the Deployment Parameters tab to input configuration details for physical infrastructure and the components used to implement the Management Domain.
- Grey cells are for information purposes and cannot be modified.
- Red cells mean the input data is either missing and mandatory or some type of validation of the input data has failed.
- Yellow cells indicate input data, default values are included to help illustrate the formatting to be used and align to the VMware documentation. If a value is not required enter 'n/a', if it turns red then its mandatory.
Existing Infrastructure Details
✓ DNS Server and DNS Zone Defined
✓ NTP Servers
Infrastructure | Value
DNS Server #1 | 192.168.202.1
DNS Server #2 | 192.168.202.2
NTP Server #1 | 192.168.202.1
NTP Server #2 | 192.168.202.2
DNS Zone | Value
DNS Zone Name | vmuglab.local
Enable Customer Experience Improvement Program ("CEIP") | No
Enable FIPS Security Mode on SDDC Manager | No
License Keys
✓ ESXi License Key Defined
Use Keyless Licensing | No
Licensing | License Key
ESXi | WWWWW-XXXXX-YYYYY-ZZZZZ-11111
vSAN | 11111-ZZZZZ-YYYYY-XXXXX-WWWWW
vCenter Server | WWWWW-11111-XXXXX-YYYYY-ZZZZZ
NSX | XXXXX-YYYYY-ZZZZZ-11111-WWWWW
vSphere Infrastructure
✓ Default Password for ESXi Hosts Defined
✓ vCenter Server Passwords Defined
✓ vCenter Server - Hostname and Static IP Defined
✓ vCenter Datacenter and Cluster Defined
✓ vSphere Resource Pools Defined
✓ Virtual Networking Defined
✓ vSphere Datastores Defined
vCenter Server | Hostname | IP Address
vCenter Server Hostname and IP Address | vcf-vcenter | 192.168.201.25
vCenter Server Appliance Size (Default Small) | medium
vCenter Server Appliance Storage Size | default
vCenter Datacenter and Cluster | Value
Datacenter Name | NESTVCF1
Cluster Name | NESTVCFCL1
Enable vLCM Cluster Image | Yes
Cluster EVC Setting | n/a
vSphere Datastore | Value
vSAN Datastore Name | nestVSAN
Enable vSAN Deduplication and Compression | No
Enable vSAN-ESA | No
Path to HCL JSON File | n/a
Proxy Server Configuration | No
Proxy Server | n/a



Instructions: Use the *Deployment Parameters* tab to input configuration details for physical infrastructure and the components used to implement the Management Domain.
- Grey cells are for information purposes and cannot be modified.
- **Red cells mean the input data is either missing and mandatory or some type of validation of the input data has failed.**
- **Yellow cells indicate input data, default values are included to help illustrate the formatting to be used and align to the VMware documentation.** If a value is not required enter 'n/a', if it turns red then its mandatory.

✓ vSphere Datastores Defined

Cluster Name	NESTVCFCL1
Enable vLCM Cluster Image	Yes
Cluster EVC Setting	n/a

Select the VCF Architecture to be deployed:	Consolidated
vSphere Resource Pools	**Value**
Resource Pool SDDC Management	m01-cl01-rp-sddc-mgmt
Resource Pool SDDC Edge	m01-cl01-rp-sddc-edge
Resource Pool User Edge	m01-cl01-rp-user-edge
Resource Pool User VM	m01-cl01-rp-user-vm

Proxy Server Configuration	No
Proxy Server	n/a
Proxy Port	n/a

NSX

✓ NSX Nodes - Hostnames and Static IPs Defined

NSX Management Cluster	**Hostname**	**IP Address**
NSX Management Cluster VIP	m01-nsx01	192.168.201.5
NSX Virtual Appliance Node #1	m01-nsx01a	192.168.201.6
NSX Virtual Appliance Node #2	m01-nsx01b	192.168.201.7
NSX Virtual Appliance Node #3	m01-nsx01c	192.168.201.8
NSX Virtual Appliance Size (Default Medium)	medium	

SDDC Manager

✓ SDDC Manager - Hostnames and Static IP Defined

SDDC Manager	**Value**
SDDC Manager Hostname	vcf01
SDDC Manager IP Address	192.168.201.4
Network Pool Name	m01-np01

VMware Cloud Foundation

Cloud Builder will validate data provided in the configuration file and elements of the physical infrastructure.

Select Platform — Review Prerequisites — Prepare Configuration — Validate Configuration — Deploy Cloud Foundation

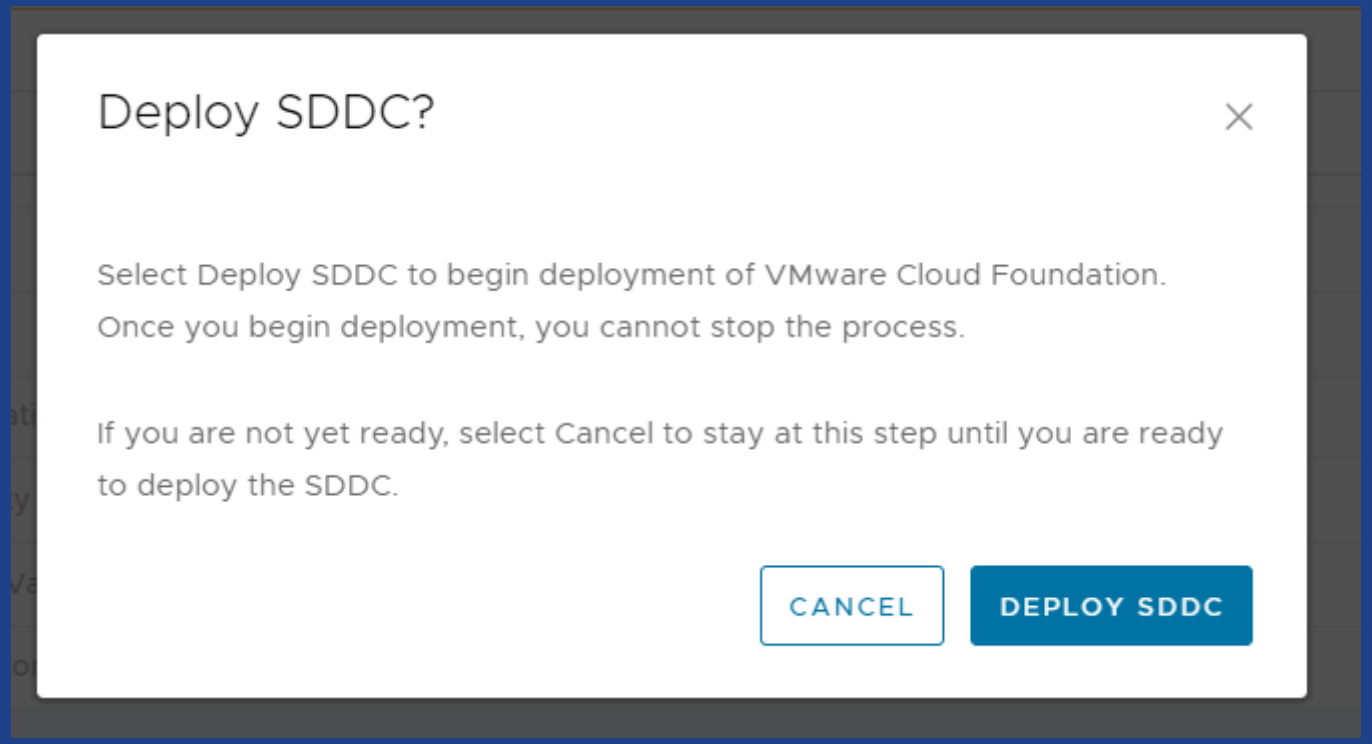
⚠ Errors found during configuration file validation. Proceed with caution. Acknowledge

DOWNLOAD PRINT

History	Validation Items	Status
Current	JSON Spec Validation	Success
3/9/24, 9:21 PM	Cloud Builder Configuration Validation	Success
3/9/24, 8:52 PM	DNS Resolution Validation	Success
	Preparing Security Requirements for Running Validation	Success
	ESXi Host Configuration Validation	Success
	ESXi Cluster Homogeneity Validation	Success
	vSAN Disk Availability Validation(AllFlash)	Success
	License Key Validation	Success
3/9/24, 8:52 PM	Password Validation	Success
	Network Configuration Validation	Success
	vMotion Network Connectivity Validation	Success
	vSAN Network Connectivity Validation	Success
	NSX Host Overlay Network Connectivity Validation	Success
	Time Synchronization Validation	Warning
	ESXi Host vcfcb is not currently synchronising time with NTP Server VMUGDC1.vmuglab.local ESXi Host vcfcb is not currently synchronising time with NTP Server VMUGDC2.vmuglab.local	
	Network IP Pool Validation	Success

BACK RETRY NEXT

BACK RETRY NEXT



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vmw Cloud Builder ™

VMware Cloud Foundation

Cloud Builder will deploy your SDDC.

Select Platform — Review Prerequisites — Prepare Configuration — Validate Configuration — Deploy Cloud Foundation

Deployment of VMware Cloud Foundation is successful.

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SDDC Bringup finished at 2/26/24, 2:09 AM. 0 tasks in progress

Search Tasks | Status

Tasks	Start Time	End Time	Status
Validate SSH/SSL Thumbprints			Success
Generate Security Thumbprints Input Data	9:46:01 PM	9:46:02 PM	Success
Validate Security Thumbprints	9:46:04 PM	9:46:05 PM	Success
Add Certificates in Trust-Store			Success
Generate input for Trust Certificates	9:46:07 PM	9:46:08 PM	Success
Trust Certificates	9:46:10 PM	9:46:11 PM	Success
Import SSH Keys			Success
Generate input for Import SSH Keys	9:46:13 PM	9:46:19 PM	Success
Import SSH Keys	9:46:21 PM	9:46:22 PM	Success
Prepare Environment for Bringup Execution			Success
Generate ESXi Host vSAN Configuration Input Data	9:46:24 PM	9:46:24 PM	Success
Generate ESXi Host Input Data	9:46:27 PM	9:46:27 PM	Success
Retrieve ESXi Host Lockdown Mode Configuration	9:46:29 PM	9:46:31 PM	Success
Disable Lockdown Mode on ESXi Hosts	9:46:31 PM	9:46:32 PM	Success
Generate ESXi Service Accounts Data	9:46:35 PM	9:46:36 PM	Success
Create New Local ESXi User	9:46:38 PM	9:46:40 PM	Success
Assign Role to New ESXi User	9:46:40 PM	9:46:41 PM	Success
Grant Administrator Access to ESXi Users	9:46:42 PM	9:46:43 PM	Success

Add Service Account to ESXi Lockdown Mode Exception Users List	9:46:45 PM	9:46:47 PM	Success
Update ESXi Hosts with ESXi Service Accounts	9:46:49 PM	9:46:50 PM	Success
Configure Lockdown Mode on ESXi Hosts	9:46:52 PM	9:46:53 PM	Success
Prepare ESXi Hosts for vSAN Configuration	9:46:58 PM	9:49:19 PM	Success
Create 'VM Network' Portgroup on ESXi Hosts	9:49:21 PM	9:49:23 PM	Success
Configure DNS on ESXi Hosts	9:49:25 PM	9:49:27 PM	Success
Determine Software Version on ESXi Hosts	9:49:29 PM	9:49:31 PM	Success
Deploy and Configure vCenter Server			Success
Generate vSphere Configuration Input Data	9:49:33 PM	9:49:34 PM	Success
Generate vCenter Server Deployment Input Data	9:49:36 PM	9:49:36 PM	Success
Generate vSAN Deployment Input	9:49:39 PM	9:49:42 PM	Success
Deploy vCenter Server	9:49:44 PM	10:35:57 PM	Success
Generate vSphere Input Data	10:35:59 PM	10:36:00 PM	Success
Install VMCA Root Certificate	10:36:02 PM	10:36:08 PM	Success
Download SSH Keys using Guest Program for vCenter	10:36:10 PM	10:36:14 PM	Success
Generate VC Fips Input Data	10:36:16 PM	10:36:16 PM	Success
Configure vCenter FIPS	10:36:18 PM	10:36:22 PM	Success
Create Admin User Groups in vsphere.local Domain	10:36:24 PM	10:36:27 PM	Success
Generate vCenter Server License Rename Input Data	10:36:32 PM	10:36:32 PM	Success
Apply vCenter Server License	10:36:35 PM	10:36:36 PM	Success
Rename the Applied vCenter Server License in vCenter Server	10:36:38 PM	10:36:40 PM	Success
Rename vSAN Datastore	10:36:42 PM	10:36:45 PM	Success
Generate Data for Cloud Admin Role Creation	10:36:47 PM	10:36:47 PM	Success
Create vCenter Server Roles	10:36:48 PM	10:36:49 PM	Success

Create vSphere Cluster			Success
Generate Cluster Configuration Input Data	10:36:51 PM	10:36:52 PM	Success
Create vSphere Cluster	10:36:54 PM	10:37:00 PM	Success
Disable vSphere Cluster Services	10:37:05 PM	10:37:06 PM	Success
Enable vSphere DRS	10:37:08 PM	10:37:11 PM	Success
Generate input data for vSAN license renaming operation	10:37:13 PM	10:37:14 PM	Success
Apply vSAN License	10:37:14 PM	10:37:19 PM	Success
Rename the Applied vSAN License in vCenter Server	10:37:19 PM	10:37:21 PM	Success
Disable vSAN VUM recommendation	10:37:23 PM	10:37:26 PM	Success
Assign Administrator Privileges to SDDC Admins Group	10:37:28 PM	10:37:30 PM	Success
Create vSphere Distributed Switch	10:37:33 PM	10:37:47 PM	Success
Retrieve ESXi Host Lockdown Mode Configuration	10:37:49 PM	10:37:50 PM	Success
Disable Lockdown Mode on ESXi Hosts	10:37:50 PM	10:37:52 PM	Success
Add ESXi Host to vSphere Cluster	10:37:54 PM	10:40:09 PM	Success
Configure Lockdown Mode on ESXi Hosts	10:40:11 PM	10:40:13 PM	Success
Add ESXi Host to vSphere Distributed Switch	10:40:15 PM	10:42:47 PM	Success
Create VM Folders	10:42:49 PM	10:42:50 PM	Success
Create Network Folders	10:42:52 PM	10:42:53 PM	Success
Update vCenter Server vApp Product Info	10:42:55 PM	10:42:58 PM	Success

Management Cluster Configuration			Success
Create vMotion vmknics	10:43:01 PM	10:43:08 PM	Success
Create vSAN vmknics	10:43:09 PM	10:43:47 PM	Success
Configure VLANs on vSphere Distributed Switch Portgroups	10:43:47 PM	10:43:57 PM	Success
Migrate VMs to vSphere Distributed Switch	10:43:58 PM	10:44:03 PM	Success
Migrate ESXi Host vmknics to vSphere Distributed Switch	10:44:03 PM	10:44:16 PM	Success
Detach ESXi Host vmnics from vSphere Standard Switch	10:44:16 PM	10:44:19 PM	Success
Attach ESXi Host vmnics to vSphere Distributed Switch	10:44:19 PM	10:44:30 PM	Success
Apply ESXi Host License Key			Success
Apply ESXi Host License Key	10:46:55 PM	10:46:58 PM	Success
Generate ESXi License Rename Input Data	10:46:58 PM	10:46:59 PM	Success
Rename the Applied ESXi License in vCenter Server	10:47:00 PM	10:47:02 PM	Success
Configure vCenter Server and NSX Service Accounts in vCenter Server			Success
Generate vSphere Input Data	10:47:04 PM	10:47:05 PM	Success
Generate vCenter Server Service Accounts Input Data	10:47:07 PM	10:47:07 PM	Success
Create vCenter Server Users	10:47:13 PM	10:47:18 PM	Success
Create vCenter Server Roles	10:47:19 PM	10:47:19 PM	Success
Assign User Roles in vCenter Server	10:47:20 PM	10:47:22 PM	Success
Add Disaster Recovery Service Users to Administrator Group in vCenter Server	10:47:27 PM	10:47:29 PM	Success

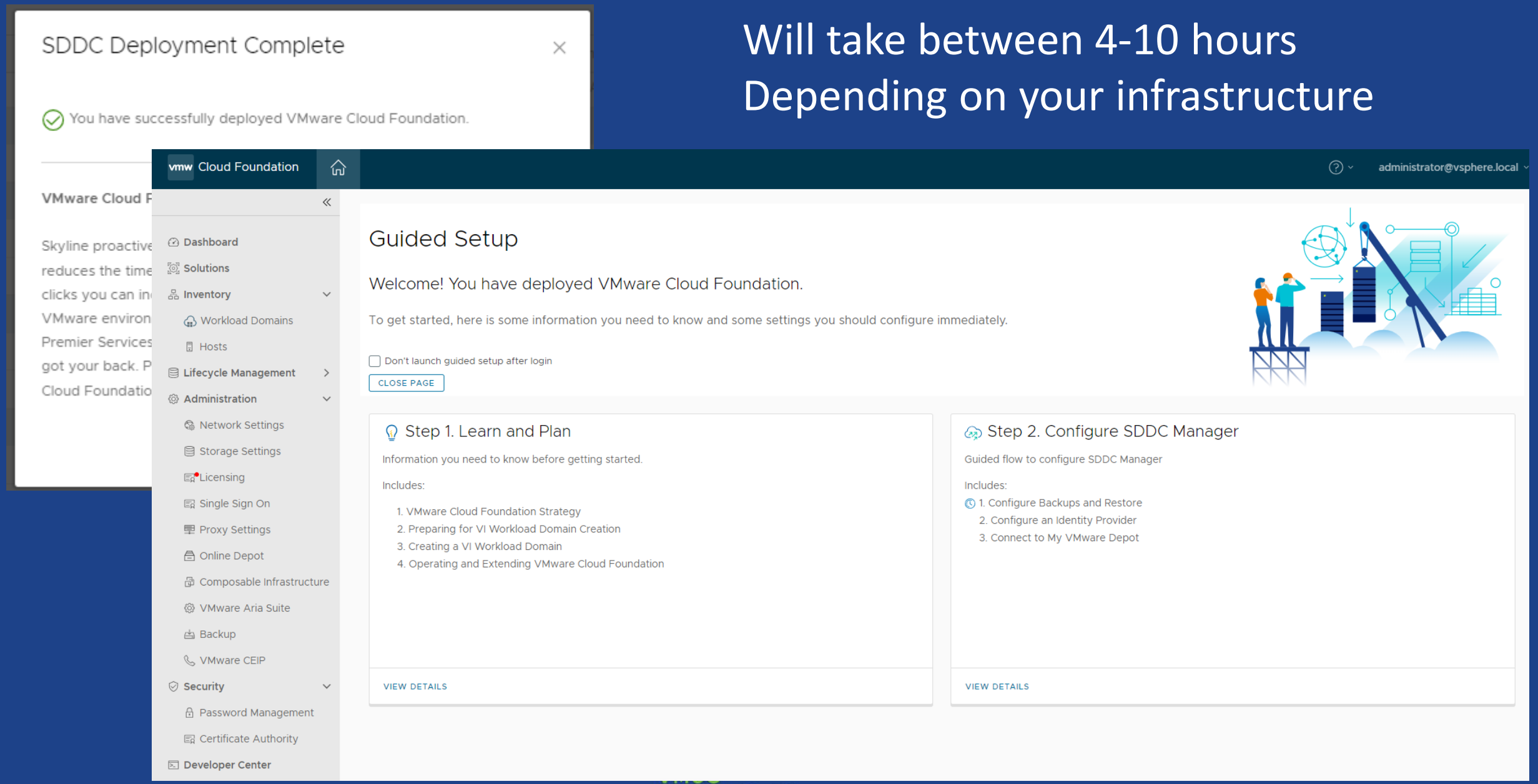
Deploy and Configure NSX		Success
Generate NSX Input Data	10:47:31 PM 10:47:32 PM	Success
Deploy NSX Manager	10:47:34 PM 12:14:42 AM	Success
Download SSH Keys	12:14:44 AM 12:14:47 AM	Success
Download Certificates	12:14:49 AM 12:14:50 AM	Success
Join NSX Managers	12:14:55 AM 12:50:48 AM	Success
Set VIP For NSX Managers	12:50:50 AM 12:56:50 AM	Success
Issue VMCA Certificate for NSX Managers	12:56:56 AM 1:01:12 AM	Success
Issue VMCA Certificate for NSX Managers Using Virtual IP	1:01:12 AM 1:02:15 AM	Success
Apply NSX License	1:02:17 AM 1:02:29 AM	Success
Add vCenter Server to NSX Management Cluster	1:02:31 AM 1:04:49 AM	Success
Create NSX Transport Zones	1:04:51 AM 1:05:14 AM	Success
Generate NSX Transport Nodes Configuration Input Data	1:05:20 AM 1:05:26 AM	Success
Create NSX Uplink Profile	1:05:28 AM 1:05:42 AM	Success
Create NSX Transport Node Profile	1:05:44 AM 1:06:05 AM	Success
Create Transport Node Collection	1:06:07 AM 1:16:50 AM	Success
Accept End User License Agreement for NSX	1:16:53 AM 1:17:08 AM	Success
Configure Customer Experience Improvement Program (CEIP) on NSX Data Center Managers	1:17:10 AM 1:17:21 AM	Success
Deploy SDDC Manager		Success
Generate SDDC Manager Input Data	1:17:24 AM 1:17:24 AM	Success
Deploy SDDC Manager	1:17:26 AM 1:36:10 AM	Success
Populate Inventory of SDDC Manager		Success
Generate SDDC Manager Configuration Input Data	1:36:12 AM 1:36:27 AM	Success
Update SDDC Manager Inventory with Credential Details	1:36:30 AM 1:36:37 AM	Success
Populate Network Pool Inventory of SDDC Manager		Success
Generate SDDC Manager Configuration Input Data	1:36:39 AM 1:36:51 AM	Success
Update SDDC Manager Inventory with Network Pool Details	1:36:53 AM 1:36:54 AM	Success
Configure SDDC Manager		Success
Generate SDDC Manager Input Data	1:36:56 AM 1:36:57 AM	Success
Download SSH Keys	1:37:00 AM 1:37:01 AM	Success
Configure Base Install Image Repository on SDDC Manager	1:37:03 AM 1:55:05 AM	Success

Update SDDC Manager with Licensing Information		Success
Generate SDDC Manager Configuration Input Data	1:55:19 AM 1:55:40 AM	Success
Update SDDC Manager with Licensing Information	1:55:42 AM 1:55:45 AM	Success
Configure NSX Firewall Exclusion List		Success
Generate NSX Input Data	1:55:47 AM 1:55:48 AM	Success
Update Firewall Exclusion List	1:55:50 AM 1:56:25 AM	Success
Configure NSX Backup		Success
Generate NSX Input Data	1:56:27 AM 1:56:28 AM	Success
Configure NSX Backup Schedule	1:56:31 AM 1:57:13 AM	Success
Watermark BOM Components		Success
Generate input for Watermarking BOM components	1:57:15 AM 1:57:16 AM	Success
Watermark vCenter Server	1:57:18 AM 1:57:19 AM	Success
Watermark NSX Manager	1:57:21 AM 1:57:29 AM	Success
SDDC Manager Known Hosts Configuration		Success
Generate SDDC Manager Input Data	1:57:34 AM 1:57:35 AM	Success
Generate ESXi Host SSH Key Input Data	1:57:37 AM 1:57:38 AM	Success
Rotate SSH Keys	1:57:40 AM 1:58:09 AM	Success
Update Known Hosts in SDDC Manager	1:58:11 AM 1:58:12 AM	Success
Configure vCenter Server Login Message and Message of the Day		Success
Generate vSphere Input Data	1:58:14 AM 1:58:14 AM	Success
Generate SDDC Manager Input Data	1:58:16 AM 1:58:17 AM	Success
Generate Configure vCenter Server Login Message and Message of the Day Input Data	1:58:19 AM 1:58:20 AM	Success
Configure vCenter Server Login Message and Message of the Day	1:58:22 AM 1:58:38 AM	Success
Populate Inventory for transport zone and cluster association for management domain		Success
Generate Inventory For Transport Zone and Cluster association	1:58:40 AM 1:58:41 AM	Success
Retrieve Transport Zone IDs from NSX Manager	1:58:43 AM 1:59:15 AM	Success
Populate NSX Data Center Cluster (vSphere or Edge) and Transport Zone association in SDDC Manager Inventory	1:59:15 AM 1:59:17 AM	Success

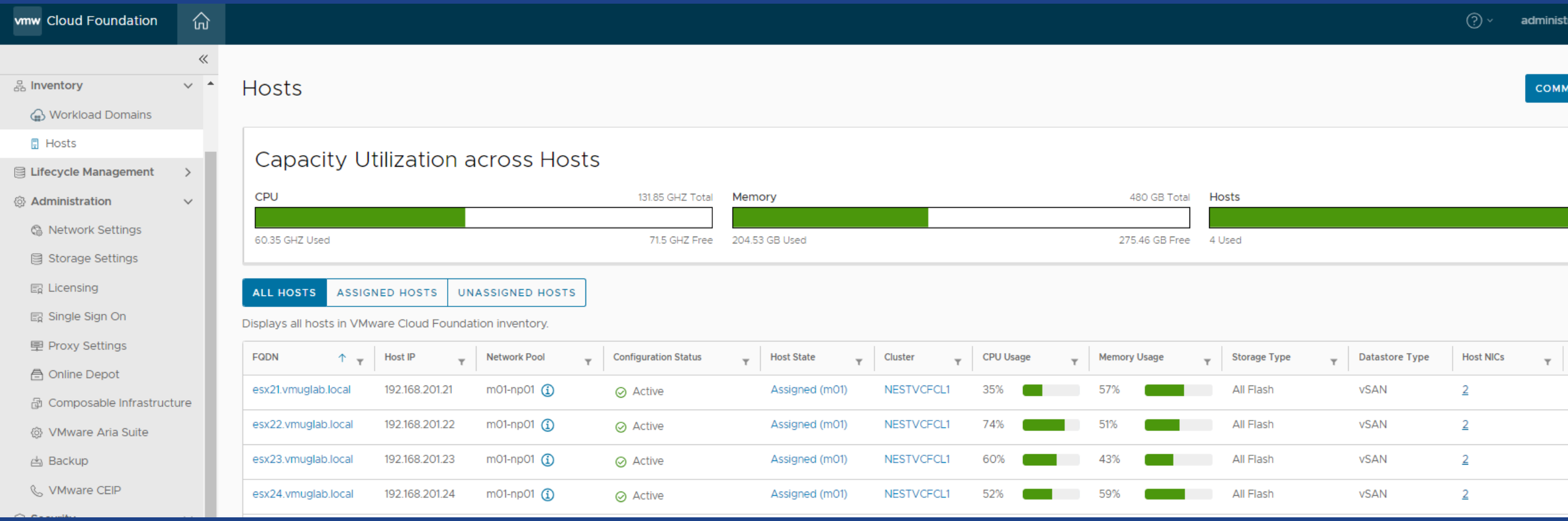
Post Deployment Configuration of vSphere Cluster		Success
Generate Post Cluster Configuration Input Data	1:59:19 AM 1:59:20 AM	Success
Generate Configure Deployment Details Action Input Data	1:59:25 AM 1:59:26 AM	Success
Fetch cluster managed object reference id	1:59:28 AM 1:59:29 AM	Success
Move VMs to VM Folders	1:59:31 AM 1:59:39 AM	Success
Move vSphere Distributed Switch to Network Folder	1:59:42 AM 1:59:48 AM	Success
Disable vSAN Force Provisioning	1:59:50 AM 1:59:51 AM	Success
Enable vSAN Storage Policies	1:59:53 AM 2:01:07 AM	Success
Move VMs to Resource Pools	2:01:09 AM 2:01:22 AM	Success
Enable vSphere High Availability	2:01:24 AM 2:04:47 AM	Success
Create VM Anti-Affinity Rules	2:04:50 AM 2:05:03 AM	Success
Configure HA Isolation Address Option	2:05:05 AM 2:05:17 AM	Success
Clear Alarms on vSAN	2:05:19 AM 2:05:20 AM	Success
Clear Alerts on Hosts	2:05:23 AM 2:05:29 AM	Success
Set SDDC Deployment Details on the Management vCenter Server	2:05:32 AM 2:05:34 AM	Success
Post Deployment Configuration of vSphere Cluster		Success
Generate Post Cluster Configuration Input Data	1:59:22 AM 1:59:23 AM	Success
Disable Bash Shell on vCenter		Success
Generate vSphere Input Data	2:05:36 AM 2:05:37 AM	Success
Disable Bash Shell on vCenter Server	2:05:39 AM 2:05:49 AM	Success
Configure NSX to Comply with Security Requirements		Success
Generate NSX Input Data	2:05:52 AM 2:05:53 AM	Success
Enable/Disable SSH on NSX Manager Nodes	2:05:55 AM 2:09:15 AM	Success
Upload vSAN HCL to SDDC Manager		Success
Generate HCL upload Configuration Input Data	2:09:17 AM 2:09:18 AM	Success
Upload vSAN HCL to SDDC Manager	2:09:20 AM 2:09:25 AM	Success
Perform configuration changes on SDDC Manager to disable basic auth based API access		Success
Generate SDDC Manager Input Data	2:09:27 AM 2:09:28 AM	Success
Disable Basic Authentication API Access on SDDC Manager	2:09:30 AM 2:09:37 AM	Success
Perform disable SSH operation on all ESXi hosts		Success
Generate SDDC Manager Input Data	2:09:39 AM 2:09:40 AM	Success
Disable SSH on ESXi host	2:09:42 AM 2:09:43 AM	Success

Post Deployment Configuration of vSphere Cluster		Success
Generate Post Cluster Configuration Input Data	1:59:19 AM 1:59:20 AM	Success
Generate Configure Deployment Details Action Input Data	1:59:25 AM 1:59:26 AM	Success
Fetch cluster managed object reference id	1:59:28 AM 1:59:29 AM	Success
Move VMs to VM Folders	1:59:31 AM 1:59:39 AM	Success
Move vSphere Distributed Switch to Network Folder	1:59:42 AM 1:59:48 AM	Success
Disable vSAN Force Provisioning	1:59:50 AM 1:59:51 AM	Success
Enable vSAN Storage Policies	1:59:53 AM 2:01:07 AM	Success
Move VMs to Resource Pools	2:01:09 AM 2:01:22 AM	Success
Enable vSphere High Availability	2:01:24 AM 2:04:47 AM	Success
Create VM Anti-Affinity Rules	2:04:50 AM 2:05:03 AM	Success
Configure HA Isolation Address Option	2:05:05 AM 2:05:17 AM	Success
Clear Alarms on vSAN	2:05:19 AM 2:05:20 AM	Success
Clear Alerts on Hosts	2:05:23 AM 2:05:29 AM	Success
Set SDDC Deployment Details on the Management vCenter Server	2:05:32 AM 2:05:34 AM	Success
Post Deployment Configuration of vSphere Cluster		Success
Generate Post Cluster Configuration Input Data	1:59:22 AM 1:59:23 AM	Success
Disable Bash Shell on vCenter		Success
Generate vSphere Input Data	2:05:36 AM 2:05:37 AM	Success
Disable Bash Shell on vCenter Server	2:05:39 AM 2:05:49 AM	Success
Configure NSX to Comply with Security Requirements		Success
Generate NSX Input Data	2:05:52 AM 2:05:53 AM	Success
Enable/Disable SSH on NSX Manager Nodes	2:05:55 AM 2:09:15 AM	Success
Upload vSAN HCL to SDDC Manager		Success
Generate HCL upload Configuration Input Data	2:09:17 AM 2:09:18 AM	Success
Upload vSAN HCL to SDDC Manager	2:09:20 AM 2:09:25 AM	Success
Perform configuration changes on SDDC Manager to disable basic auth based API access		Success
Generate SDDC Manager Input Data	2:09:27 AM 2:09:28 AM	Success
Disable Basic Authentication API Access on SDDC Manager	2:09:30 AM 2:09:37 AM	Success
Perform disable SSH operation on all ESXi hosts		Success
Generate SDDC Manager Input Data	2:09:39 AM 2:09:40 AM	Success
Disable SSH on ESXi host	2:09:42 AM 2:09:43 AM	Success

Will take between 4-10 hours
Depending on your infrastructure



Log in to SDDC Manager for a glimpse of what you have built!



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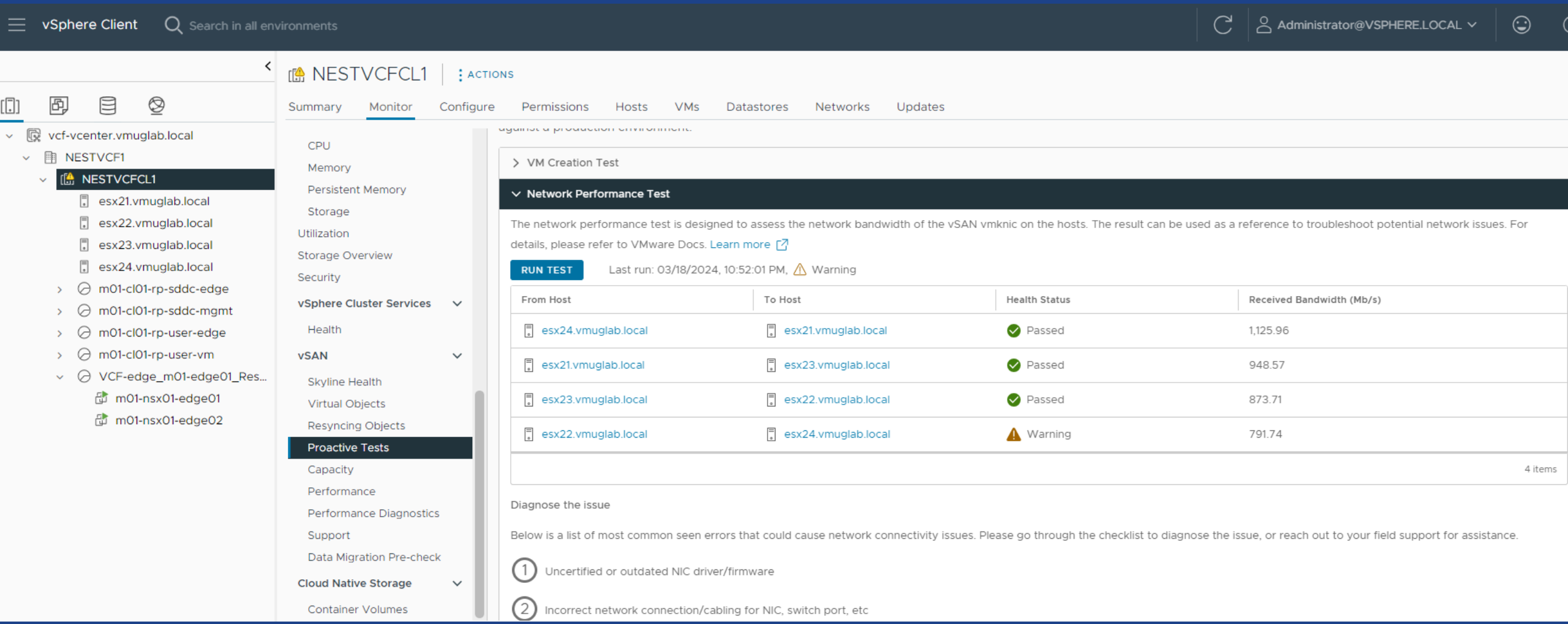
Log in to the Management Domain's vCenter Server



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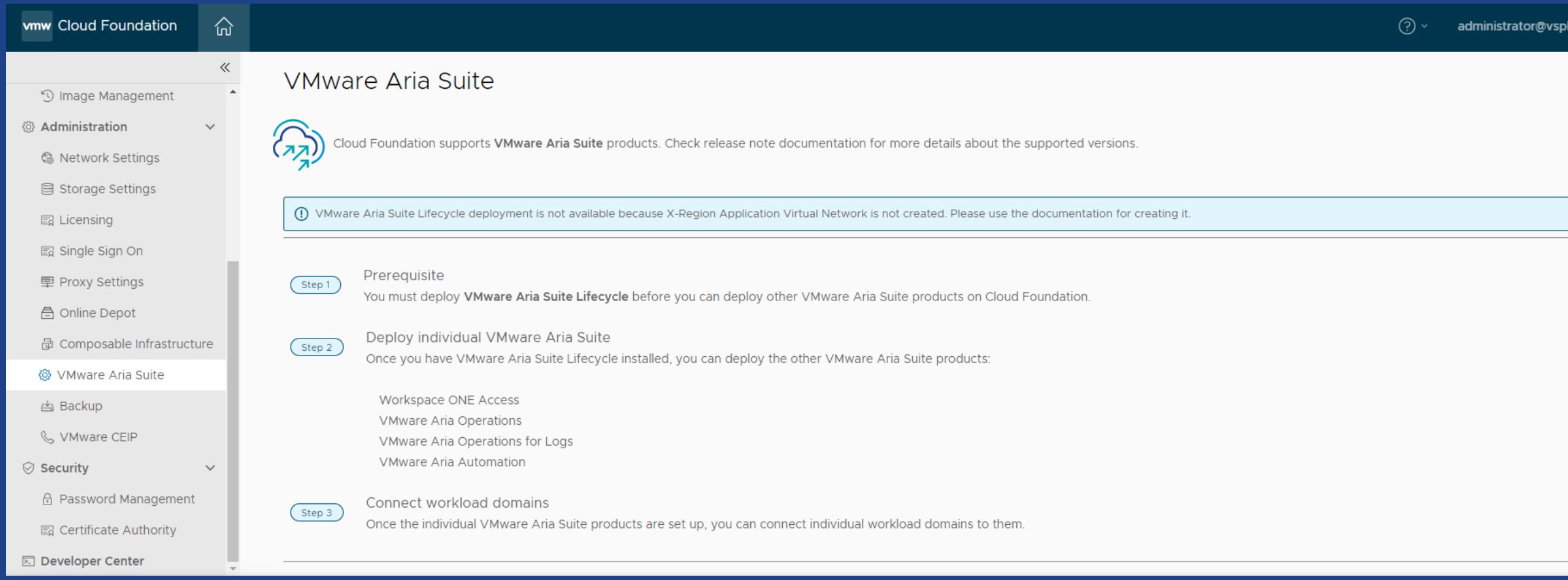
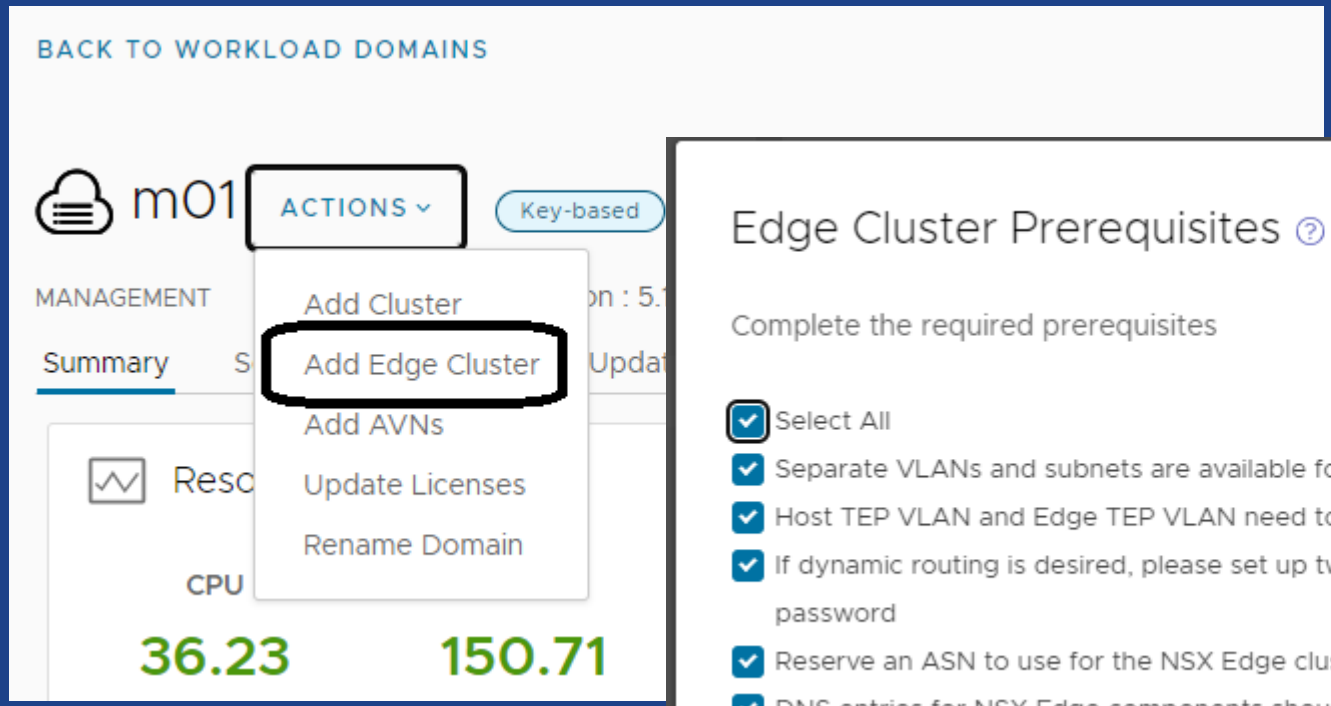


VMware Aria Suite Lifecycle deployment is not available because X-Region Application Virtual Network is not created. Please use the documentation for creating it.

VMUG usercon



Edge Cluster Prerequisites

Complete the required prerequisites

- [x] Select All
- [x] Separate VLANs and subnets are available for Host TEP VLAN and Edge TEP VLAN use
- [x] Host TEP VLAN and Edge TEP VLAN need to be routed
- [x] If dynamic routing is desired, please set up two BGP peers (on TORs or infra ESG) with an interface IP, ASN and BGP password
- [x] Reserve an ASN to use for the NSX Edge cluster's Tier-0 interfaces
- [x] DNS entries for NSX Edge components should be populated in customer managed DNS server
- [x] The vSphere clusters hosting the Edge clusters should be L2 Uniform. All host nodes in a hosting vSphere cluster need to have identical management, uplink, Edge and host TEP networks
- [x] The vSphere clusters hosting the NSX Edge node VMs must have the same pNIC speed for NSX enabled VDS uplinks chosen for Edge overlay (e.g., either 10G or 25G but not both)
- [x] All nodes of an NSX Edge cluster must use the same set of NSX enabled VDS uplinks. The selected uplinks must be prepared for overlay use
- [x] If the vSphere cluster hosting the Edge nodes has hosts with a DPU device then enable SR-IOV in the BIOS and in the vSphere Client (if required by your DPU vendor)

CANCEL BEGIN

Add Edge Cluster

1 General Info

2 Edge Cluster Settings

3 Edge Node

4 Summary

5 Validation

General Info

Edge Cluster Name: m01-edge01

MTU: 9000

Tier-0 Router Name: m01-t0-router

Tier-1 Router Name: m01-t1-router

Edge Cluster Profile Type: Default

Create Passwords

Edge Root Password: ••••••••••••

Confirm Root Password: ••••••••••••

Edge Admin Password: ••••••••••••

Confirm Admin Password: ••••••••••••

Edge Audit Password: ••••••••••••

Confirm Audit Password: ••••••••••••

CANCEL NEXT

Add Edge Cluster

1 General Info

2 Edge Cluster Settings

3 Edge Node

4 Summary

5 Validation

General Info

Edge Cluster Name: m01-edge01

MTU: 9000

Tier-0 Router Name: m01-t0-router

Tier-1 Router Name: m01-t1-router

Edge Cluster Profile Type: Default

Create Passwords

Edge Root Password: ••••••••••••

Confirm Root Password: ••••••••••••

Edge Admin Password: ••••••••••••

Confirm Admin Password: ••••••••••••

Edge Audit Password: ••••••••••••

Confirm Audit Password: ••••••••••••

CANCEL NEXT

Add Edge Cluster

1 General Info

2 Edge Cluster Settings

3 Edge Node

4 Summary

5 Validation

Edge Cluster Settings

What will you be using this Edge Cluster for?

- ○ Kubernetes - Workload Management
- ● Application Virtual Networks
- ○ Custom

The following settings are recommended based on the use case selected.

Edge Form Factor ⓘ — Medium (Recommended)

Medium = 4 GHz vCPU, 8 GB Memory

Tier-0 Service High Availability ⓘ — Active-Active (Recommended)

Select Tier-0 Routing Type for Edge Cluster

Tier-0 Routing Type ⓘ

- ● Static
- ○ EBGP

ADVANCED SETTINGS

Only specify these settings if you wish to change the defaults. Only IPv4 transit subnets are permitted. Once you create Tier-0 Gateway, internal transit subnet and T0-T1 transit subnets cannot be modified. Neither the internal transit nor the T0-T1 transit subnets are advertised to the datacenter by default.

Internal Transit Subnet (optional) ⓘ — Enter an IPv4 subnet

Enter an IPv4 subnet in CIDR format. For example, 169.254.0.0/24

T0-T1 Transit Subnets (optional) ⓘ — Enter one or more IPv4

CANCEL BACK NEXT

Edge Node

A minimum of 2 Edge nodes is required to deploy an Edge cluster.

Edge Node Name (FQDN) m01-nsx01-edge01.vmug

vSphere Cluster Details

Select the cluster that the Edge node will reside on.

Cluster NESTVCFCL1

Cluster Type

(•) L2 Uniform ( ) L2 Non-uniform and L3

ADVANCED CLUSTER SETTINGS

Edge Node Details

Specify details of the Edge Node to be added.

Management IP (CIDR) 192.168.201.101/24

Management Gateway	192.168.201.254
VM Management Portgroup VLAN	201
	USE ESXI MANAGEMENT VMK'S VLAN
VM Management Portgroup Name	SDDC-DPortGroup-VM-M
Edge TEP 1 IP (CIDR)	192.168.206.101/24
Edge TEP 2 IP (CIDR)	192.168.206.102/24
Edge TEP Gateway	192.168.206.254
Edge TEP VLAN	206

Tier-0 Uplink Configurations

Two Tier-0 uplinks can be configured for every Edge node.

First Tier-0 Uplink

Tier-0 Uplink VLAN	207

Edge node added successfully.

	Edge VM Name	Management IP
⋮	m01-nsx01-edge01.vmuglab.local	192.168.201.101/24
⋮	m01-nsx01-edge02.vmuglab.local	192.168.201.102/24

First Tier-0 Uplink

Tier-0 Uplink VLAN ⓘ 207

Tier-0 Uplink Interface IP (CIDR) ⓘ 192.168.207.101/24

Second Tier-0 Uplink

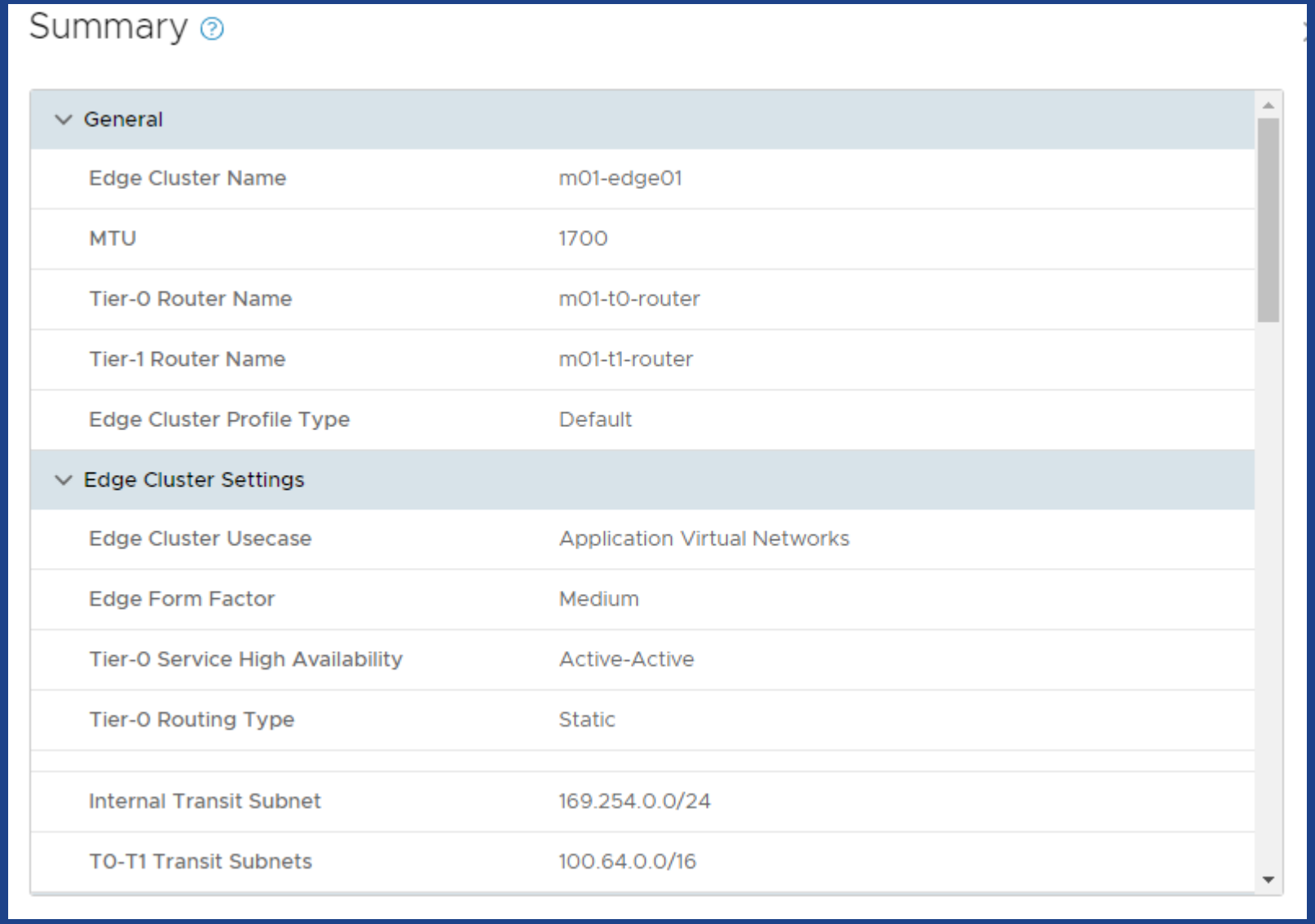
Tier-0 Uplink VLAN ⓘ 208

Tier-0 Uplink Interface IP (CIDR) ⓘ 192.168.208.101/24

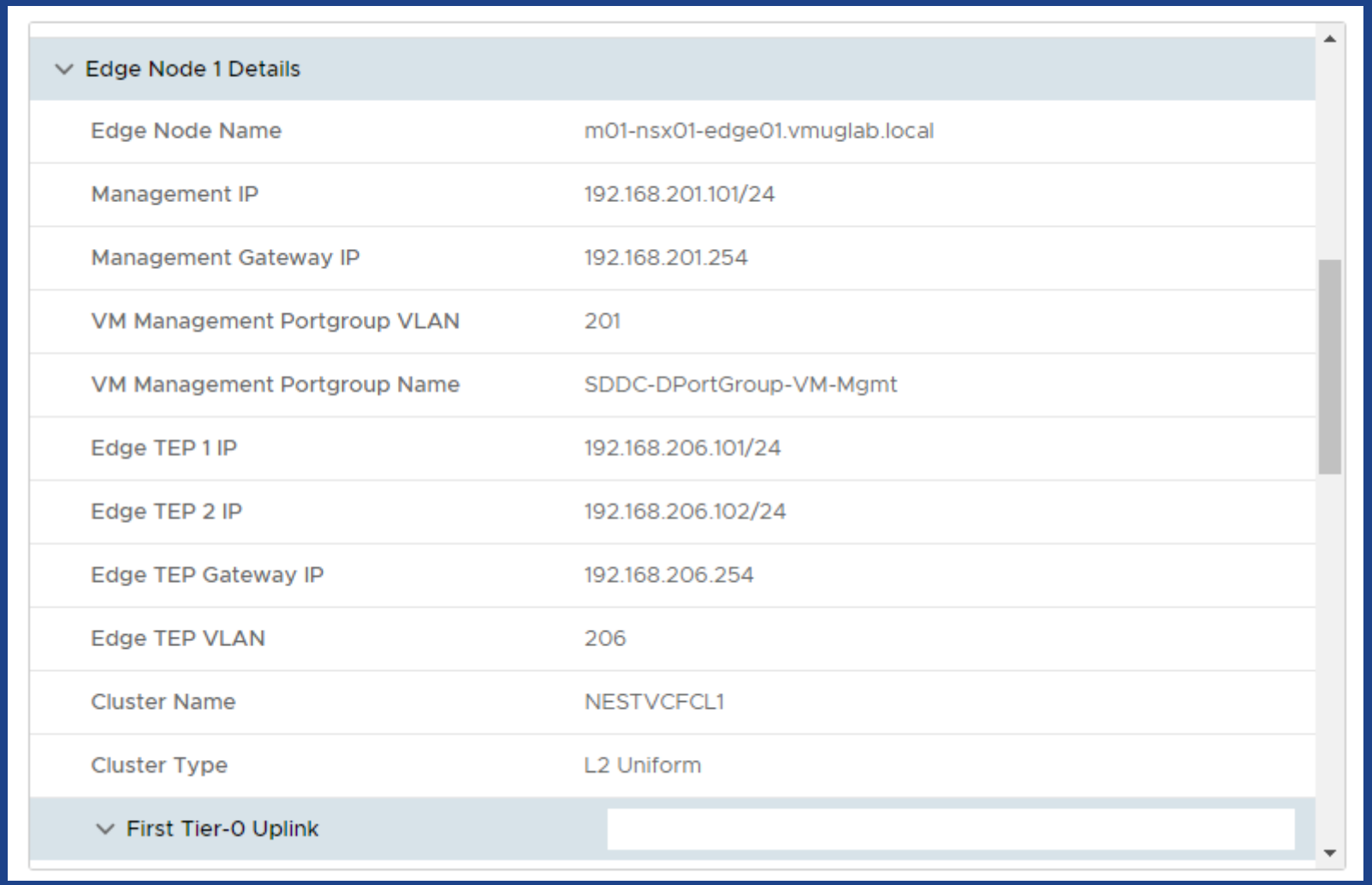
ADD EDGE NODE

Edge VM Name	Management IP

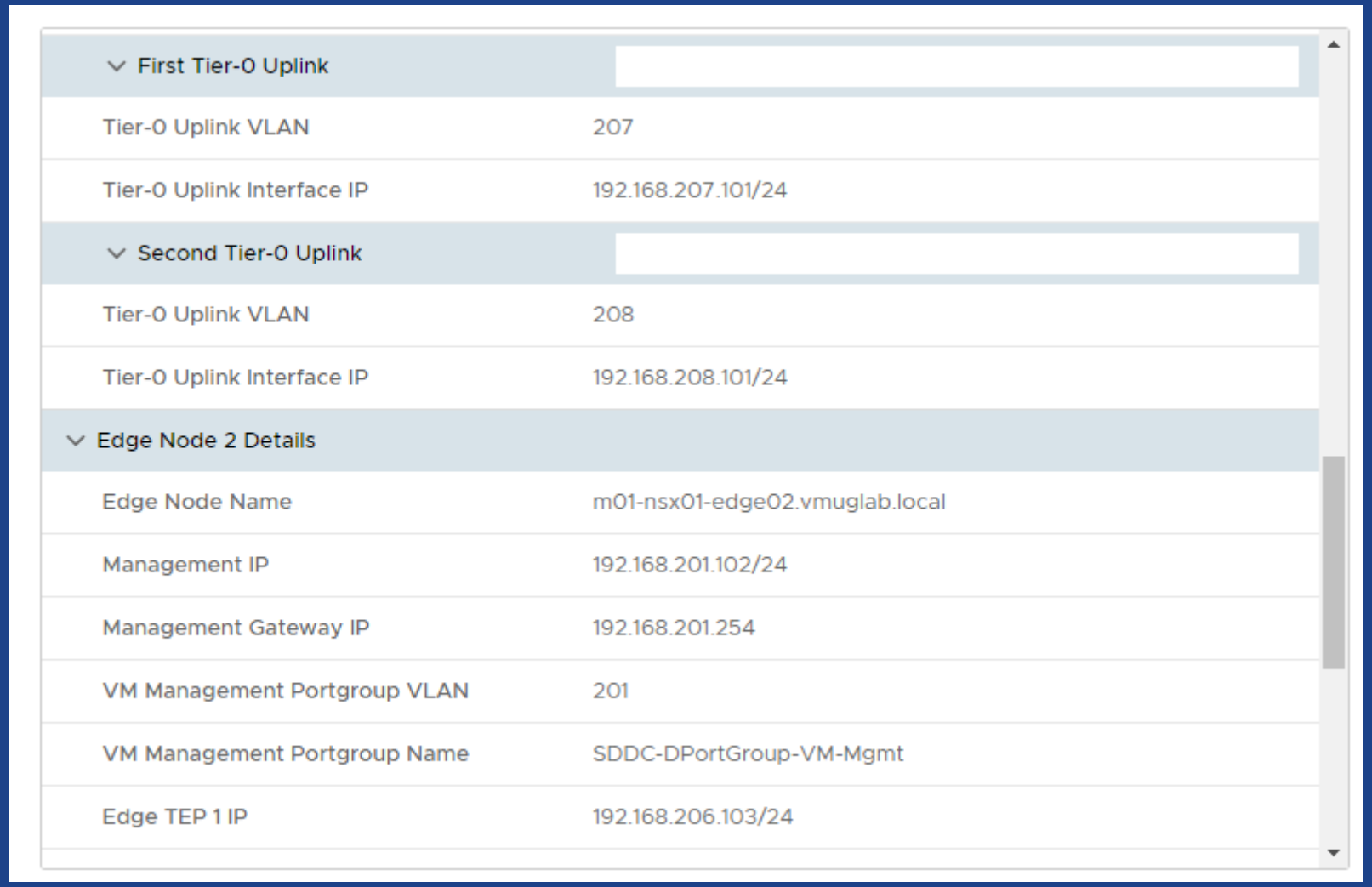
VMUG usercon



VMUG usercon



VMUG usercon



VMUG usercon

VM Management Portgroup Name	SDDC-DPortGroup-VM-Mgmt
Edge TEP 1 IP	192.168.206.103/24
Edge TEP 2 IP	192.168.206.104/24
Edge TEP Gateway IP	192.168.206.254
Edge TEP VLAN	206
Cluster Name	NESTVCFCL1
Cluster Type	L2 Uniform
First Tier-0 Uplink	
Tier-0 Uplink VLAN	207
Tier-0 Uplink Interface IP	192.168.207.102/24
Second Tier-0 Uplink	
Tier-0 Uplink VLAN	208
Tier-0 Uplink Interface IP	192.168.208.102/24

CANCEL BACK NEXT

Add Edge Cluster

1 General Info

2 Edge Cluster Settings

3 Edge Node

4 Summary

5 Validation

Validation

Validation for Edge cluster specification succeeded.

Validation items	Status
Validate Edge Node Management IP to FQDN Resolution	Succeeded
Validate Distinct Uplink Interfaces per Edge Node	Succeeded
Validate Tier-1 Gateway Name Does Not Exist	Succeeded
Validate the specified NSX enabled VDS uplinks are prepared for Edge overlay	Succeeded
Check vSphere cluster has all hosts with a vCPU count and RAM size to accommodate the selected Edge form factor	Succeeded
Validate new Edge node TEP address configuration	Succeeded
Validate IP Address Assigned to Same Subnet	Succeeded
Validate Edge Node Overlay (TEP) IPs are Unique	Succeeded

CANCEL BACK FINISH

Add Edge Cluster

1 General Info

2 Edge Cluster Settings

3 Edge Node

4 Summary

5 Validation

Validation

Validate Edge Cluster Name Does Not Exist	Succeeded
Validate Management Network is Reachable	Succeeded
Validate the specified VM management port group VLAN id(s) in input spec	Succeeded
Validate if specified VM management port group info(s) in input spec do not conflict with existing port group(s) (If available)	Succeeded
Validate Edge Node Passwords Against NSX Password Policy	Succeeded
Check for unique IPs for Edge management IP, Edge TEP IPs, Tier-0 uplink interface IPs & BGP Peer IPs across Edge Nodes.	Succeeded
Validate that TEP IPs, gateway, and management IP, gateway are in the same subnet	Succeeded
Validate Edge Cluster Name Does Not Exist in NSX Manager	Succeeded
Validate that the specified IP addresses in the input spec do not conflict with the Tier-0 transit subnets	Succeeded
Validate new NSX IP pools	Succeeded
Validate completeness of new NSX IP pools	Succeeded
Check that the custom Edge cluster profile does not conflict with an existing profile	

CANCEL BACK FINISH

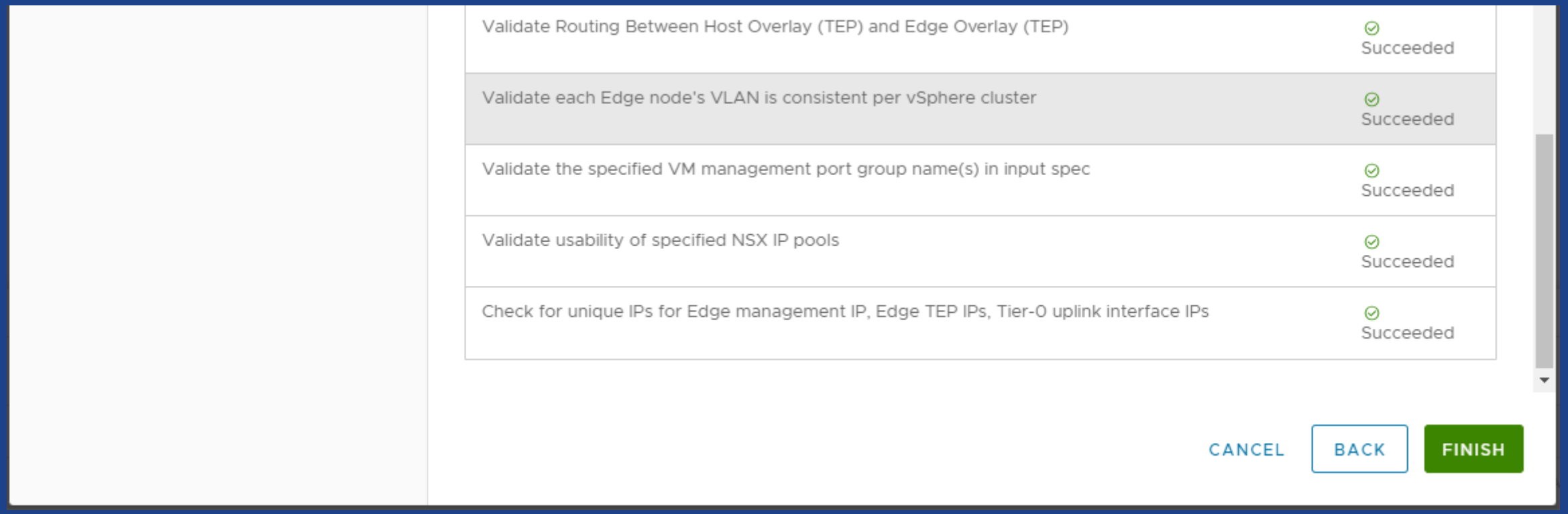
Add Edge Cluster

1 General Info
2 Edge Cluster Settings
3 Edge Node
4 Summary
5 Validation

Validation

Check that the custom Edge cluster profile does not conflict with an existing profile	Succeeded
Validate Edge Node FQDNs are Unique	Succeeded
Validate L2 Non-Uniform and L3 Cluster	Succeeded
Validate all vCenter clusters are either all stretched or none are stretched	Succeeded
Validate IP Address Conflicts	Succeeded
Validate Tier-0 Gateway Name Does Not Exist	Succeeded
Validate vSphere Cluster Belongs to the Workload Domain	Succeeded
Validate Uplink VLANs	Succeeded
Validate Capacity for Hosting vSphere Cluster	Succeeded
Validate Tier-0 specific fields	Succeeded
Validate if specified vSphere cluster is DVPG compliant.	Succeeded

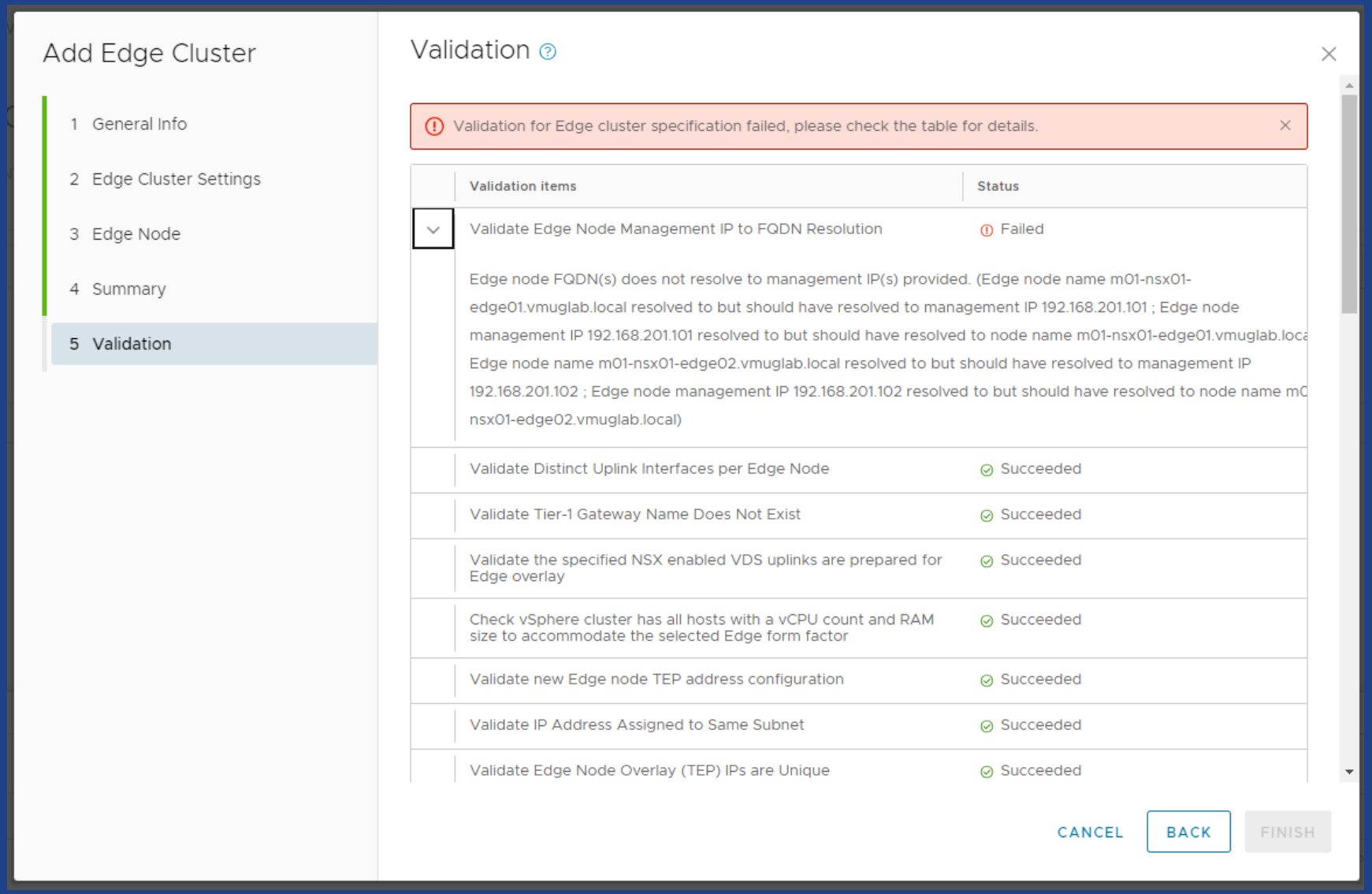
CANCEL BACK FINISH


Validate Routing Between Host Overlay (TEP) and Edge Overlay (TEP)
Succeeded
Validate each Edge node's VLAN is consistent per vSphere cluster
Succeeded
Validate the specified VM management port group name(s) in input spec
Succeeded
Validate usability of specified NSX IP pools
Succeeded
Check for unique IPs for Edge management IP, Edge TEP IPs, Tier-0 uplink interface IPs
Succeeded
CANCEL
BACK
FINISH

See the importance of having DNS fully functional (forward And reverse)

Validation pre-checks can fail

This error was due to a typo in DNS.



VMUG usercon

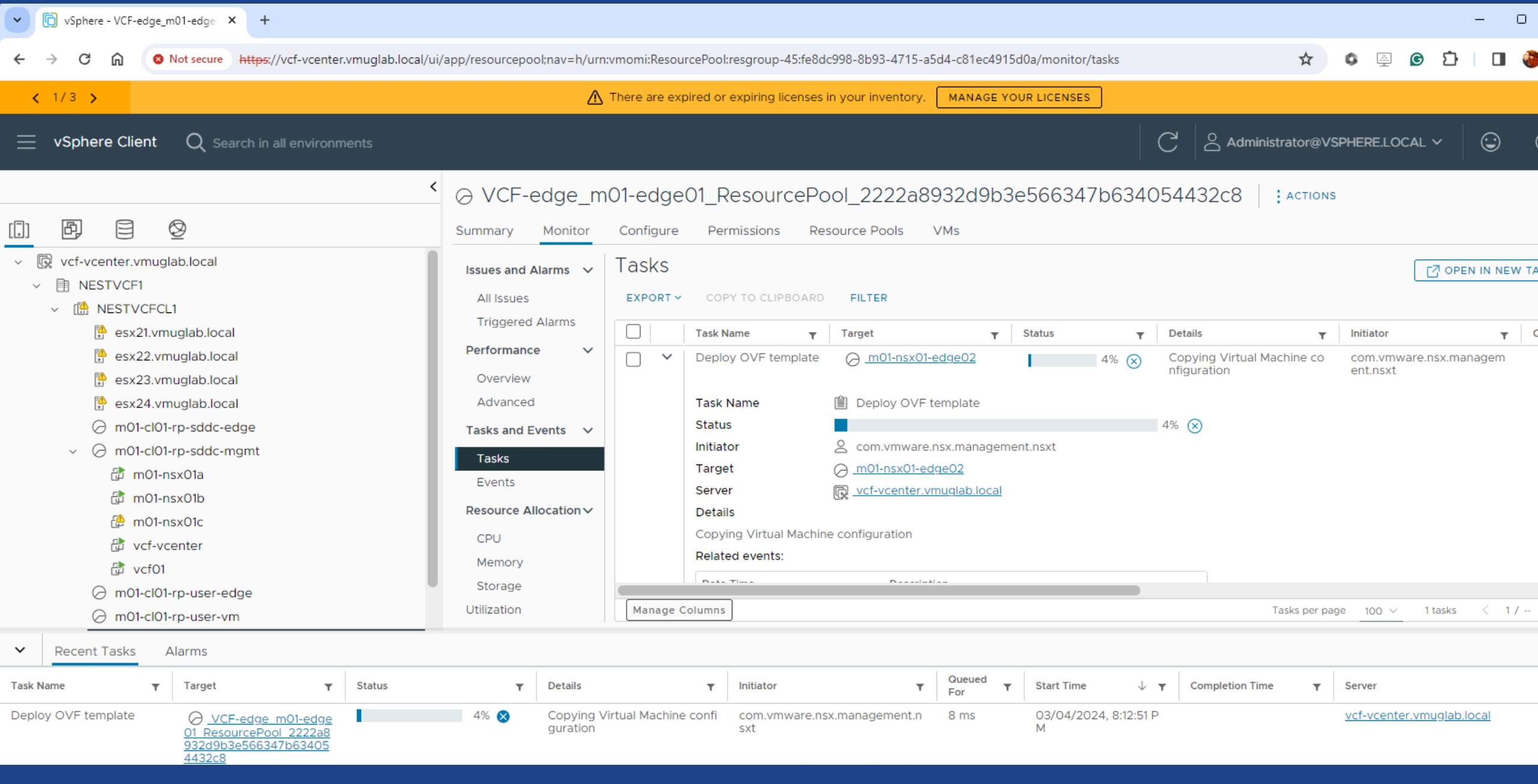
Tasks

Adding edge cluster from edge01

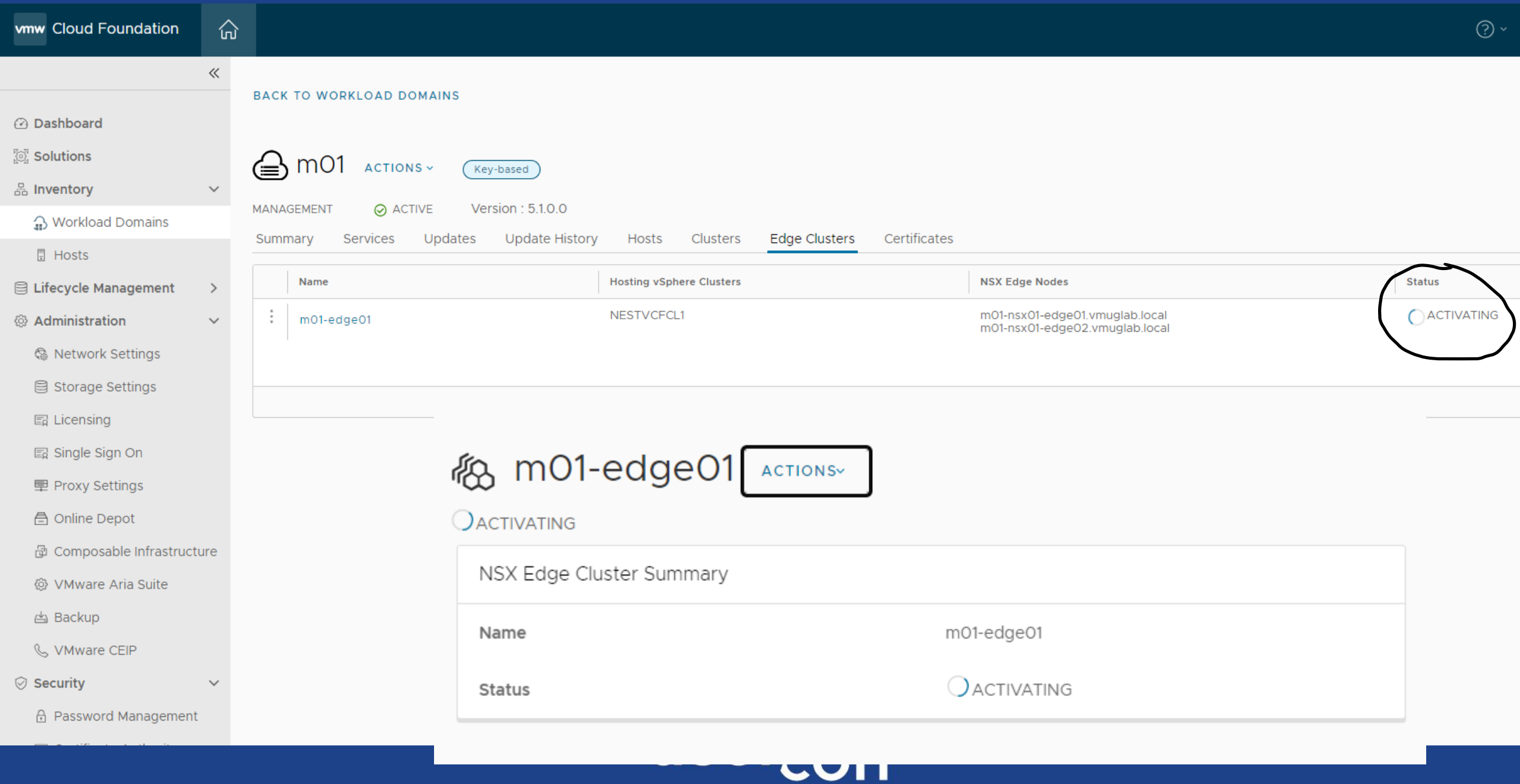
SUBTASK | TASK INFO

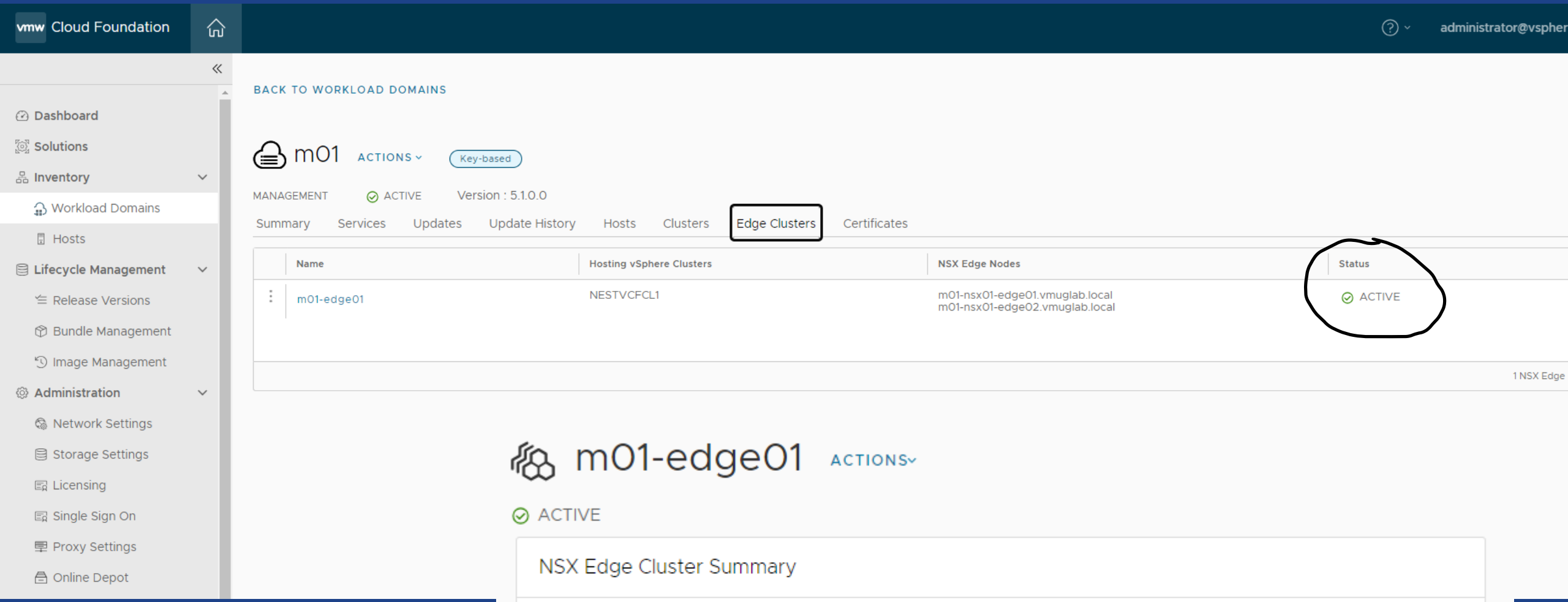
Subtask	Task Status	Last Occurrence
Pre-Validation of NSX Edge Cluster Deployment	Running	3/2/24, 8:28 AM
Ensure Edge Node NSX VDS Uplink Values are Present	Successful	3/2/24, 8:28 AM
Fetch NSX enabled VDS uplinks used for overlay	Successful	3/2/24, 8:28 AM
Fetch NSX Overlay Transport Zone	Successful	3/2/24, 8:28 AM
Obtain SDDC Manager Inventory Data	Successful	3/2/24, 8:28 AM
Fetch Credentials from Inventory	Successful	3/2/24, 8:28 AM
Fetch and Validate VMware Cloud Foundation vCenter Cluster IDs	Successful	3/2/24, 8:28 AM
Automation Helper Action	Successful	3/2/24, 8:28 AM
Acquire Lock on SDDC Manager	Successful	3/2/24, 8:28 AM
Release Lock on SDDC Manager	Pending	3/2/24, 8:28 AM
Release Lock on SDDC Manager	Pending	3/2/24, 8:28 AM
Update NSX edge cluster and transport zone ID association in inventory	Pending	3/2/24, 8:28 AM
Update SDDC Manager Inventory with NSX Edge Cluster Status	Pending	3/2/24, 8:28 AM
Refresh VCF resource aggregator cache	Pending	3/2/24, 8:28 AM
Enable/Disable SSH on NSX Edge Nodes	Pending	3/2/24, 8:28 AM
Add SSH Host Key Of Edge Node VMs To Known Hosts File Of SDDC Manager	Pending	3/2/24, 8:28 AM
Retrieve Transport Zone IDs from NSX Manager	Pending	3/2/24, 8:28 AM
Validate NSX Edge Cluster Status	Pending	3/2/24, 8:28 AM
Verify NSX Tier-0 to Tier-1 Connectivity	Pending	3/2/24, 8:28 AM

View from vCenter Point-of-View – Deploying an Edge Cluster Node



First – Edge Cluster Node 2 deploys, and then Edge Cluster Node 1 – Shows activating until cluster creation completes





Took about 2 hours to come active

Add AVNs

1 General

2 NSX Edge Cluster

3 Settings

4 AVN Summary

General

Based on the NSX segment type selected, SDDC Manager will automate the provisioning of the topology, such as attaching ESXi hosts in a vSphere cluster to an overlay or VLAN-backed NSX transport zone, preparing an NSX Edge cluster for routing and edge services, and creating NSX Segments.

Select application that the AVNs will utilize VMware Aria Suite

Select NSX segment type

For management applications that require mobility and disaster recovery across multiple VMware Cloud Foundation instances, overlay-backed NSX segments must be used.

- Overlay-backed NSX segment

  In an overlay-backed segment, traffic between two VMs on different hosts but attached to the same overlay segment have their layer 2 traffic carried by a tunnel between the hosts.

- VLAN-backed NSX segment

  A VLAN-backed segment is a layer 2 broadcast domain that is implemented as a traditional VLAN in the physical infrastructure. Traffic between two VMs on two different hosts but attached to the same VLAN-backed segment is carried over a VLAN between the two hosts. An appropriate VLAN and gateway must exist in the physical infrastructure.

CANCEL NEXT

Add AVNs

1 General

2 NSX Edge Cluster

3 Settings

4 AVN Summary

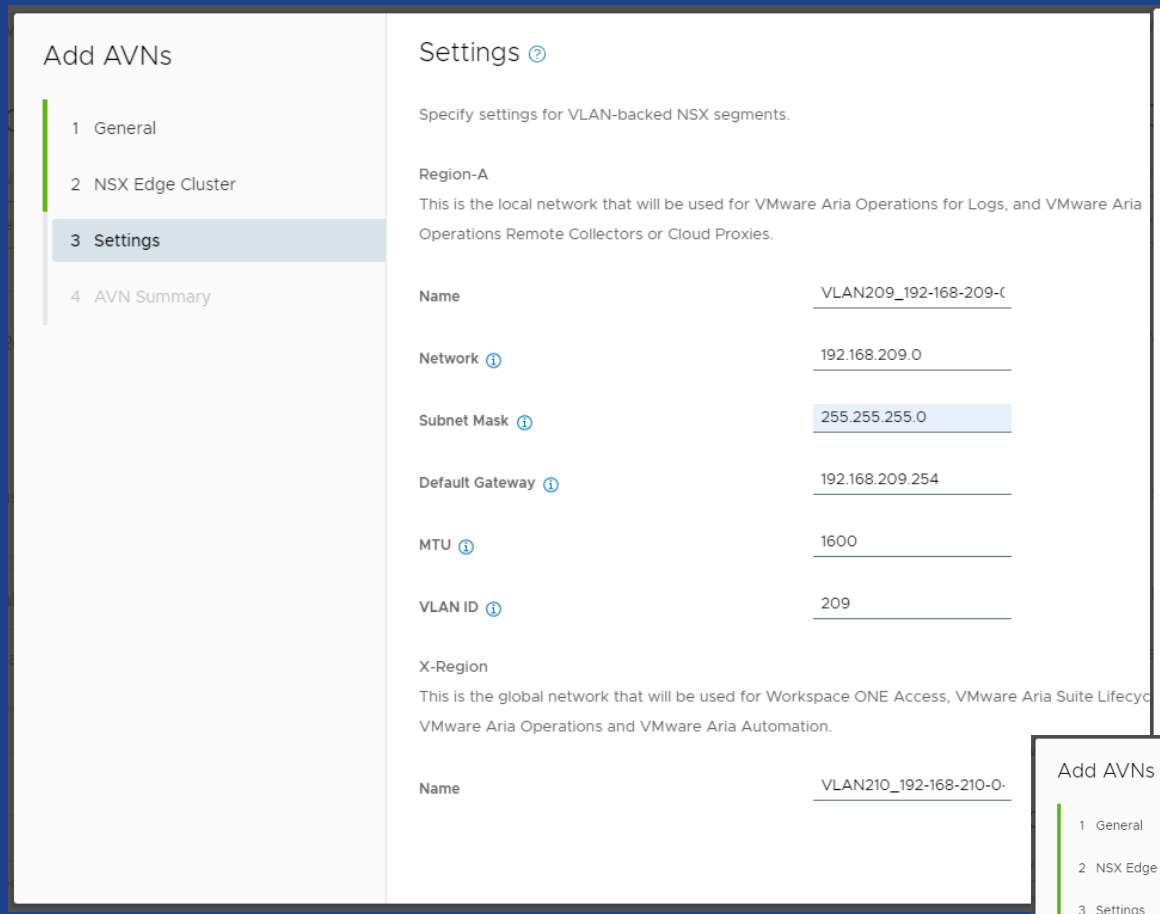
NSX Edge Cluster

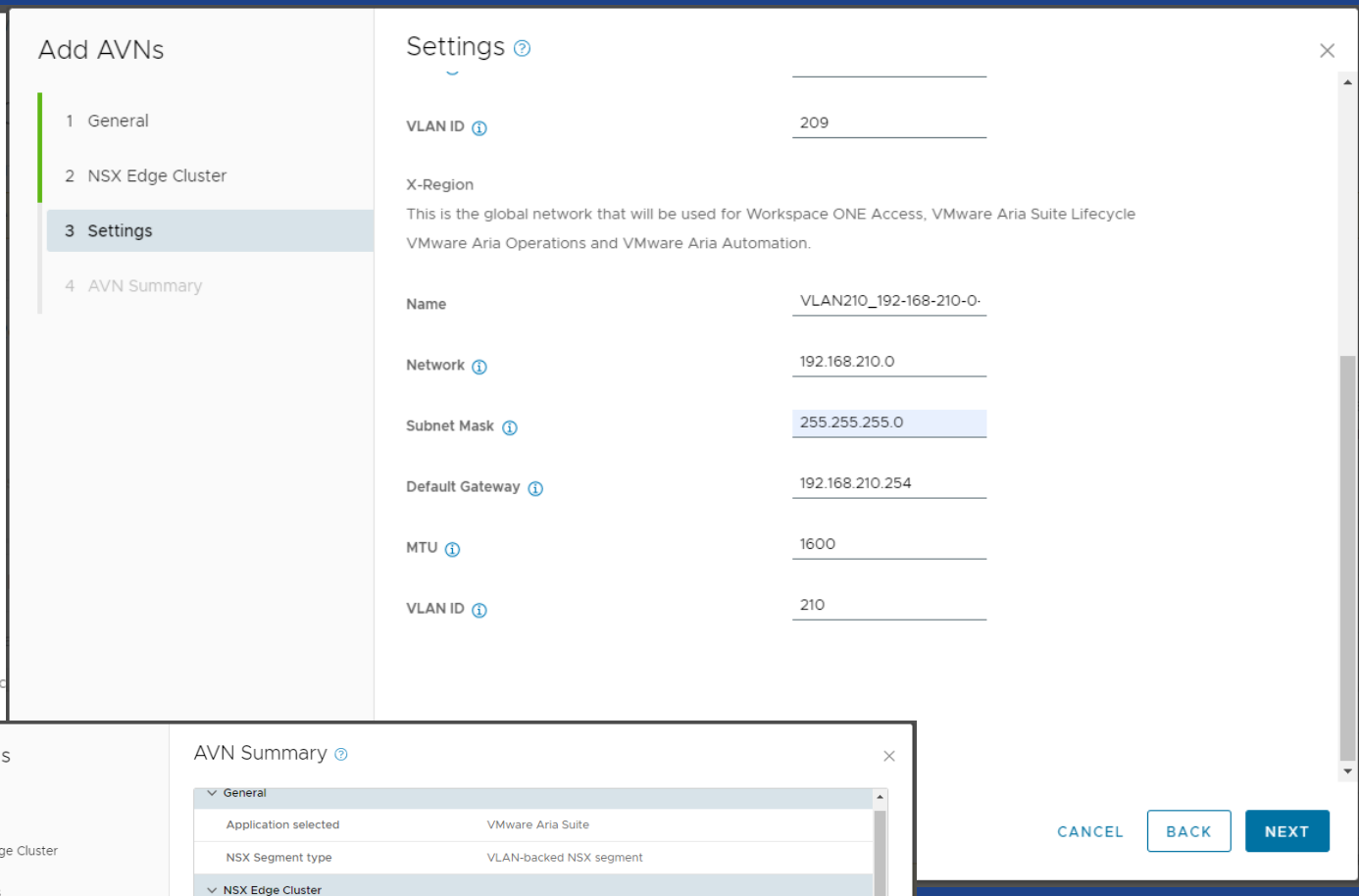
The NSX Edge cluster provides load-balancing services for the clustered applications on VLAN-backed NSX segments.

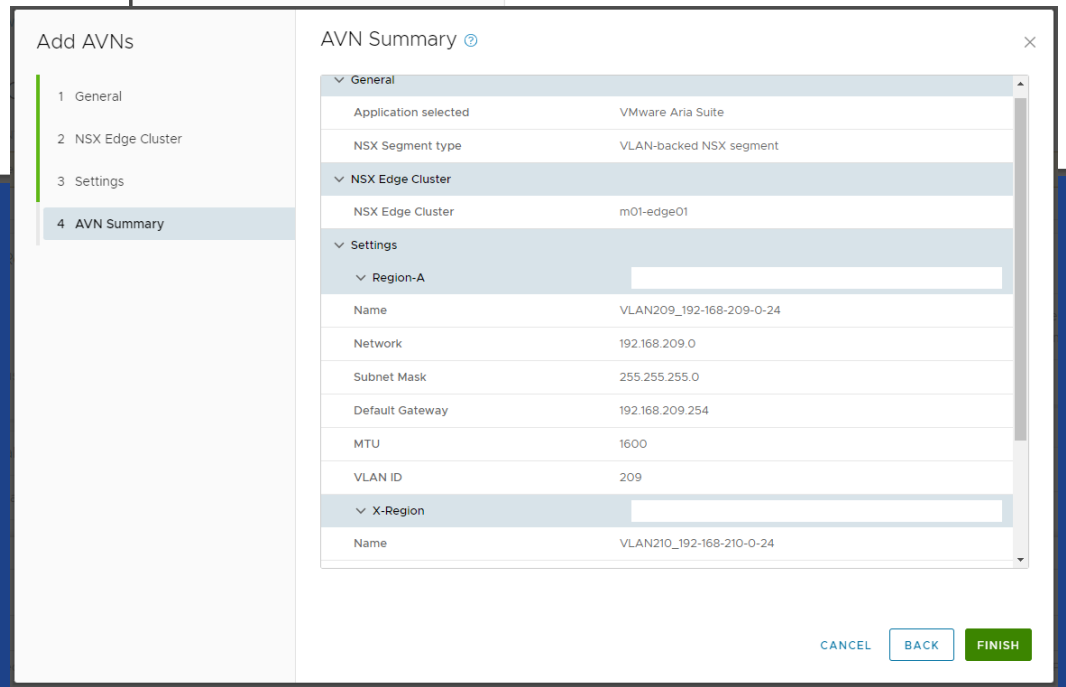
NSX Edge cluster that is selected cannot be expanded.

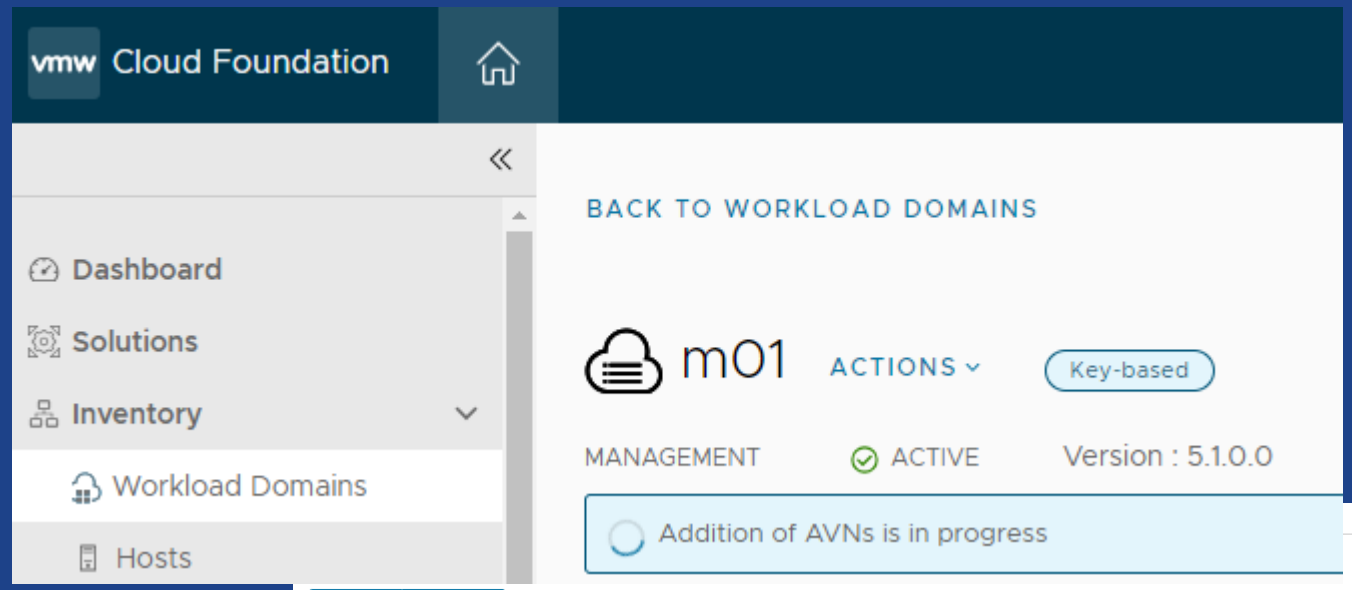
NSX Edge Cluster: m01-edge01

CANCEL BACK NEXT


Add AVNs
1 General
2 NSX Edge Cluster
3 Settings
4 AVN Summary
Settings
Specify settings for VLAN-backed NSX segments.
Region-A
This is the local network that will be used for VMware Aria Operations for Logs, and VMware Aria Operations Remote Collectors or Cloud Proxies.
Name
VLAN209_192-168-209-(
Network
192.168.209.0
Subnet Mask
255.255.255.0
Default Gateway
192.168.209.254
MTU
1600
VLAN ID
209
X-Region
This is the global network that will be used for Workspace ONE Access, VMware Aria Suite Lifecyc
VMware Aria Operations and VMware Aria Automation.
Name
VLAN210_192-168-210-0-


Add AVNs
1 General
2 NSX Edge Cluster
3 Settings
4 AVN Summary
Settings
VLAN ID
209
X-Region
This is the global network that will be used for Workspace ONE Access, VMware Aria Suite Lifecycle
VMware Aria Operations and VMware Aria Automation.
Name
VLAN210_192-168-210-0-
Network
192.168.210.0
Subnet Mask
255.255.255.0
Default Gateway
192.168.210.254
MTU
1600
VLAN ID
210
CANCEL
BACK
NEXT

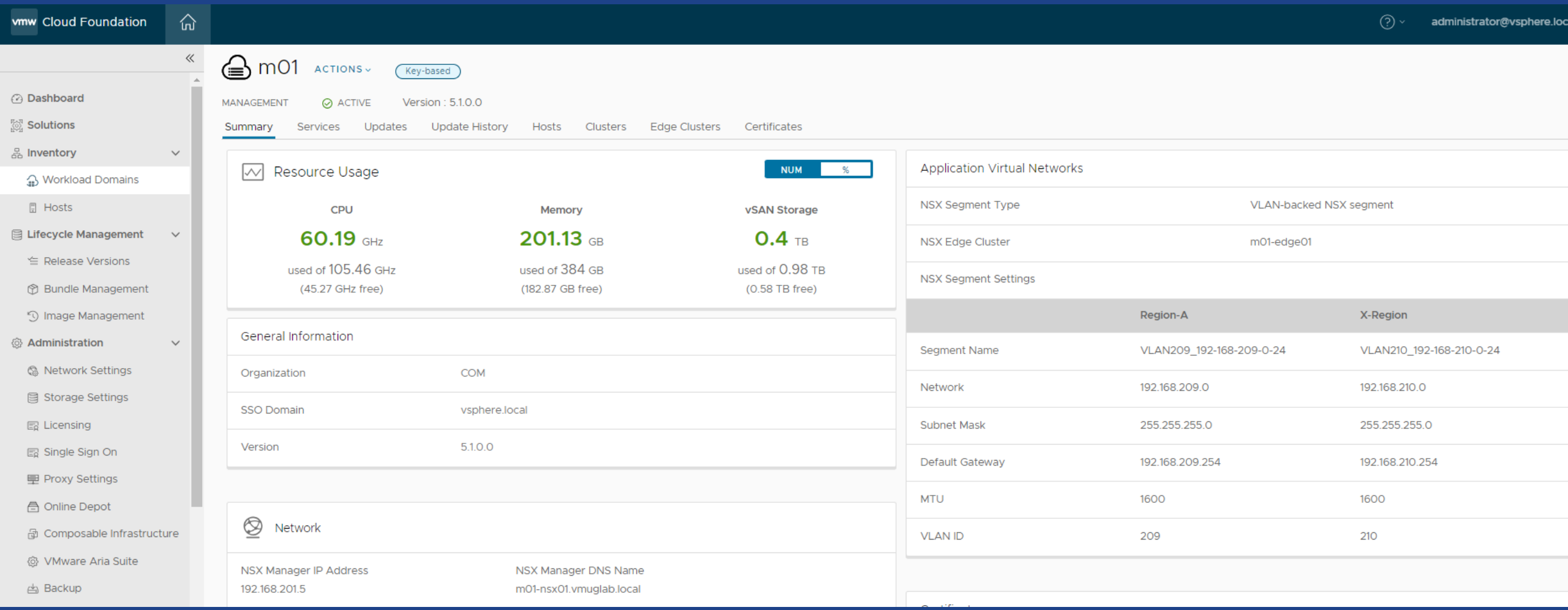

Add AVNs
1 General
2 NSX Edge Cluster
3 Settings
4 AVN Summary
AVN Summary
General
Application selected
VMware Aria Suite
NSX Segment type
VLAN-backed NSX segment
NSX Edge Cluster
NSX Edge Cluster
m01-edge01
Settings
Region-A
Name
VLAN209_192-168-209-0-24
Network
192.168.209.0
Subnet Mask
255.255.255.0
Default Gateway
192.168.209.254
MTU
1600
VLAN ID
209
X-Region
Name
VLAN210_192-168-210-0-24
CANCEL
BACK
FINISH



REFRESH RESET FILTERS

SUBTASK TASK INFO

Subtask	Task Status	Last Occurrence
Discover NSX Resources Used by Edge Cluster	Running	3/15/24, 10:53 PM
Validate NSX Edge Cluster status	Successful	3/15/24, 10:53 PM
Prepare data required for VLAN AVNs creation	Successful	3/15/24, 10:53 PM
Prepare data required for AVNs creation	Successful	3/15/24, 10:53 PM
Validate the AVN input spec	Successful	3/15/24, 10:53 PM
Acquire lock for AVNs creation	Successful	3/15/24, 10:53 PM
Release lock	Pending	3/15/24, 10:53 PM
Release lock	Pending	3/15/24, 10:53 PM
Create AVN inventory	Pending	3/15/24, 10:53 PM
Create VLAN transport zone - cluster association inventory	Pending	3/15/24, 10:53 PM
Create VLAN AVN Segment in NSX	Pending	3/15/24, 10:53 PM
Attach transport zone with NSX transport node profile	Pending	3/15/24, 10:53 PM
Attach transport zone with NSX edge transport node	Pending	3/15/24, 10:53 PM
Attach transport zone with NSX transport node	Pending	3/15/24, 10:53 PM
Create NSX VLAN Transport Zone	Pending	3/15/24, 10:53 PM

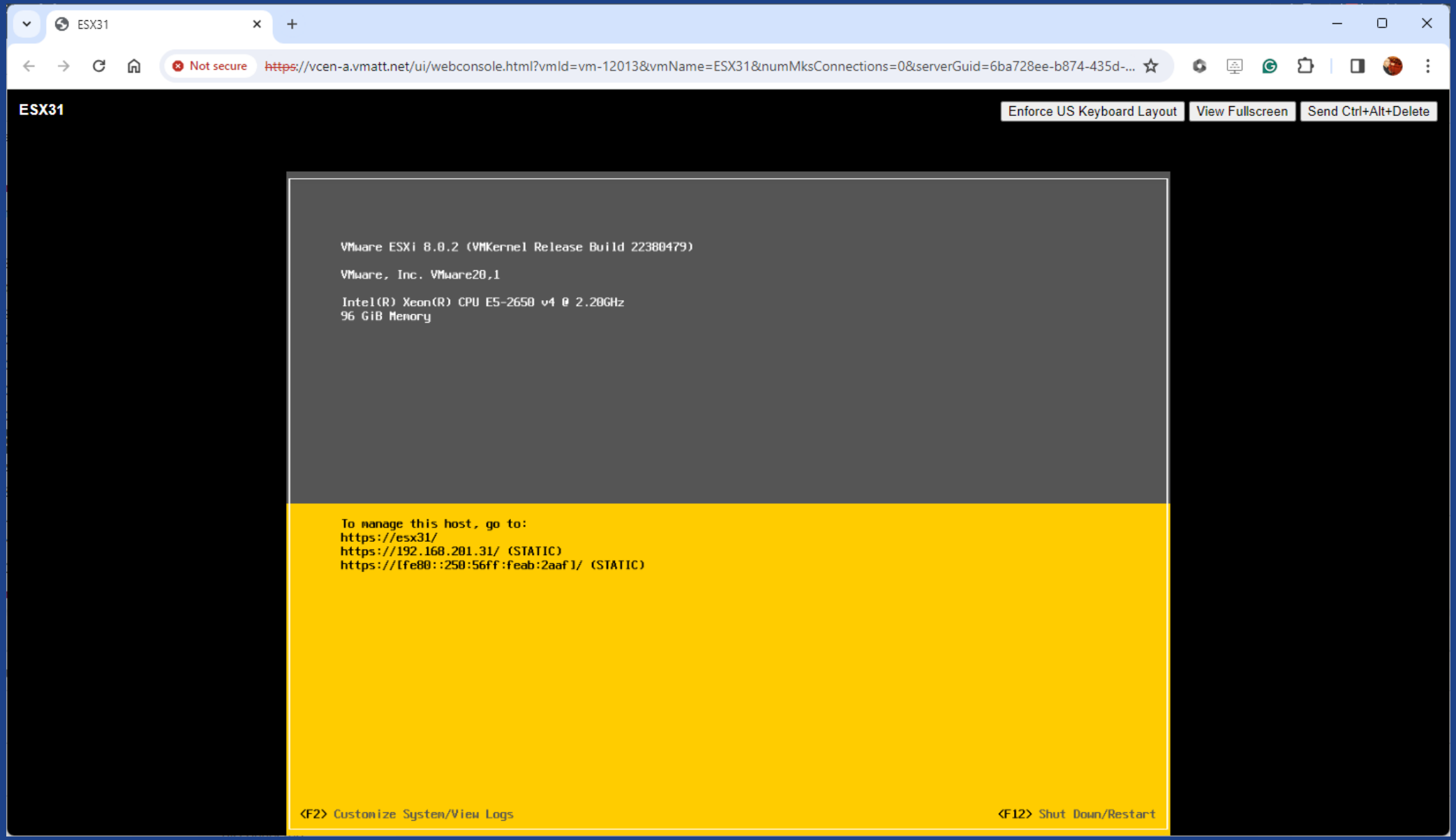


VMUG usercon

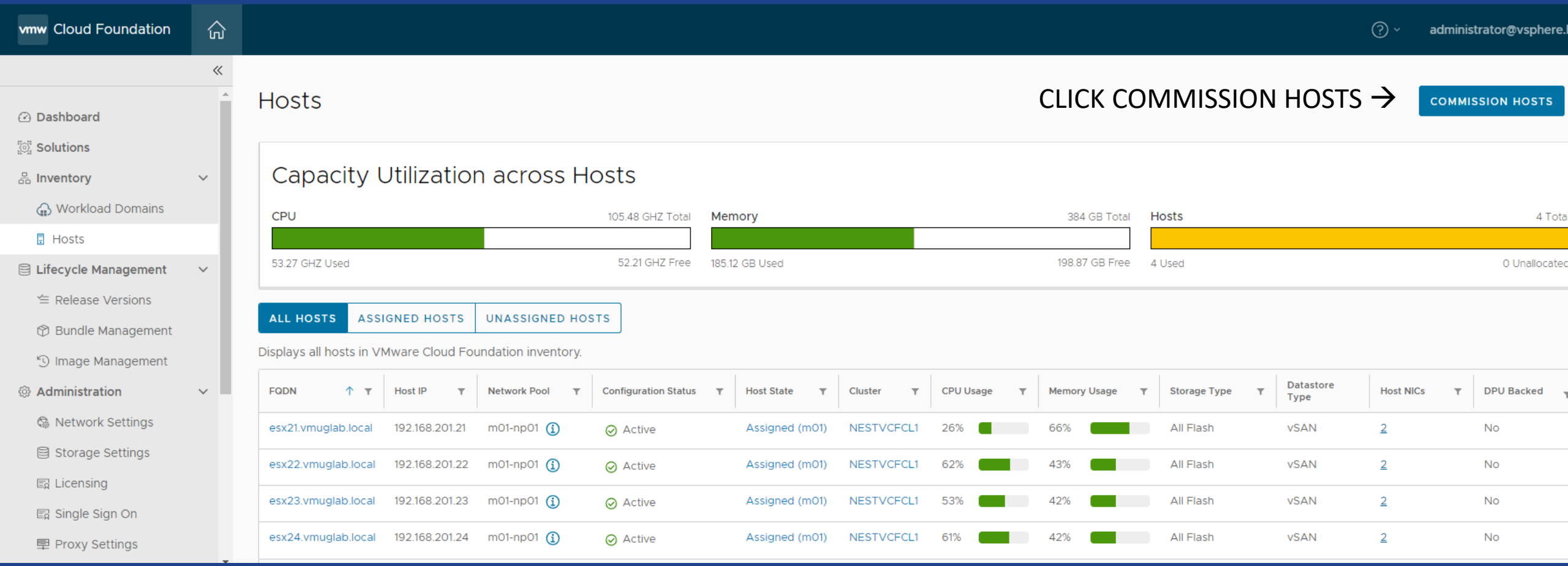
Let’s add a host
To our management
Cluster in VCF

Deploy a VM with
The same specs
As the other four
Hosts in the
Management
Domain

12 vCPU
96GB RAM
32GB Boot Disk
100GB Cache Disk
250GB Capacity Disk



VMUG usercon



VMUG usercon

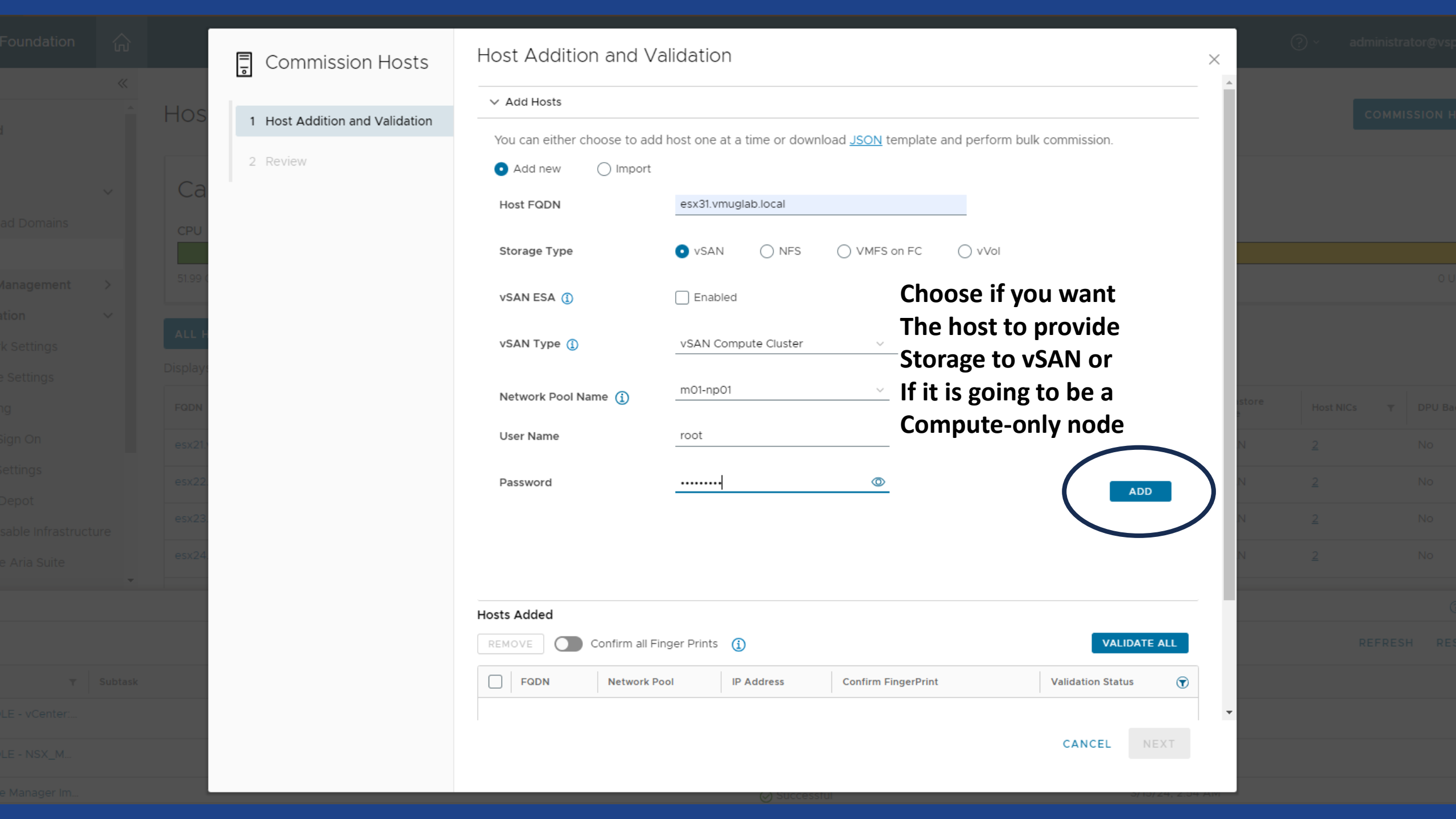
Checklist

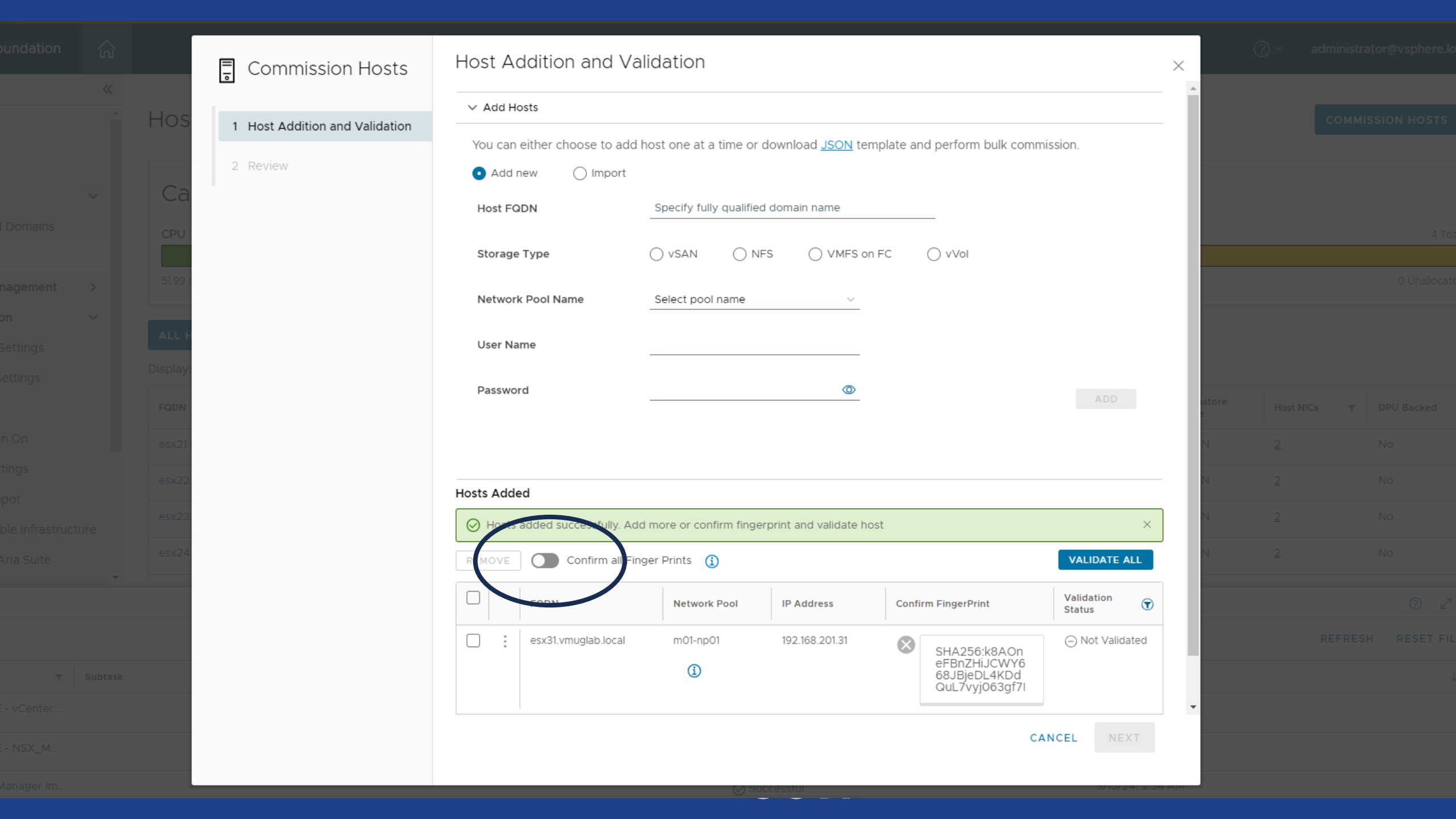
Commissioning a host adds it to the VMware Cloud Foundation inventory. The host you want to commission must meet the checklist criterion below.

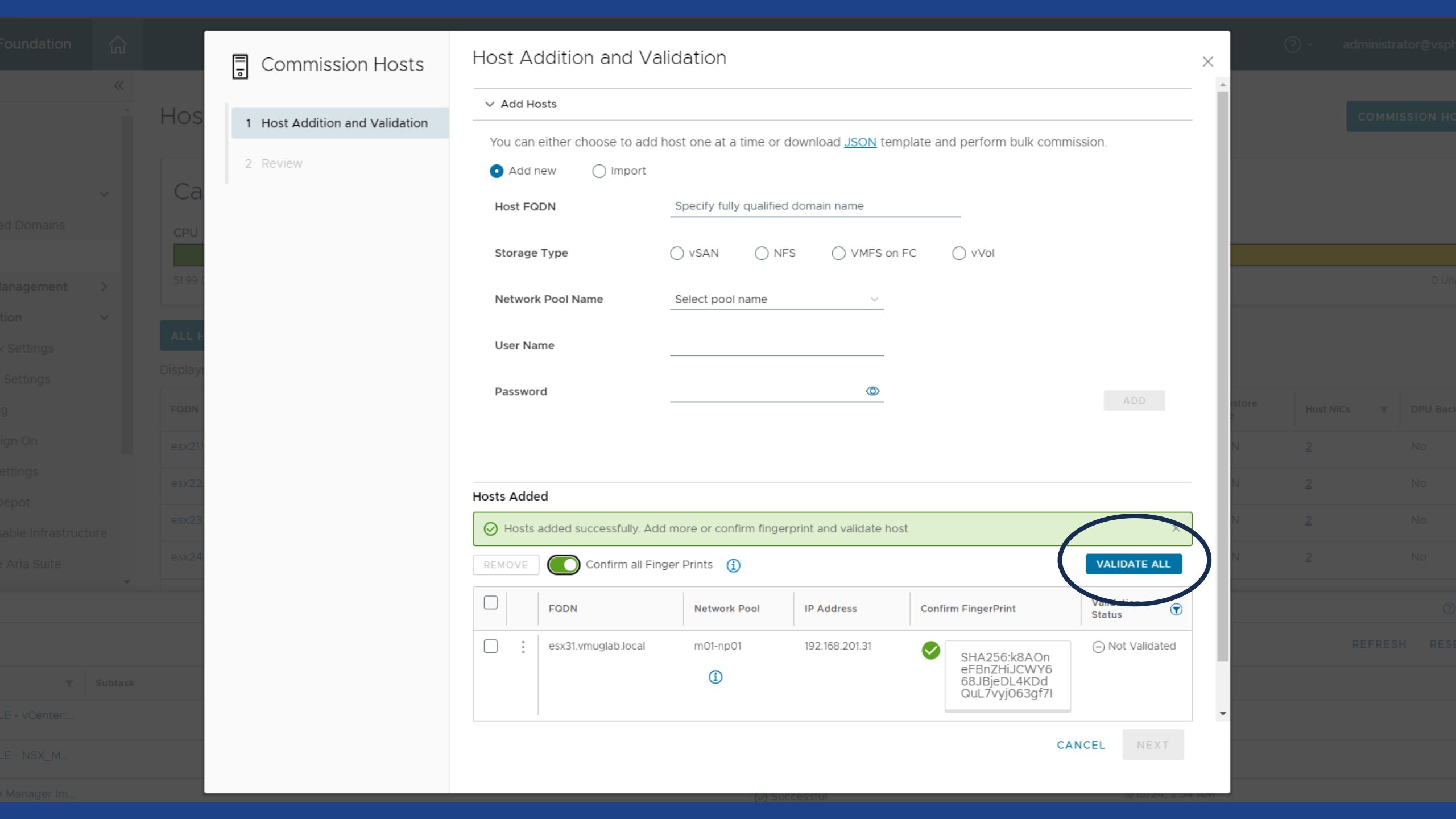
- [x] **Select All**
- [x] Host for vSAN/vSAN ESA workload domain should be vSAN/vSAN ESA compliant and certified per the VMware Hardware Compatibility Guide. BIOS, HBA, SSD, HDD, etc. must match the VMware Hardware Compatibility Guide.
- [x] Host has a standard switch with two NIC ports with a minimum 10 Gbps speed.
- [x] Host has the drivers and firmware versions specified in the VMware Compatibility Guide.
- [x] Host has ESXi installed on it. The host must be preinstalled with supported versions (8.0.2-22380479)
- [x] Host is configured with DNS server for forward and reverse lookup and FQDN.
- [x] Hostname should be same as the FQDN.
- [x] Management IP is configured to first NIC port.
- [x] Ensure that the host has a standard switch and the default uplinks with 10Gb speed are configured starting with traditional numbering (e.g., vmnic0) and increasing sequentially.
- [x] Host hardware health status is healthy without any errors.
- [x] All disk partitions on HDD / SSD are deleted.
- [x] Ensure required network pool is created and available before host commissioning.
- [x] Ensure hosts to be used for VSAN workload domain are associated with VSAN enabled network pool.

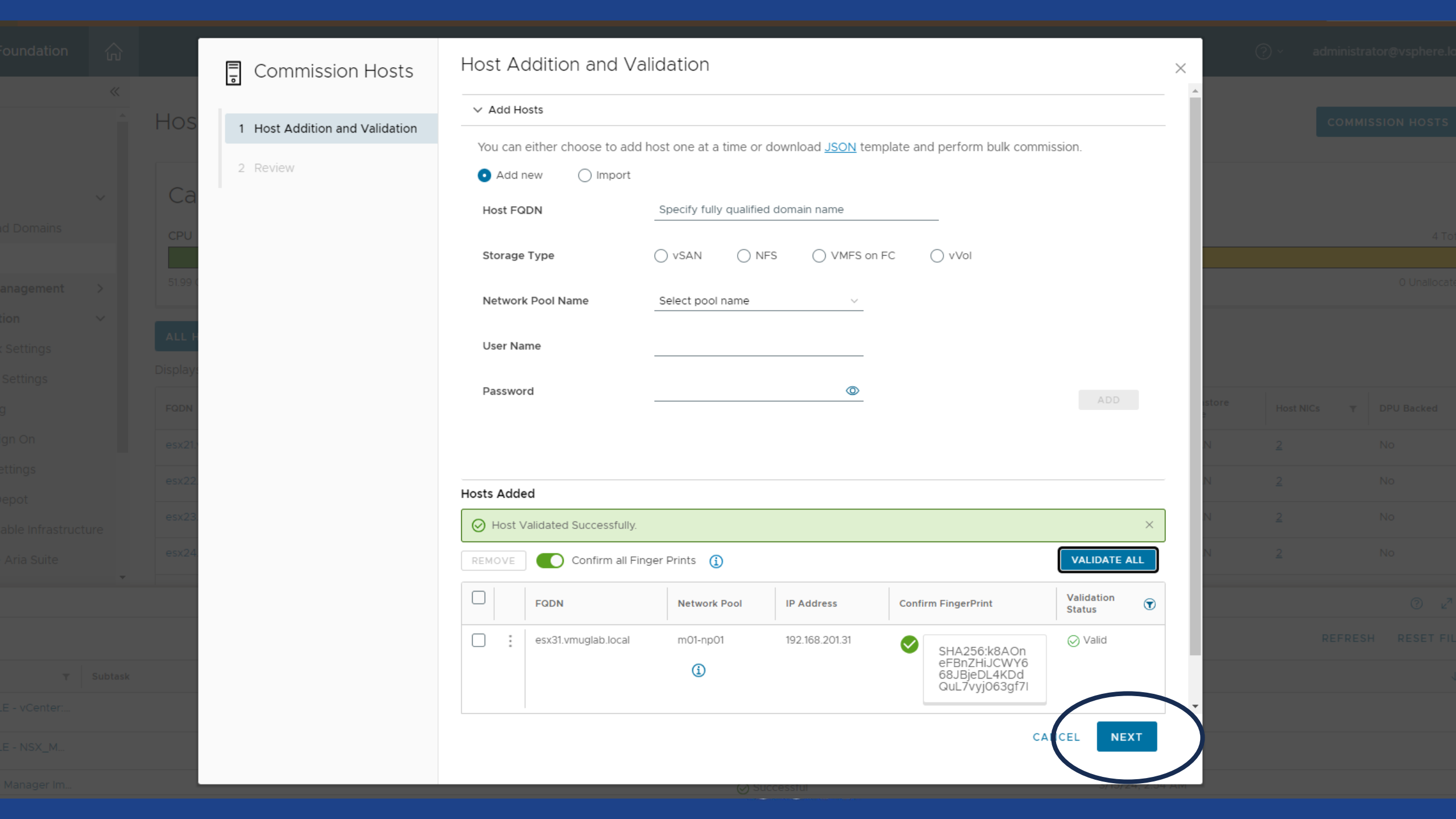
- [x] Ensure hosts to be used for NFS workload domain are associated with NFS enabled network pool.
- [x] Ensure hosts to be used for VMFS on FC workload domain are associated with NFS or VMOTION only enabled network pool.
- [x] Ensure hosts to be used for vVol FC workload domain are associated with NFS or VMOTION only enabled network pool.
- [x] Ensure hosts to be used for vVol NFS workload domain are associated with NFS and VMOTION only enabled network pool.
- [x] Ensure hosts to be used for vVol iSCSI workload domain are associated with iSCSI and VMOTION only enabled network pool.
- [x] For hosts with a DPU device, enable SR-IOV in the BIOS and in the vSphere Client (if required by your DPU vendor).

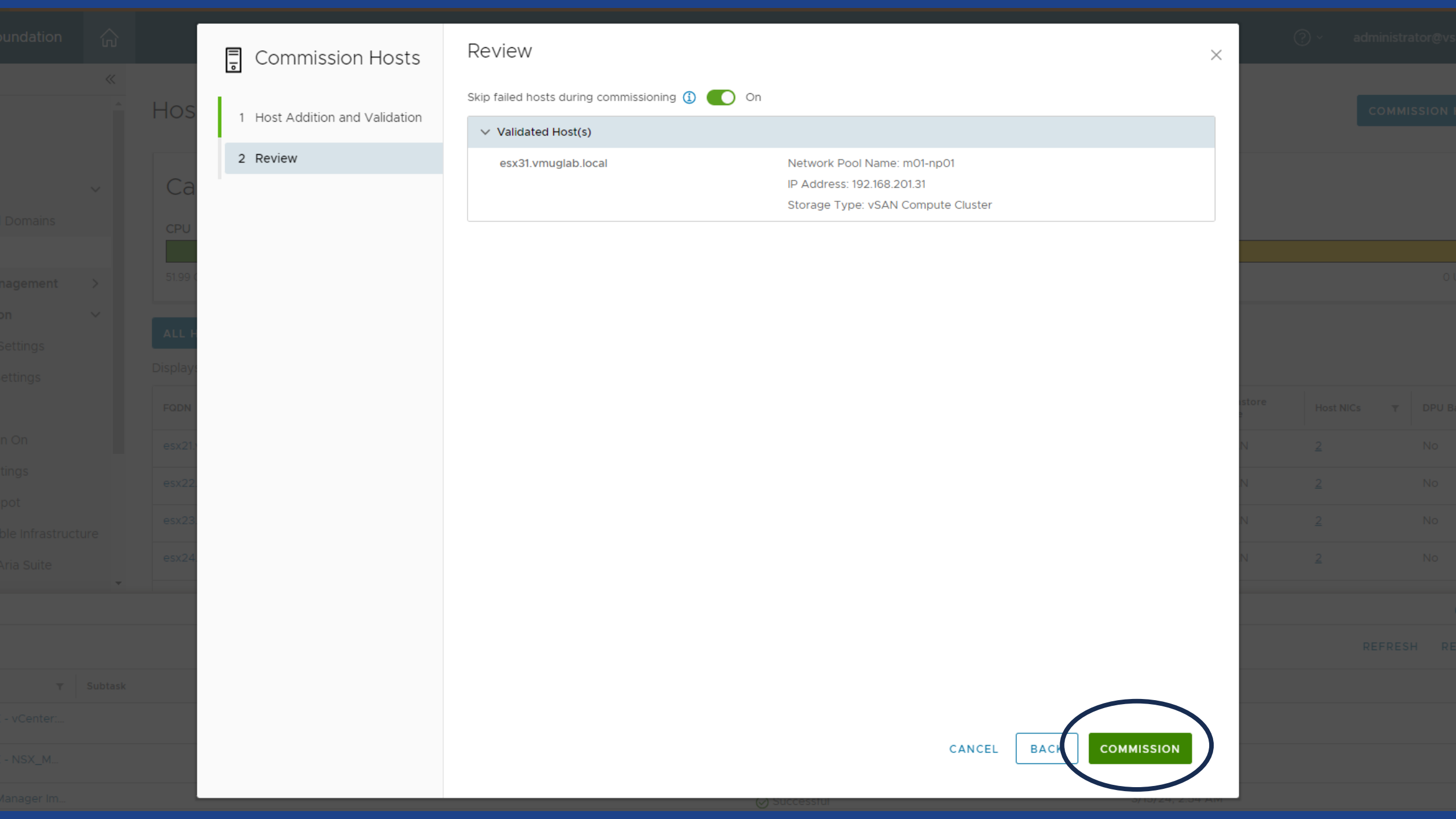
CANCEL PROCEED

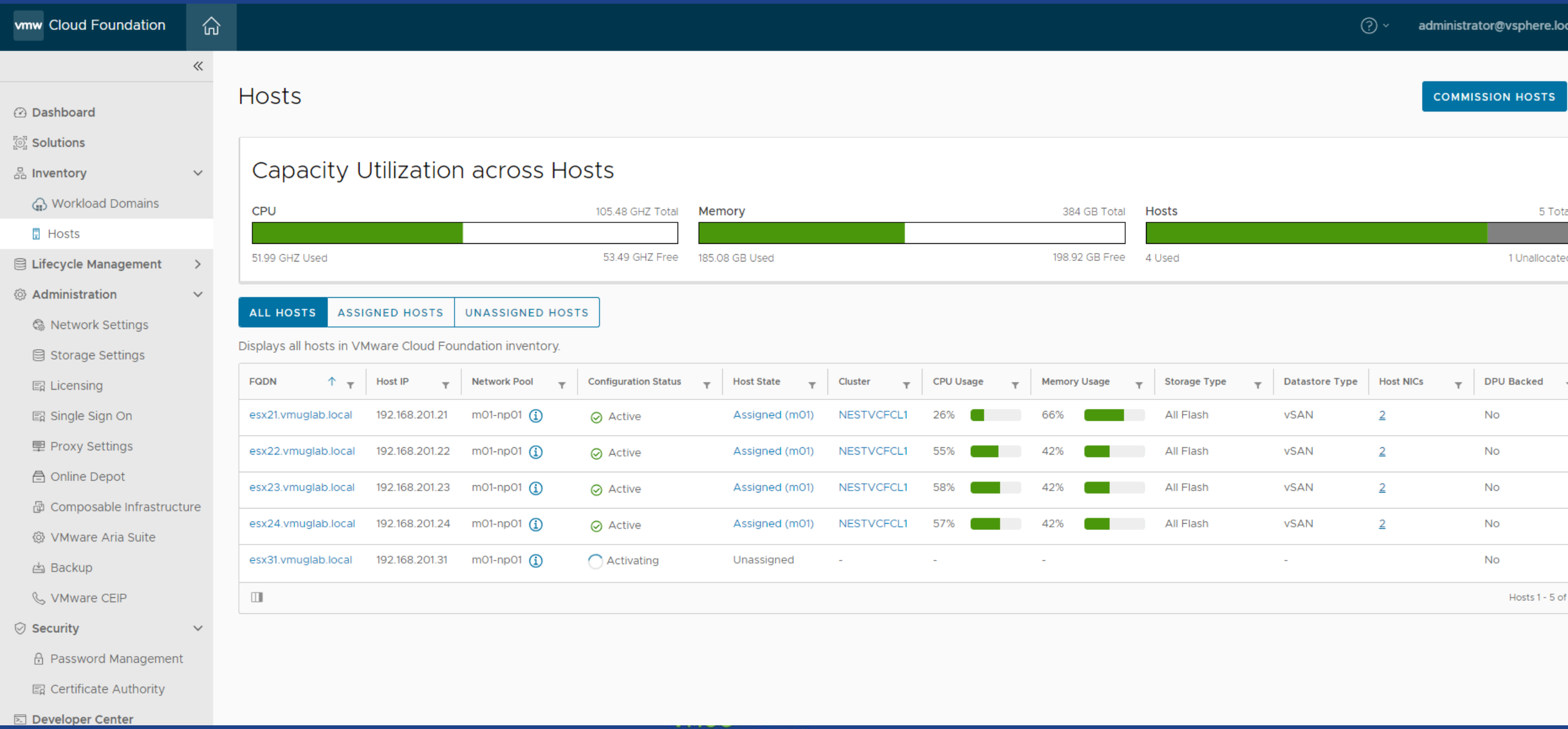

Commission Hosts
1 Host Addition and Validation
2 Review
Host Addition and Validation
Add Hosts
You can either choose to add host one at a time or download JSON template and perform bulk commission.
Add new
Import
Host FQDN
esx31.vmuglab.local
Storage Type
vSAN
NFS
VMFS on FC
vVol
vSAN ESA
Enabled
vSAN Type
vSAN Compute Cluster
Network Pool Name
m01-np01
User Name
root
Password
Choose if you want
The host to provide
Storage to vSAN or
If it is going to be a
Compute-only node
ADD
Hosts Added
REMOVE
Confirm all Finger Prints
VALIDATE ALL
FQDN
Network Pool
IP Address
Confirm FingerPrint
Validation Status
CANCEL
NEXT


Commission Hosts
1 Host Addition and Validation
2 Review
Host Addition and Validation
Add Hosts
You can either choose to add host one at a time or download JSON template and perform bulk commission.
Add new
Import
Host FQDN
Specify fully qualified domain name
Storage Type
vSAN
NFS
VMFS on FC
vVol
Network Pool Name
Select pool name
User Name
Password
ADD
Hosts Added
Hosts added successfully. Add more or confirm fingerprint and validate host
REMOVE
Confirm all Finger Prints
VALIDATE ALL
FQDN
Network Pool
IP Address
Confirm FingerPrint
Validation Status
esx31.vmuglab.local
m01-np01
192.168.201.31
SHA256:k8AOneFBnZHiJCWY668JBjeDL4KDdQuL7vyj063gf7I
Not Validated
CANCEL
NEXT


Commission Hosts
1 Host Addition and Validation
2 Review
Host Addition and Validation
Add Hosts
You can either choose to add host one at a time or download JSON template and perform bulk commission.
Add new
Import
Host FQDN
Specify fully qualified domain name
Storage Type
vSAN
NFS
VMFS on FC
vVol
Network Pool Name
Select pool name
User Name
Password
ADD
Hosts Added
Hosts added successfully. Add more or confirm fingerprint and validate host
REMOVE
Confirm all Finger Prints
VALIDATE ALL
FQDN
Network Pool
IP Address
Confirm FingerPrint
Validation Status
esx31.vmuglab.local
m01-np01
192.168.201.31
SHA256:k8AOneFBnZHiJCWY668JBjeDL4KDdQuL7vyj063gf7I
Not Validated
CANCEL
NEXT


Commission Hosts
1 Host Addition and Validation
2 Review
Host Addition and Validation
Add Hosts
You can either choose to add host one at a time or download JSON template and perform bulk commission.
Add new
Import
Host FQDN
Specify fully qualified domain name
Storage Type
vSAN
NFS
VMFS on FC
vVol
Network Pool Name
Select pool name
User Name
Password
ADD
Hosts Added
Host Validated Successfully.
REMOVE
Confirm all Finger Prints
VALIDATE ALL
FQDN
Network Pool
IP Address
Confirm FingerPrint
Validation Status
esx31.vmuglab.local
m01-np01
192.168.201.31
SHA256:k8AOneFBnZHiJCWY668JBjeDL4KDdQuL7vyj063gf7I
Valid
CANCEL
NEXT


Commission Hosts
1 Host Addition and Validation
2 Review
Review
Skip failed hosts during commissioning
On
Validated Host(s)
esx31.vmuglab.local
Network Pool Name: m01-np01
IP Address: 192.168.201.31
Storage Type: vSAN Compute Cluster
CANCEL
BACK
COMMISSION

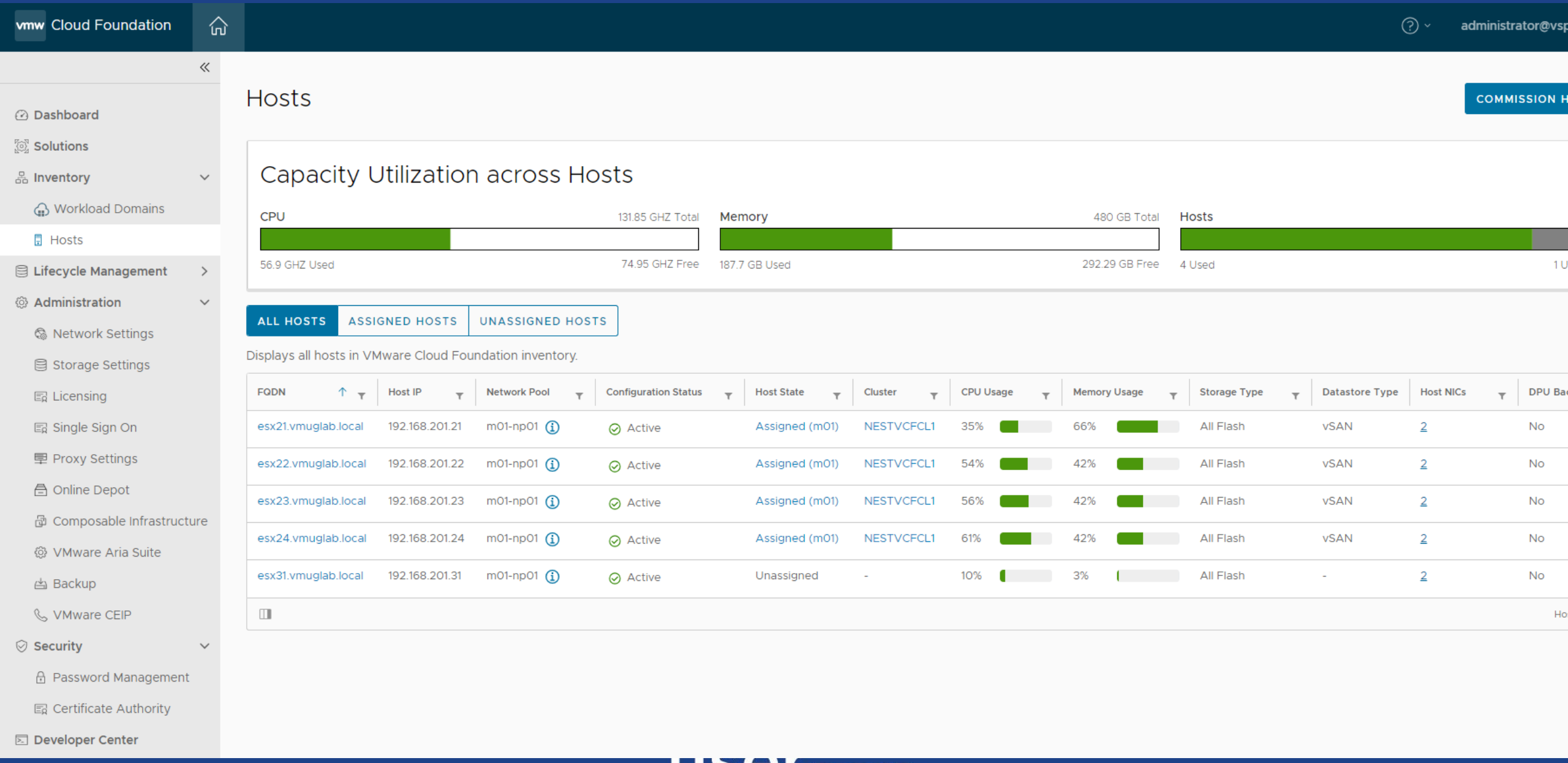

vmw Cloud Foundation
administrator@vsphere.loc
Dashboard
Solutions
Inventory
Workload Domains
Hosts
Lifecycle Management
Administration
Network Settings
Storage Settings
Licensing
Single Sign On
Proxy Settings
Online Depot
Composable Infrastructure
VMware Aria Suite
Backup
VMware CEIP
Security
Password Management
Certificate Authority
Developer Center
Hosts
COMMISSION HOSTS
Capacity Utilization across Hosts
CPU
105.48 GHZ Total
51.99 GHZ Used
53.49 GHZ Free
Memory
384 GB Total
185.08 GB Used
198.92 GB Free
Hosts
5 Tota
4 Used
1 Unallocated
ALL HOSTS
ASSIGNED HOSTS
UNASSIGNED HOSTS
Displays all hosts in VMware Cloud Foundation inventory.
FQDN
Host IP
Network Pool
Configuration Status
Host State
Cluster
CPU Usage
Memory Usage
Storage Type
Datastore Type
Host NICs
DPU Backed
esx21.vmuglab.local
192.168.201.21
m01-np01
Active
Assigned (m01)
NESTVCFCL1
26%
66%
All Flash
vSAN
2
No
esx22.vmuglab.local
192.168.201.22
m01-np01
Active
Assigned (m01)
NESTVCFCL1
55%
42%
All Flash
vSAN
2
No
esx23.vmuglab.local
192.168.201.23
m01-np01
Active
Assigned (m01)
NESTVCFCL1
58%
42%
All Flash
vSAN
2
No
esx24.vmuglab.local
192.168.201.24
m01-np01
Active
Assigned (m01)
NESTVCFCL1
57%
42%
All Flash
vSAN
2
No
esx31.vmuglab.local
192.168.201.31
m01-np01
Activating
Unassigned
No
Hosts 1 - 5 of

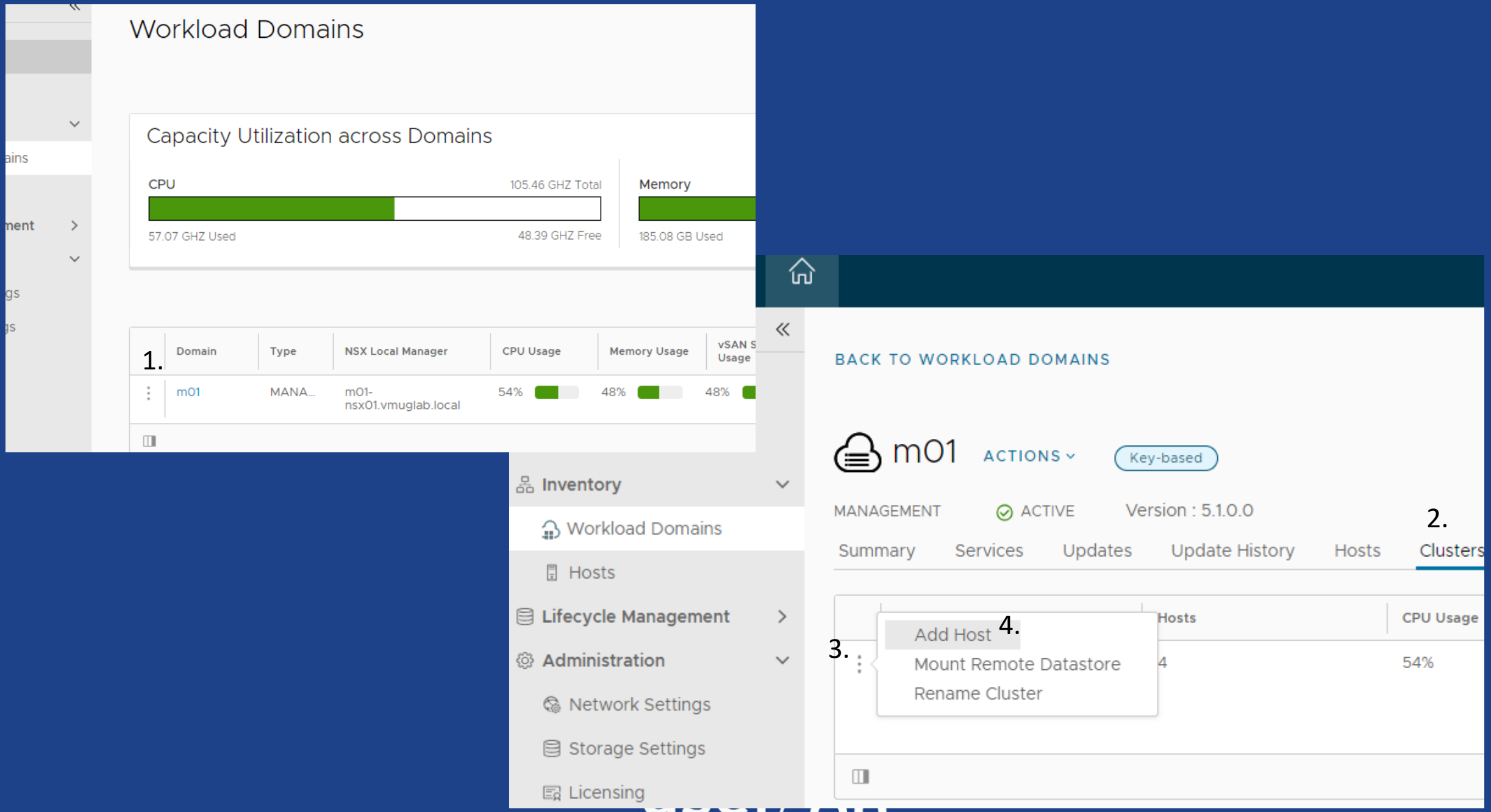
Tasks

Commissioning host(s) esx31.vmuglab.local to VMware Cloud Foundation

SUBTASK | TASK INFO

Subtask	Task Status	Last Occurrence
Install Temporary VMCA Certificate For Host Commissioning	Running	3/15/24, 2:57 PM
Update SDDC Manager known_hosts with New ESXi Host SSH Keys	Successful	3/15/24, 2:57 PM
Gather New ESXi Hosts Details	Successful	3/15/24, 2:57 PM
Gather DNS and NTP Server Details	Successful	3/15/24, 2:57 PM
Updates SDDC Manager Task-Registration with New Resource IDs	Successful	3/15/24, 2:57 PM
Acquire SDDC Manager Host(s) Lock	Successful	3/15/24, 2:57 PM
Generate SDDC Manager Acquire Host(s) Lock Data	Successful	3/15/24, 2:57 PM
Acquire SDDC Manager System Limited Lock	Successful	3/15/24, 2:57 PM
Generate SDDC Manager Acquire System Limited Lock Data	Successful	3/15/24, 2:57 PM
Update SDDC Manager Inventory with New ESXi Hosts and Associate with Given Network Pool	Successful	3/15/24, 2:57 PM
Validate System Lock Availability on SDDC Manager	Successful	3/15/24, 2:57 PM
Validate ESXi Hosts Before Starting the Commissioning Process	Successful	3/15/24, 2:57 PM
Performing Cleanup of SDDC Inventory Before Retrying the Failed ESXi Host Commissioning Workflow	Successful	3/15/24, 2:56 PM
Removes hosts (missing from DB) from orchestrator metadata before retrying a failed commissioning workflow	Successful	3/15/24, 2:56 PM
Acquire SDDC Manager Resources Lock if Resources exists	Successful	3/15/24, 2:56 PM
Acquire SDDC Manager System Limited Lock if Resources Exists	Successful	3/15/24, 2:56 PM
Generate Input To Clean Skipped Hosts Configuration	Pending	3/15/24, 2:56 PM
[Applicable to skipped ESXi Hosts]Remove ESXi Host From known_hosts File	Pending	3/15/24, 2:56 PM
[Applicable to skipped ESXi Hosts]Disassociate ESXi Host From Network Pool And Delete ESXi Host From Inventory	Pending	3/15/24, 2:56 PM
Generate SDDC Manager Release Host(s) Lock Data	Pending	3/15/24, 2:56 PM
Release SDDC Manager Host(s) Lock	Pending	3/15/24, 2:56 PM
Generate Release Limited System Lock Data	Pending	3/15/24, 2:56 PM
Release Limited System Lock	Pending	3/15/24, 2:56 PM
Add ESXi Root Credentials to SDDC Manager Credentials Store	Pending	3/15/24, 2:56 PM
Update SDDC Manager Logical Inventory with New ESXi Hosts	Pending	3/15/24, 2:56 PM
Disable SSH on ESXi host	Pending	3/15/24, 2:56 PM
Update Input to Disable SSH on ESXi hosts	Pending	3/15/24, 2:56 PM
Rotate SSH Keys for New ESXi Hosts	Pending	3/15/24, 2:56 PM
Gather All Attributes (Including ESXi Version) for New ESXi Hosts	Pending	3/15/24, 2:56 PM
Configure NTP Server Details on New ESXi Hosts	Pending	3/15/24, 2:56 PM
Configure DNS Server Details on New ESXi Hosts	Pending	3/15/24, 2:56 PM
Configure Lockdown Mode on ESXi Hosts	Pending	3/15/24, 2:56 PM
Generate Data for configuring ESXi lock down mode	Pending	3/15/24, 2:56 PM
Add Service Account to ESXi Lockdown Mode Exception Users List	Pending	3/15/24, 2:56 PM
Grant Administrator Access to ESXi Users	Pending	3/15/24, 2:56 PM
Assign Role to New ESXi User	Pending	3/15/24, 2:56 PM
Create New Local ESXi User	Pending	3/15/24, 2:56 PM
Update Input To Create Esxi Service Accounts.	Pending	3/15/24, 2:56 PM
Retrieve ESXi Host Lockdown Mode Configuration	Pending	3/15/24, 2:56 PM
Disable Lockdown Mode on ESXi Hosts	Pending	3/15/24, 2:56 PM
Update Input for disable ESXi lockdown mode	Pending	3/15/24, 2:56 PM


vmw Cloud Foundation
administrator@vsp
Dashboard
Solutions
Inventory
Workload Domains
Hosts
Lifecycle Management
Administration
Network Settings
Storage Settings
Licensing
Single Sign On
Proxy Settings
Online Depot
Composable Infrastructure
VMware Aria Suite
Backup
VMware CEIP
Security
Password Management
Certificate Authority
Developer Center
Hosts
COMMISSION H
Capacity Utilization across Hosts
CPU
131.85 GHZ Total
56.9 GHZ Used
74.95 GHZ Free
Memory
480 GB Total
187.7 GB Used
292.29 GB Free
Hosts
4 Used
1 U
ALL HOSTS
ASSIGNED HOSTS
UNASSIGNED HOSTS
Displays all hosts in VMware Cloud Foundation inventory.
FQDN
Host IP
Network Pool
Configuration Status
Host State
Cluster
CPU Usage
Memory Usage
Storage Type
Datastore Type
Host NICs
DPU Ba
esx21.vmuglab.local 192.168.201.21 m01-np01 Active Assigned (m01) NESTVCFCL1 35% 66% All Flash vSAN 2 No
esx22.vmuglab.local 192.168.201.22 m01-np01 Active Assigned (m01) NESTVCFCL1 54% 42% All Flash vSAN 2 No
esx23.vmuglab.local 192.168.201.23 m01-np01 Active Assigned (m01) NESTVCFCL1 56% 42% All Flash vSAN 2 No
esx24.vmuglab.local 192.168.201.24 m01-np01 Active Assigned (m01) NESTVCFCL1 61% 42% All Flash vSAN 2 No
esx31.vmuglab.local 192.168.201.31 m01-np01 Active Unassigned - 10% 3% All Flash - 2 No
Ho


Workload Domains
Capacity Utilization across Domains
CPU
105.46 GHZ Total
57.07 GHZ Used
48.39 GHZ Free
Memory
185.08 GB Used
1.
Domain
Type
NSX Local Manager
CPU Usage
Memory Usage
vSAN S Usage
m01
MANA...
m01-nsx01.vmuglab.local
54%
48%
48%
Inventory
Workload Domains
Hosts
Lifecycle Management
Administration
Network Settings
Storage Settings
Licensing
BACK TO WORKLOAD DOMAINS
m01
ACTIONS
Key-based
MANAGEMENT
ACTIVE
Version : 5.1.0.0
2.
Summary
Services
Updates
Update History
Hosts
Clusters
3.
4.
Add Host
Mount Remote Datastore
Rename Cluster
Hosts
CPU Usage
4
54%

Add Hosts to NESTVCFCL1

1 Host Selection

2 Switch Configuration

3 License

4 Review

Host Selection

As a best practice, VMware recommends deploying ESXi hosts with similar or identical configurations across all cluster members, including similar or identical storage configurations. For more detail, please check product documentation.

The following hosts have principal storage and switch configurations that are compatible with the existing hosts in the cluster.

The cluster uses switch configuration with 2 NICs. All hosts are required to have a minimum of 2 NICs.

Compatible Hosts (1) | Incompatible Hosts (0)

Selected resources: 12 Cores 96 GB Memory, 350 GB Storage. 2 Host NICs

RESET FILTER | CLEAR SELECTION

FQDN	Network Pool	Memory	Raw Storage	Host NICs	Disks	Storage Type
esx31.vmuglab.local	m01-np01	96.00 GB	350.00 GB	2	2 SSD, 0 HDD	ALL-FLASH

1 Hosts per page 10 1 - 1 of 1 hosts

CANCEL NEXT

Add Hosts to NESTVCFCL1

1 Host Selection

2 Switch Configuration

3 License

4 Review

Switch Configuration

Map host NICs to this cluster's vSphere Distributed Switch configuration.

NESTED-VCF-VDS1

NICs Used 2

Traffic Types

Network Type	Active Uplinks	Standby Uplinks	Teaming Policy
MANAGEMENT	uplink1, uplink2	None	Route based on physical NIC load
VMOTION	uplink1, uplink2	None	Route based on physical NIC load
VSAN	uplink1, uplink2	None	Route based on physical NIC load
VM_MANAGEMENT	uplink1, uplink2	None	Route based on physical NIC load
NSX-OVERLAY	uplink1, uplink2	None	Load Balance Source
NSX-VLAN	uplink1, uplink2	None	Load Balance Source

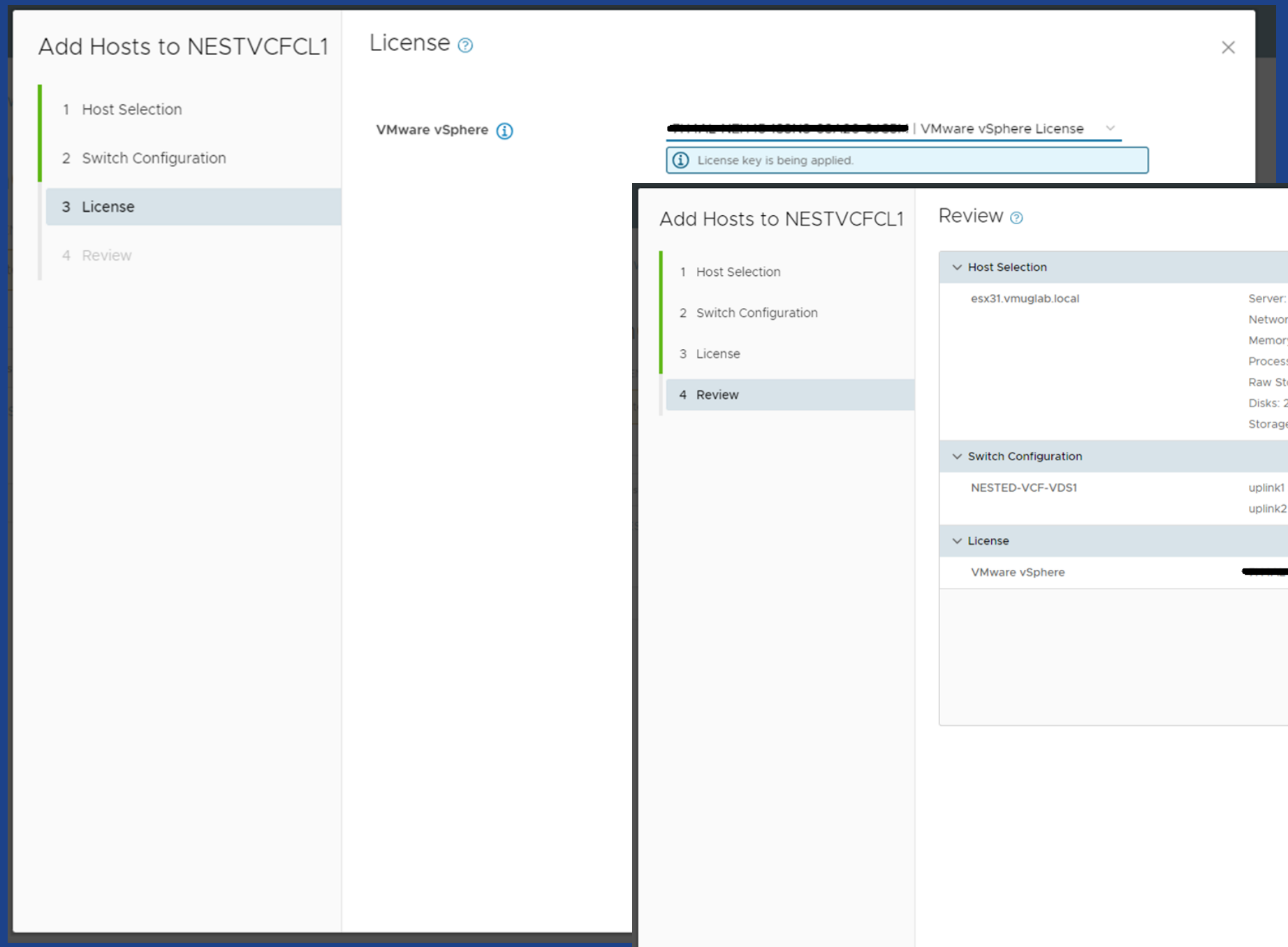
Physical Network Adapter to Uplink Mapping

Map uplinks to physical network adapter on host

uplink1 vmnic0

uplink2 vmnic1

CANCEL BACK NEXT


Add Hosts to NESTVCFCL1
1 Host Selection
2 Switch Configuration
3 License
4 Review
License
VMware vSphere
[redacted] | VMware vSphere License
License key is being applied.

Add Hosts to NESTVCFCL1
1 Host Selection
2 Switch Configuration
3 License
4 Review
Review
Host Selection
esx31.vmuglab.local
Server: VMware, Inc. VMware20,1
Network Pool Name: m01-np01
Memory : 96.00 GB
Processor: 12 x Intel(R) Xeon(R) CPU E5-2650 v4 @ 2.20GHz
Raw Storage : 350.00 GB
Disks: 2 SSD, 0 HDD
Storage Type: ALL-FLASH
Switch Configuration
NESTED-VCF-VDS1
uplink1 : vmnic0
uplink2 : vmnic1
License
VMware vSphere
[redacted]
CANCEL
BACK
FINISH

Tasks

Adding new host(s) to cluster

REFRESH RESET FILTERS

SUBTASK TASK INFO

Subtask	Task Status	Last Occurrence
Validate ESXi Hosts do not Contain Disallowed NSX vSphere Installation Bundles (VIBs)	Running	3/15/24, 3:16 PM
Validate Incoming ESXi Host(s) Compatibility with Existing ESXi Hosts in the Cluster	Successful	3/15/24, 3:16 PM
Validate Compute Manager Status of the Domain in NSX	Successful	3/15/24, 3:16 PM
Validate Overlay Transport Zone for NSX	Successful	3/15/24, 3:16 PM
Generate NSX Validation Input Data	Successful	3/15/24, 3:16 PM
Validate Installed NSX Version is Supported	Successful	3/15/24, 3:16 PM
Validate subscription state	Successful	3/15/24, 3:16 PM
Validate the cluster expansion input specification	Successful	3/15/24, 3:16 PM
Generate Add Host Operation Input Data	Successful	3/15/24, 3:16 PM
Acquire Resource Locks	Successful	3/15/24, 3:16 PM
Generate Acquire Resource Locks Input Data	Successful	3/15/24, 3:16 PM
Release Resource Locks	Pending	3/15/24, 3:16 PM
Generate Release Resources Lock Data	Pending	3/15/24, 3:16 PM
Unblock NSX Static IP pool Addresses blocked by Cluster Expansion workflow	Pending	3/15/24, 3:16 PM
Release Blocked Resource	Pending	3/15/24, 3:16 PM
Generate Blocked Resources Data by Add Host	Pending	3/15/24, 3:16 PM
Generate Release Resources Lock Data	Pending	3/15/24, 3:16 PM
Release Resource Locks	Pending	3/15/24, 3:16 PM
Generate Migrate VCF Attached Tags to vCenter Server Input Data	Pending	3/15/24, 3:16 PM
Migrate VCF Attached Tags to vCenter Server	Pending	3/15/24, 3:16 PM
Update ESXi Host(s) Status in the SDDC Manager Inventory	Pending	3/15/24, 3:16 PM
Generate ESXi Host(s) Source ID Input Data	Pending	3/15/24, 3:16 PM
Update ESXi Host's Source ID in the SDDC Manager Inventory	Pending	3/15/24, 3:16 PM
Exit Maintenance Mode on ESXi Hosts	Pending	3/15/24, 3:16 PM
Fetch Remediated ESXi Host Version from the Cluster Image	Pending	3/15/24, 3:16 PM
Update Remediated ESXi Host(s) Version in the SDDC Manager Inventory	Pending	3/15/24, 3:16 PM
Validate ESXi Host(s) Connectivity to the NSX	Pending	3/15/24, 3:16 PM
Prepare Transport Node Collection	Pending	3/15/24, 3:16 PM
Find Transport Node Profile attached to cluster	Pending	3/15/24, 3:16 PM
Gather Existing NSX Configuration to Join NSX Fabric	Pending	3/15/24, 3:16 PM
Validate ESXi Host(s) Connectivity to the NSX	Pending	3/15/24, 3:16 PM

Tasks

Adding new host(s) to cluster

REFRESH RESET FILTERS

SUBTASK TASK INFO

Subtask	Task Status	Last Occurrence
Find Transport Node Profile attached to cluster	Pending	3/15/24, 3:16 PM
Gather Existing NSX Configuration to Join NSX Fabric	Pending	3/15/24, 3:16 PM
Validate ESXi Host(s) Connectivity to the NSX	Pending	3/15/24, 3:16 PM
Validate NSX Connectivity Before Starting NSX Network Configuration	Pending	3/15/24, 3:16 PM
Generate NSX Input Data	Pending	3/15/24, 3:16 PM
Generate Disable SSH On ESXi Host(s) Input Data	Pending	3/15/24, 3:16 PM
Disable SSH on ESXi host	Pending	3/15/24, 3:16 PM
Clear Alarms on ESXi Hosts	Pending	3/15/24, 3:16 PM
Remediate ESXi Host(s) to be Compliant with Cluster's Image	Pending	3/15/24, 3:16 PM
Create vSAN Disk Groups	Pending	3/15/24, 3:16 PM
Configure HA Isolation Address Option	Pending	3/15/24, 3:16 PM
Configure Power Management Policy on ESXi Host(s)	Pending	3/15/24, 3:16 PM
Generate Configure Power Management Policy on ESXi Host(s) Input Data	Pending	3/15/24, 3:16 PM
Add ESXi Hosts to vSphere Cluster	Pending	3/15/24, 3:16 PM
Detach vmknic(s) from vSphere Standard Switch	Pending	3/15/24, 3:16 PM
Attach vmknic(s) to vSphere Distributed Switch	Pending	3/15/24, 3:16 PM
Remove vSphere Standard Switches from ESXi Hosts	Pending	3/15/24, 3:16 PM
Migrate ESXi Host Management vmknic(s) to vSphere Distributed Switch	Pending	3/15/24, 3:16 PM
Create vSAN vmknic(s) on ESXi Host	Pending	3/15/24, 3:16 PM
Create vMotion vmknic(s) on ESXi Host	Pending	3/15/24, 3:16 PM
Add ESXi Hosts to vSphere Distributed Switch	Pending	3/15/24, 3:16 PM
Enter Maintenance Mode on ESXi Hosts	Pending	3/15/24, 3:16 PM
Apply License(s) to ESXi Host in vCenter Server	Pending	3/15/24, 3:16 PM
Configure Lockdown Mode on ESXi Hosts	Pending	3/15/24, 3:16 PM
Add ESXi Hosts to Data Center	Pending	3/15/24, 3:16 PM
Retrieve ESXi Host Lockdown Mode Configuration	Pending	3/15/24, 3:16 PM
Disable Lockdown Mode on ESXi Hosts	Pending	3/15/24, 3:16 PM
Generate Disable ESXi Host(s) Lockdown Mode Input Data	Pending	3/15/24, 3:16 PM
Update Input Map for Add Host Operation	Pending	3/15/24, 3:16 PM
Prepare ESXi Host	Pending	3/15/24, 3:16 PM
Validate Uplink Teaming Policy for Management Port Group	Pending	3/15/24, 3:16 PM

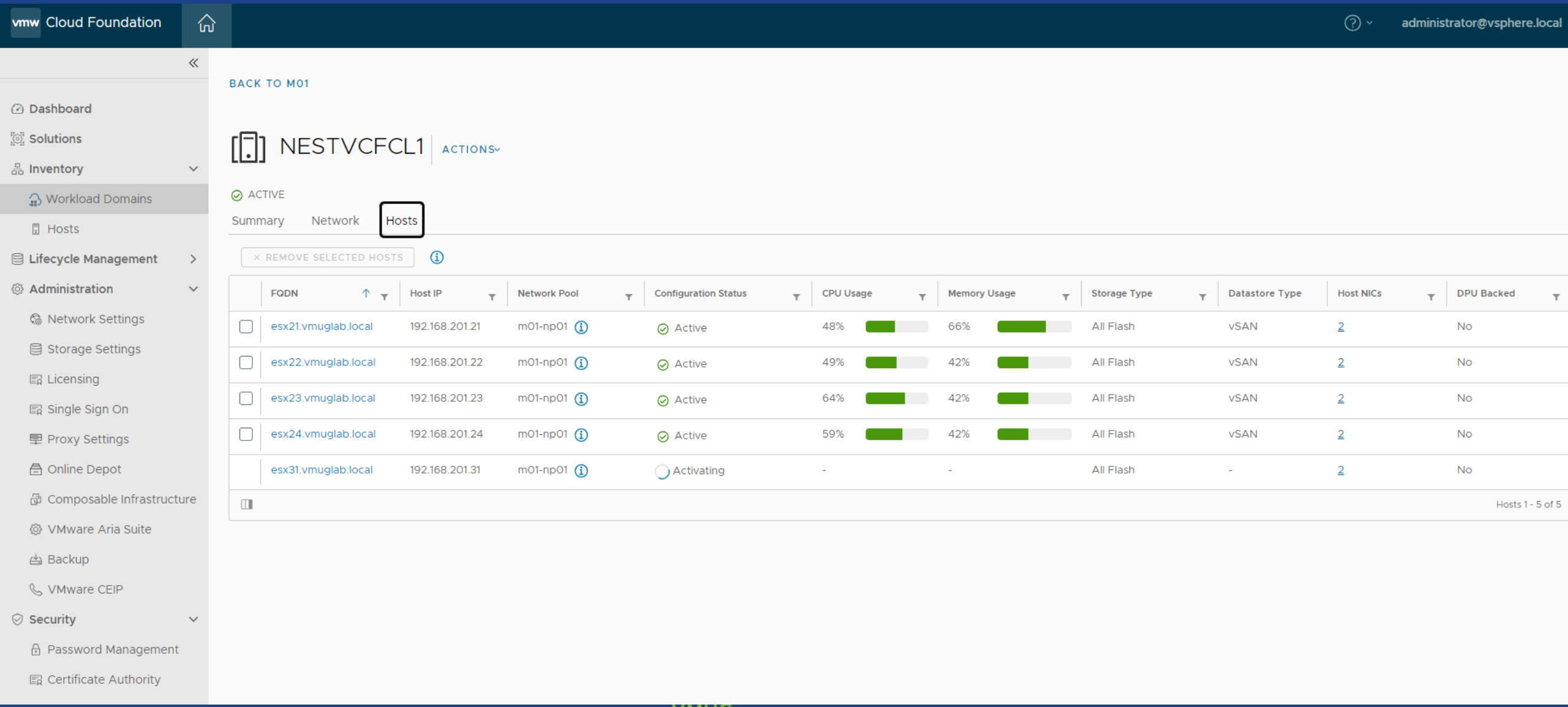
Tasks

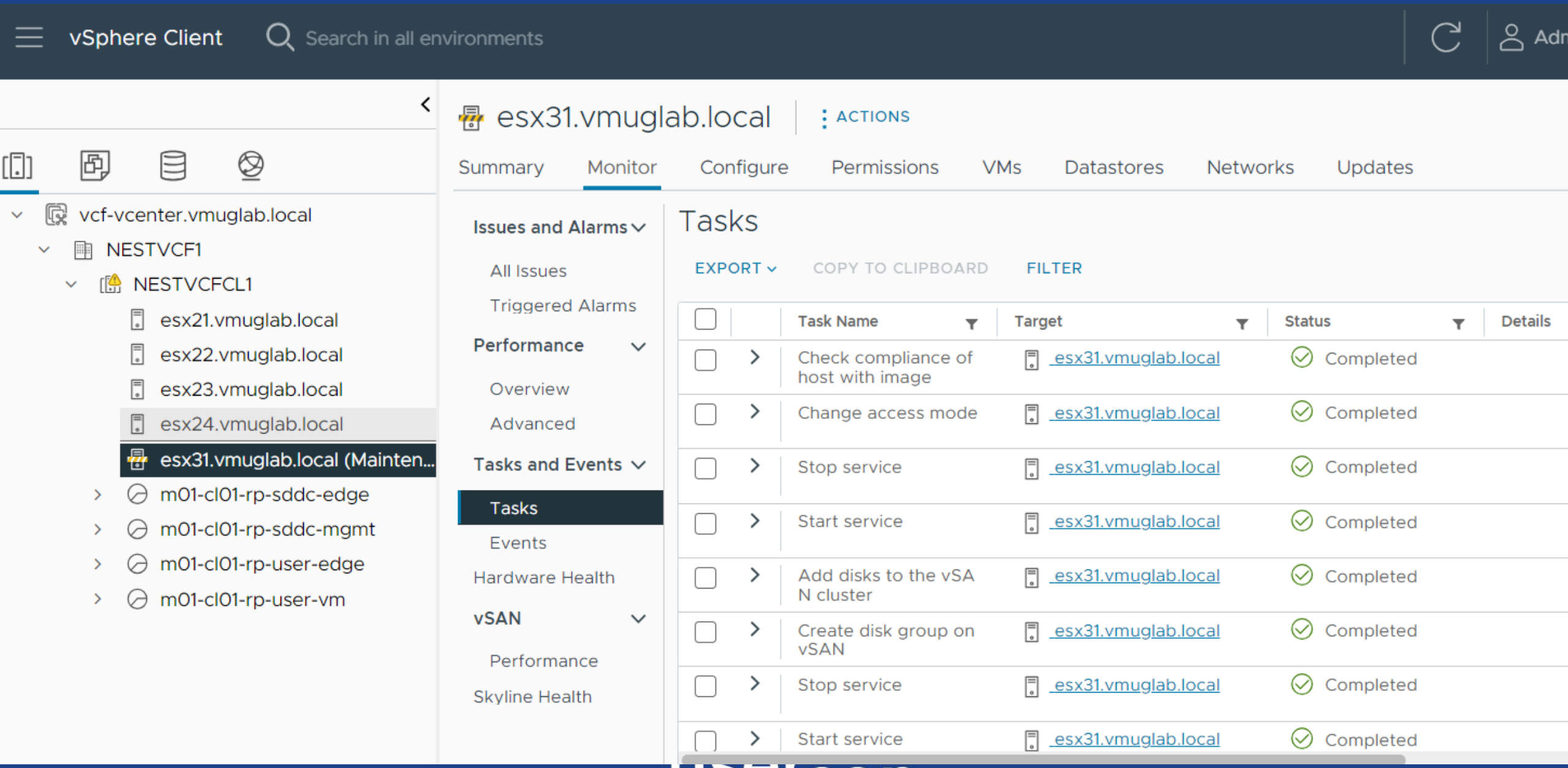
Adding new host(s) to cluster

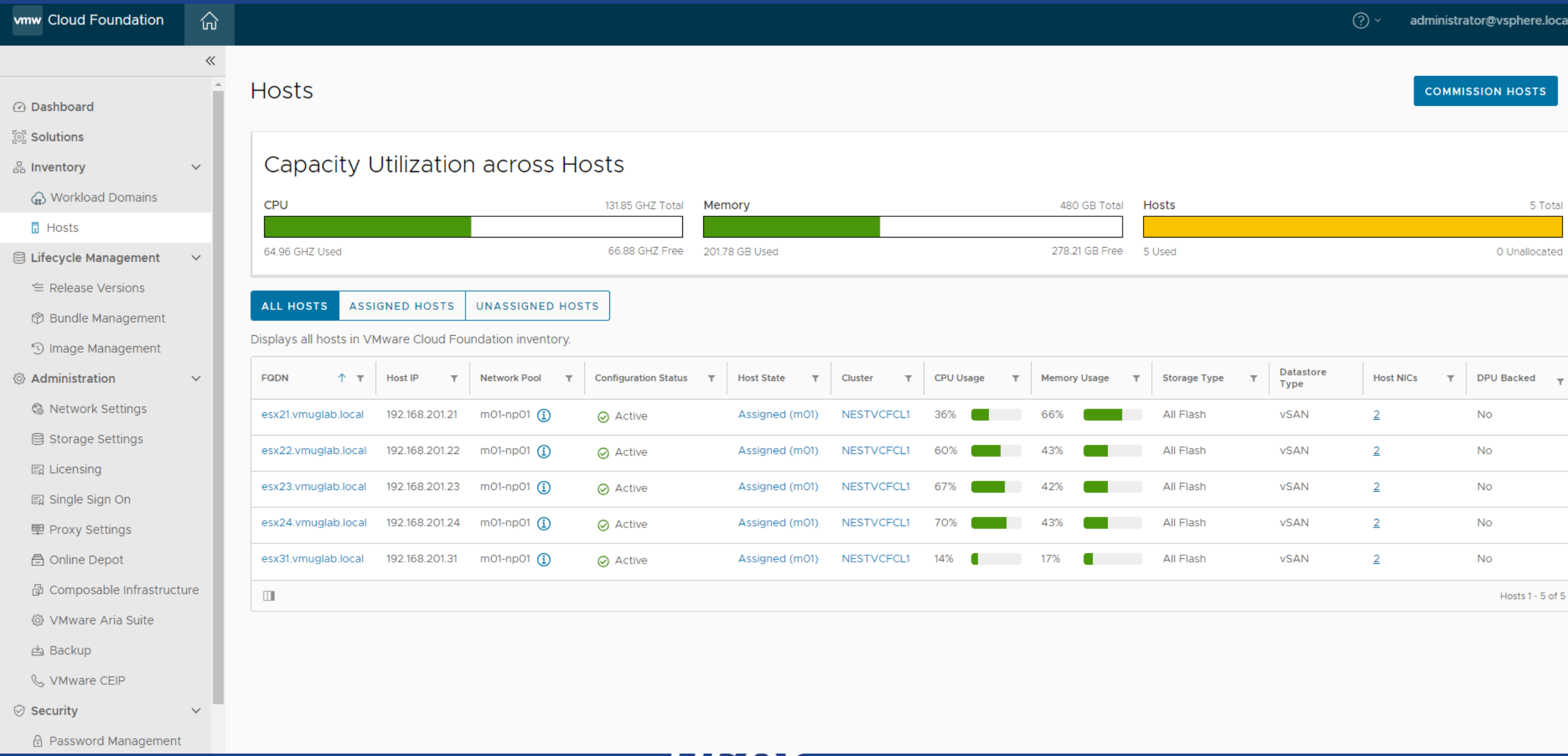
REFRESH RESET FILTER

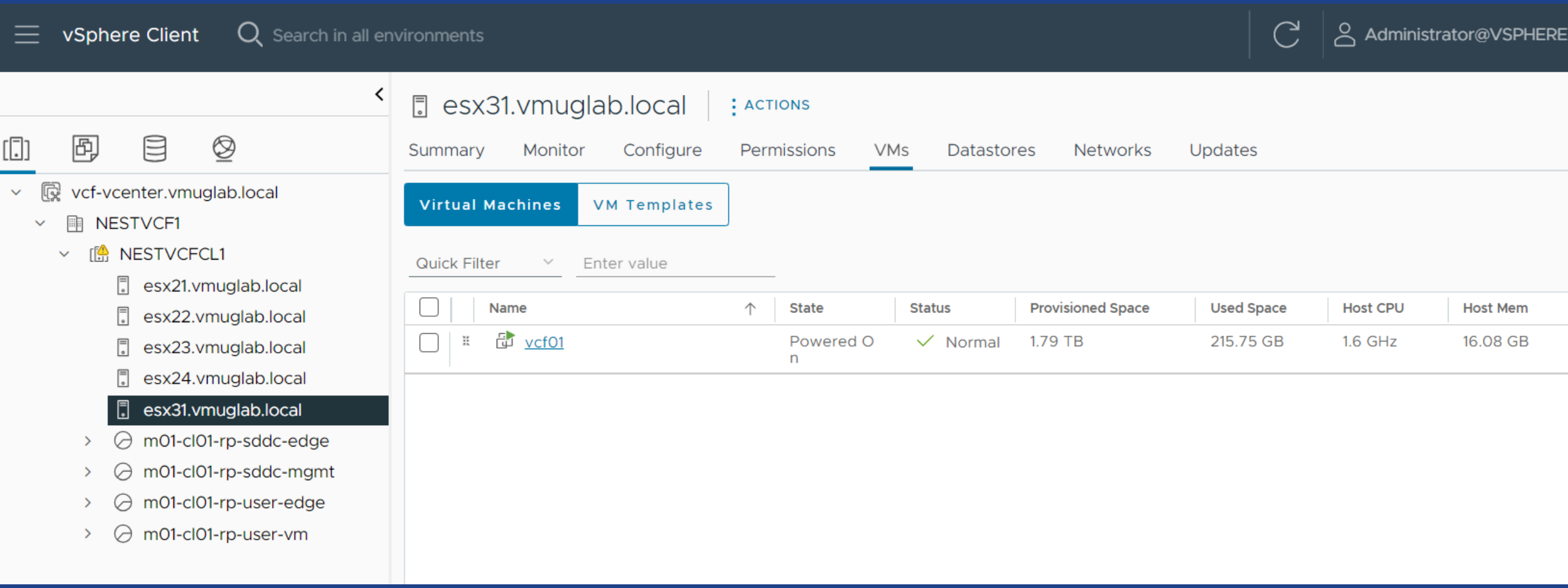
SUBTASK TASK INFO

Subtask	Task Status	Last Occurrence
Add ESXi Hosts to Data Center	Pending	3/15/24, 3:16 PM
Retrieve ESXi Host Lockdown Mode Configuration	Pending	3/15/24, 3:16 PM
Disable Lockdown Mode on ESXi Hosts	Pending	3/15/24, 3:16 PM
Generate Disable ESXi Host(s) Lockdown Mode Input Data	Pending	3/15/24, 3:16 PM
Update Input Map for Add Host Operation	Pending	3/15/24, 3:16 PM
Prepare ESXi Host	Pending	3/15/24, 3:16 PM
Validate Uplink Teaming Policy for Management Port Group	Pending	3/15/24, 3:16 PM
Fetch vmnic and uplink map of each VDS from an existing host of the current cluster	Pending	3/15/24, 3:16 PM
Generate Validate ESXi Host(s) vMotion Network Connectivity Input Data	Pending	3/15/24, 3:16 PM
Validate vMotion Network Connectivity	Pending	3/15/24, 3:16 PM
Validate Runtime Data Model for ESXi Host(s) Addition	Pending	3/15/24, 3:16 PM
Validate Workload Management Licenses	Pending	3/15/24, 3:16 PM
Check Workload Management Status for a Cluster	Pending	3/15/24, 3:16 PM
Generate Validate Workload Management License Input Data	Pending	3/15/24, 3:16 PM
Update the SDDC Manager Inventory with ESXi Host(s) Details	Pending	3/15/24, 3:16 PM
Register Current Task	Pending	3/15/24, 3:16 PM
Generate ESXi Host(s) Addition Input Data	Pending	3/15/24, 3:16 PM
Retrieve the ESXi Host(s) License Key(s)	Pending	3/15/24, 3:16 PM
Allocate ESXi Host(s) IP Addresses	Pending	3/15/24, 3:16 PM
Persists the ESXi Host(s) to the Runtime Data model once the IP Addresses for the different network types are assigned	Pending	3/15/24, 3:16 PM
Fetch Network Pool Data from the SDDC Manager Inventory	Pending	3/15/24, 3:16 PM
Validate vSAN disks for ESXi Host(s)	Pending	3/15/24, 3:16 PM
Validate if ESXi Host(s) Do Not Use DHCP for the Management Network	Pending	3/15/24, 3:16 PM
Generate Validate vSAN disks for ESXi Hosts Input Data	Pending	3/15/24, 3:16 PM
Validate subscription state	Pending	3/15/24, 3:16 PM
Update the inventory VDS with NSX switch configuration	Pending	3/15/24, 3:16 PM
Update the inventory host with MTU and VLAN ID of the ESXi's management network	Pending	3/15/24, 3:16 PM
Automation Helper Action	Pending	3/15/24, 3:16 PM
Validate ESXi Host(s) Addition Specification	Pending	3/15/24, 3:16 PM
Validate vCenter Server Password Has Not Expired	Pending	3/15/24, 3:16 PM
Validate IP Address Availability for Edge Overlay (TEP) IP Assignment	Pending	3/15/24, 3:16 PM




vSphere Client
Search in all environments
Adr
vcf-vcenter.vmuglab.local
NESTVCF1
NESTVCFCL1
esx21.vmuglab.local
esx22.vmuglab.local
esx23.vmuglab.local
esx24.vmuglab.local
esx31.vmuglab.local (Mainten...
m01-cl01-rp-sddc-edge
m01-cl01-rp-sddc-mgmt
m01-cl01-rp-user-edge
m01-cl01-rp-user-vm
esx31.vmuglab.local
ACTIONS
Summary
Monitor
Configure
Permissions
VMs
Datastores
Networks
Updates
Issues and Alarms
All Issues
Triggered Alarms
Performance
Overview
Advanced
Tasks and Events
Tasks
Events
Hardware Health
vSAN
Performance
Skyline Health
Tasks
EXPORT
COPY TO CLIPBOARD
FILTER
Task Name
Target
Status
Details
Check compliance of host with image
esx31.vmuglab.local
Completed
Change access mode
esx31.vmuglab.local
Completed
Stop service
esx31.vmuglab.local
Completed
Start service
esx31.vmuglab.local
Completed
Add disks to the vSAN cluster
esx31.vmuglab.local
Completed
Create disk group on vSAN
esx31.vmuglab.local
Completed
Stop service
esx31.vmuglab.local
Completed
Start service
esx31.vmuglab.local
Completed


vmw Cloud Foundation
administrator@vsphere.loca
Dashboard
Solutions
Inventory
Workload Domains
Hosts
Lifecycle Management
Release Versions
Bundle Management
Image Management
Administration
Network Settings
Storage Settings
Licensing
Single Sign On
Proxy Settings
Online Depot
Composable Infrastructure
VMware Aria Suite
Backup
VMware CEIP
Security
Password Management
Hosts
COMMISSION HOSTS
Capacity Utilization across Hosts
CPU
131.85 GHZ Total
64.96 GHZ Used
66.88 GHZ Free
Memory
480 GB Total
201.78 GB Used
278.21 GB Free
Hosts
5 Total
5 Used
0 Unallocated
ALL HOSTS
ASSIGNED HOSTS
UNASSIGNED HOSTS
Displays all hosts in VMware Cloud Foundation inventory.
FQDN
Host IP
Network Pool
Configuration Status
Host State
Cluster
CPU Usage
Memory Usage
Storage Type
Datastore Type
Host NICs
DPU Backed
esx21.vmuglab.local 192.168.201.21 m01-np01 Active Assigned (m01) NESTVCFCL1 36% 66% All Flash vSAN 2 No
esx22.vmuglab.local 192.168.201.22 m01-np01 Active Assigned (m01) NESTVCFCL1 60% 43% All Flash vSAN 2 No
esx23.vmuglab.local 192.168.201.23 m01-np01 Active Assigned (m01) NESTVCFCL1 67% 42% All Flash vSAN 2 No
esx24.vmuglab.local 192.168.201.24 m01-np01 Active Assigned (m01) NESTVCFCL1 70% 43% All Flash vSAN 2 No
esx31.vmuglab.local 192.168.201.31 m01-np01 Active Assigned (m01) NESTVCFCL1 14% 17% All Flash vSAN 2 No
Hosts 1 - 5 of 5



VMUG usercon

vmw Cloud Foundation

- Dashboard
- Solutions
- Inventory
  - Workload Domains
  - Hosts
- Lifecycle Management
- Administration
  - Network Settings
  - Storage Settings
  - Licensing
  - Single Sign On
  - Proxy Settings
  - Online Depot
  - Composable Infrastructure
- VMware Aria Suite

VMware Aria Suite

Cloud Foundation supports **VMware Aria Suite** products. Check release note documentation for more details about the supported versions.

VMware Aria Suite Lifecycle deployment is not available because install bundle for version 8.12.0-XXXXXX is not downloaded.

Step 1

Prerequisite

You must deploy **VMware Aria Suite Lifecycle** before you can deploy other VMware Aria Suite products on Cloud Foundation.

Step 2

Deploy individual VMware Aria Suite

Once you have VMware Aria Suite Lifecycle installed, you can deploy the other VMware Aria Suite products:

- Workspace ONE Access
- VMware Aria Operations
- VMware Aria Operations for Logs
- VMware Aria Automation

Step 3

Connect workload domains

Once the individual VMware Aria Suite products are set up, you can connect individual workload domains to them.

Offline Bundle Download for VMware Cloud Foundation

Add to Library | RSS | Download PDF | Feedback

Updated on 10/09/2023

Selected product version: VMware Cloud Foundation 4.3

Lifecycle Management polls the VMware depot to access update bundles. If you do not have internet connectivity in your VMware Cloud Foundation system, you can use the Bundle Transfer utility to manually download the bundles from the depot on your local computer and then upload them to the SDDC Manager appliance.

Beginning with the VMware Cloud Foundation 4.2 release, you must also download the manifest file and upload it to the SDDC Manager appliance. The manifest contains information about the VMware product versions included in the release Bill of Materials and is used to determine the upgrade path. It is recommended that you download the manifest file and upload it to the SDDC Manager appliance periodically so that you are aware of the latest available bundles.

Prerequisites

- A Windows or Linux computer with internet connectivity for downloading the bundles.
- The computer must have Java 8 or later.
- A Windows or Linux computer with access to the SDDC Manager appliance for uploading the bundles.
- To upload the manifest file from a Windows computer, you must have OpenSSL installed and configured.

TOP POSTS VCENTER 8.0 U2 STORAGE POLICIES GO MIS

VirtualBytes

HOME ABOUT EDUCATION HARDWARE VMWARE EVENTS

Cloud

VMWARE CLOUD FOUNDATION 4.4.0 OFFLINE BUNDLE WALKTHROUGH

by Tommy Grot | September 4, 2022 | 1300 views | 5 minutes read

https://www.virtualbytes.io/vmware-cloud-foundation-4-4-0-offline-bundle-walkthrough/

VMUG usercon

Download Bundles with the Bundle Transfer Utility

Updated on 10/09/2023

Selected product version: VMware Cloud Foundation 4.5

If the SDDC Manager appliance does not have access to the VMware Depot, you can use the Bundle Transfer Utility to download the bundles from a different computer and then upload them to the SDDC Manager appliance.

When you download bundles, the Bundle Transfer Utility verifies that the file size and checksum of the downloaded bundles match the expected values.

Prerequisites

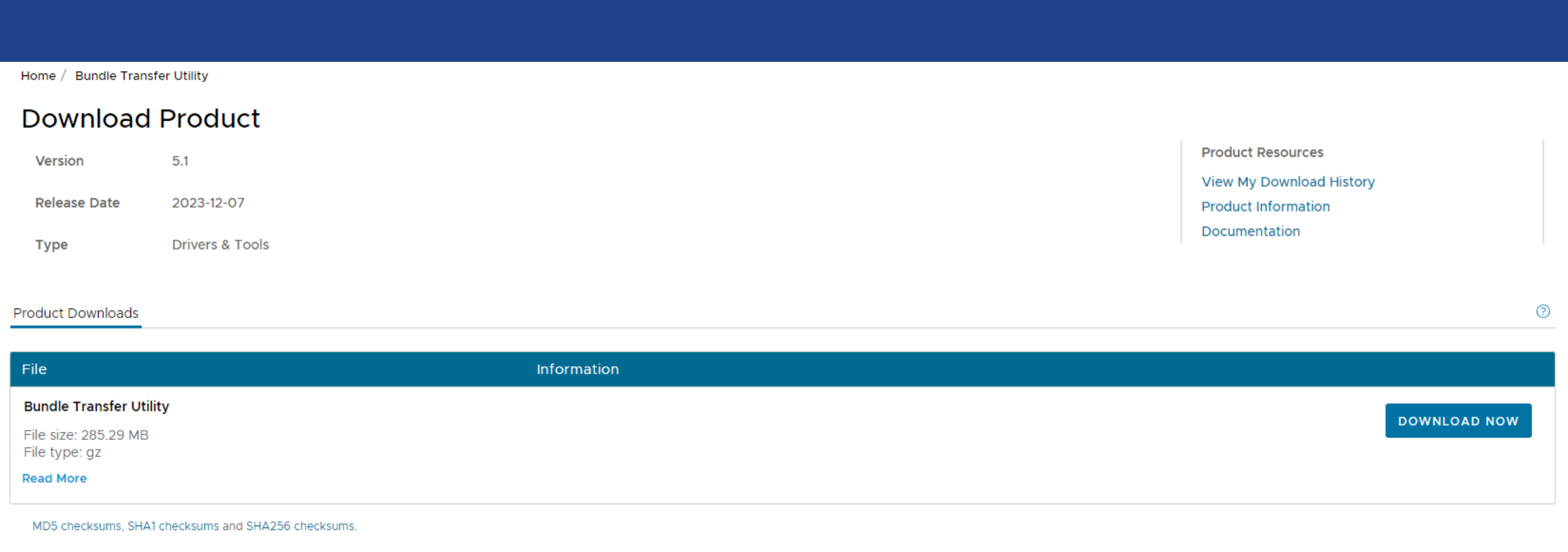
- A Windows or Linux computer with internet connectivity for downloading the bundles.
- The computer must have Java 8 or later.
- A Windows or Linux computer with access to the SDDC Manager appliance for uploading the bundles.
- To upload the manifest file from a Windows computer, you must have OpenSSL installed and configured.
- Configure TCP keepalive in your SSH client to prevent socket connection timeouts when using the Bundle Transfer Utility for long-running operations.

Note:

The Bundle Transfer Utility is the only supported method for downloading bundles. Do not use third-party tools or other methods to download bundles.

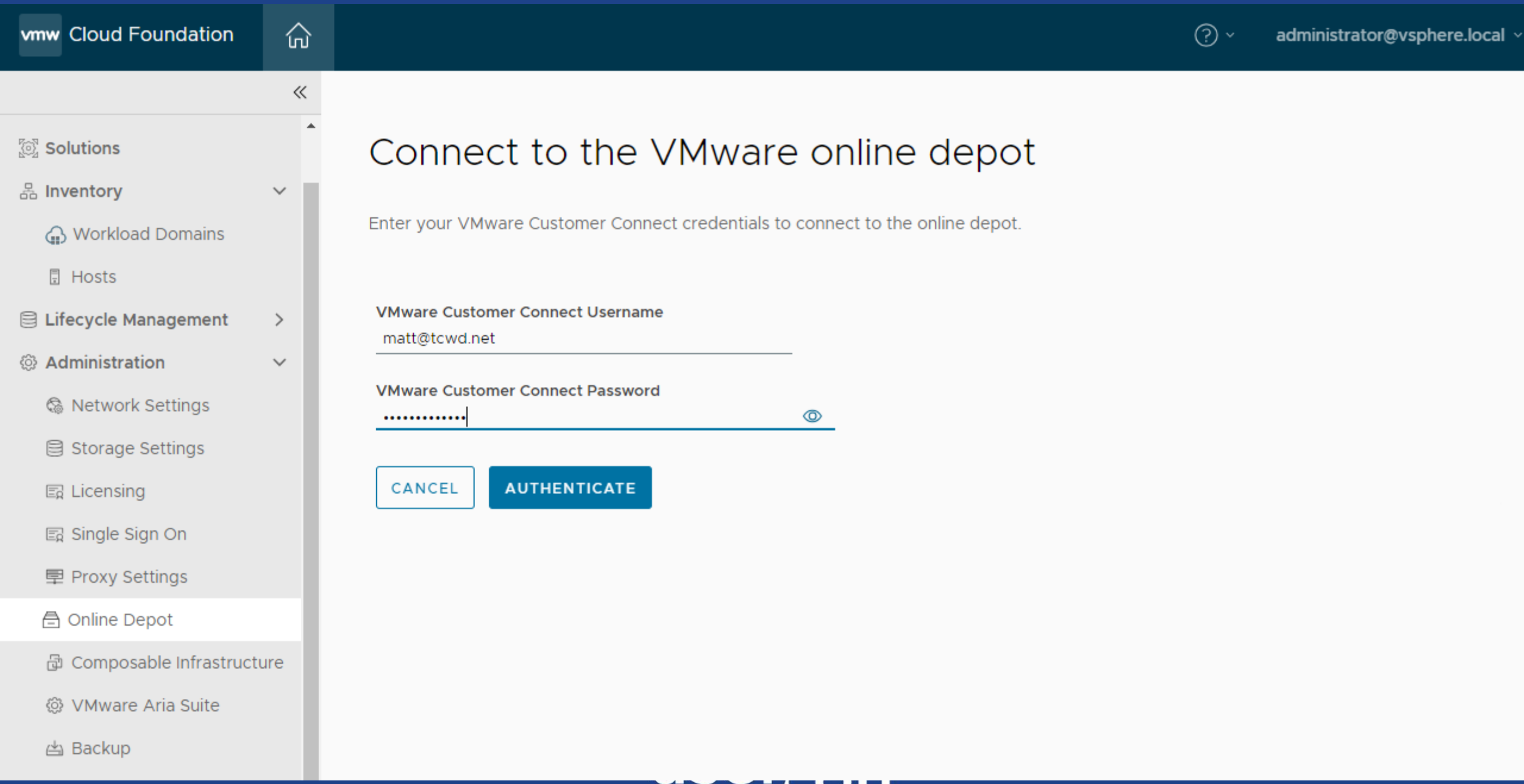
Procedure

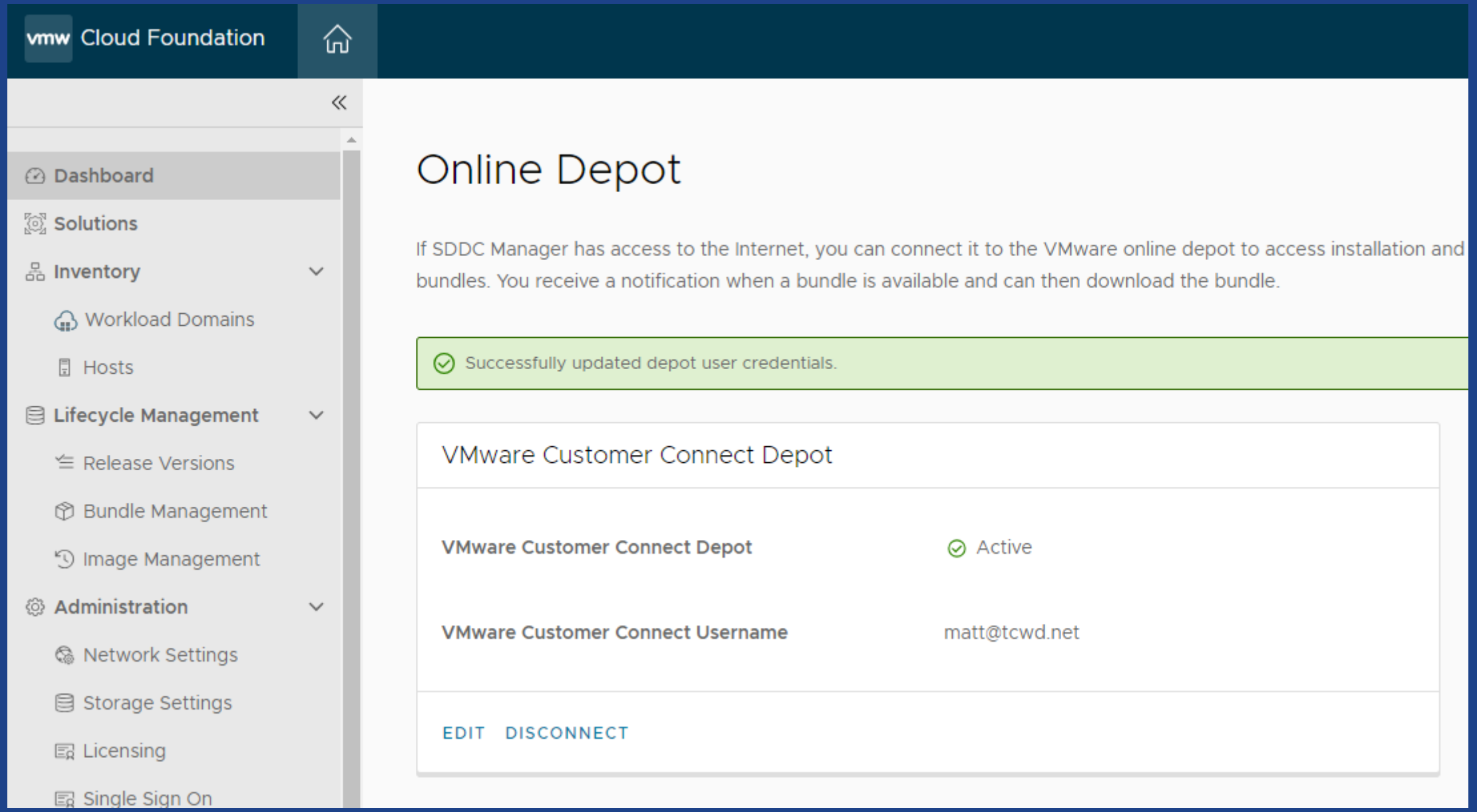
1. Download the most recent version of the Bundle Transfer Utility on a computer with internet access.
   a. Log in to VMware Customer Connect and browse to the Download VMware Cloud Foundation page.



https://customerconnect.vmware.com/downloads/details?downloadGroup=VCF5XSUPP_TOOLS&productId=1484

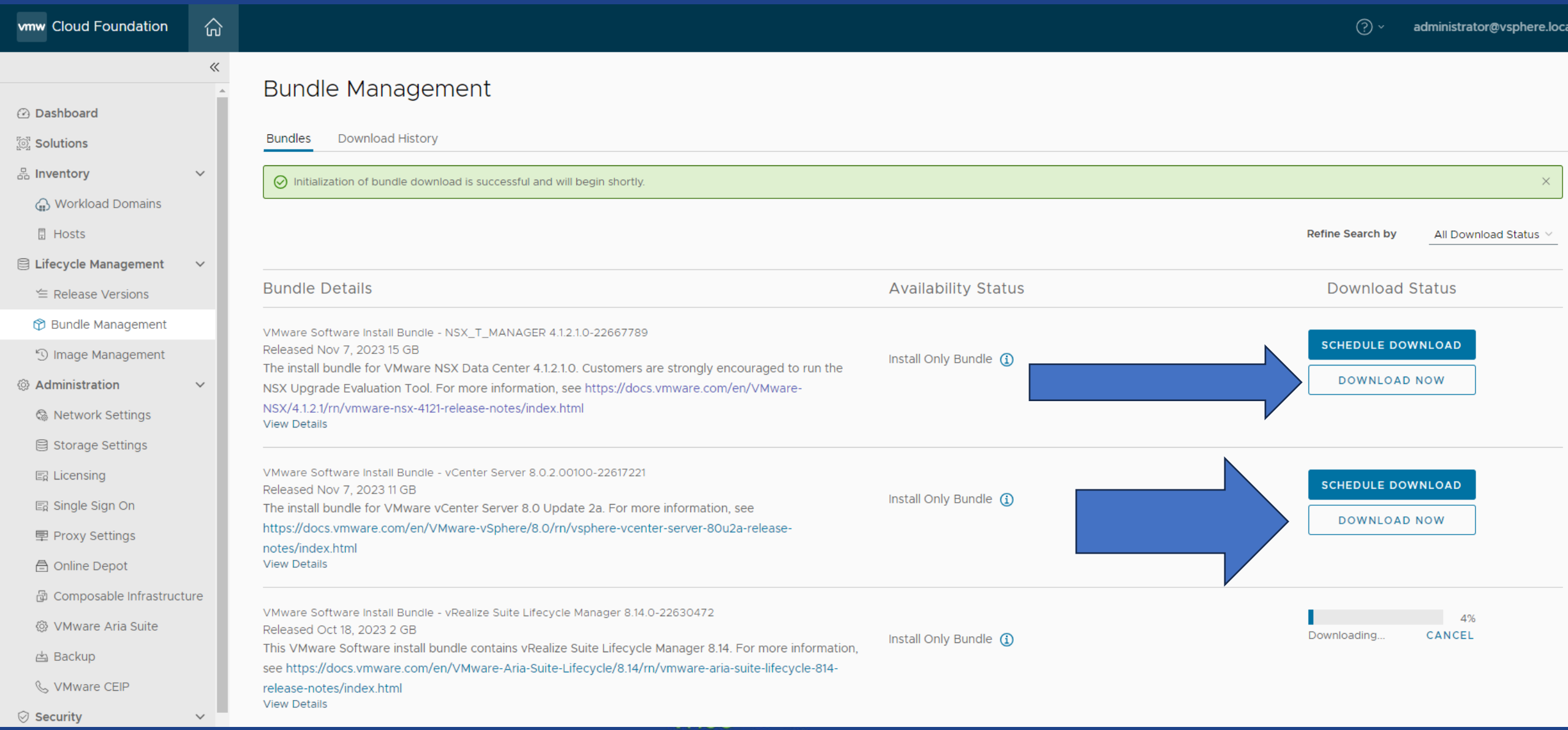
VMUG usercon


vmw Cloud Foundation
administrator@vsphere.local
Solutions
Inventory
Workload Domains
Hosts
Lifecycle Management
Administration
Network Settings
Storage Settings
Licensing
Single Sign On
Proxy Settings
Online Depot
Composable Infrastructure
VMware Aria Suite
Backup
Connect to the VMware online depot
Enter your VMware Customer Connect credentials to connect to the online depot.
VMware Customer Connect Username
matt@tcwd.net
VMware Customer Connect Password
CANCEL
AUTHENTICATE



Needed to log off and log back in again for the update bundles to show up (next page)

VMUG usercon


vmw Cloud Foundation
administrator@vsphere.loca
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Security
Bundle Management
Bundles
Download History
Initialization of bundle download is successful and will begin shortly.
Refine Search by
All Download Status
Bundle Details
Availability Status
Download Status
VMware Software Install Bundle - NSX_T_MANAGER 4.1.2.1.0-22667789
Released Nov 7, 2023 15 GB
The install bundle for VMware NSX Data Center 4.1.2.1.0. Customers are strongly encouraged to run the NSX Upgrade Evaluation Tool. For more information, see https://docs.vmware.com/en/VMware-NSX/4.1.2.1/rn/vmware-nsx-4121-release-notes/index.html
View Details
Install Only Bundle
SCHEDULE DOWNLOAD
DOWNLOAD NOW
VMware Software Install Bundle - vCenter Server 8.0.2.00100-22617221
Released Nov 7, 2023 11 GB
The install bundle for VMware vCenter Server 8.0 Update 2a. For more information, see https://docs.vmware.com/en/VMware-vSphere/8.0/rn/vsphere-vcenter-server-80u2a-release-notes/index.html
View Details
Install Only Bundle
SCHEDULE DOWNLOAD
DOWNLOAD NOW
VMware Software Install Bundle - vRealize Suite Lifecycle Manager 8.14.0-22630472
Released Oct 18, 2023 2 GB
This VMware Software install bundle contains vRealize Suite Lifecycle Manager 8.14. For more information, see https://docs.vmware.com/en/VMware-Aria-Suite-Lifecycle/8.14/rn/vmware-aria-suite-lifecycle-814-release-notes/index.html
View Details
Install Only Bundle
4%
Downloading...
CANCEL

Dashboard
Solutions
Inventory
Workload Domains
Hosts
Lifecycle Management
Release Versions
Bundle Management
Image Management
Administration
Network Settings
Storage Settings
Licensing
Single Sign On
Proxy Settings
Online Depot
Composable Infrastructure
VMware Aria Suite
Backup
VMware CEIP
Security

VMware Aria Suite

Cloud Foundation supports **VMware Aria Suite** products. Check release note documentation for more details about the supported versions.

Step 1

Prerequisite

You must deploy **VMware Aria Suite Lifecycle** before you can deploy other VMware Aria Suite products on Cloud Foundation.

Step 2

Deploy individual VMware Aria Suite

Once you have VMware Aria Suite Lifecycle installed, you can deploy the other VMware Aria Suite products:

- Workspace ONE Access
- VMware Aria Operations
- VMware Aria Operations for Logs
- VMware Aria Automation

Step 3

Connect workload domains

Once the individual VMware Aria Suite products are set up, you can connect individual workload domains to them.

DEPLOY

VMware Aria Suite Lifecycle Installation Prerequisites

Complete the required prerequisites before deploying VMware Aria Suite Lifecycle

- [x] Select All
- [x] DNS & IP allocation

  - Prepare the IP addresses and forward/reverse DNS records for the VMware Aria Suite Lifecycle virtual appliance.
  - Prepare the IP address for the Standalone Tier 1 Load Balancer for VMware Aria components.

- [x] Network Configuration for VMware Aria

  Routing between the Application Virtual Networks, Management Network, and connectivity to network services (DNS and NTP) is setup. If any firewalls exist, VMware Aria product specific firewall rule sets should be enabled following the VMware Aria product documentation.

- [x] Installation Package Availability

  The VMware Aria Suite Lifecycle installation package must be downloaded and available in the local bundle repository.

CANCEL BEGIN

VMware Aria Suite Lifecycle Installation

1 Network Settings

2 Appliance Settings

3 Review Summary

Network Settings

Application Virtual Network settings for VMware Aria Suite Lifecycle deployment.

Application Virtual Network	VLAN210_192-168-210-0-24
Network	192.168.210.0
Subnet Mask	255.255.255.0
Gateway	192.168.210.254
DNS	192.168.202.1, 192.168.202.2
NTP	192.168.202.1, 192.168.202.2

CANCEL NEXT

VMware Aria Suite Lifecycle Installation

1 Network Settings

2 Appliance Settings

3 Review Summary

Virtual Appliance Settings

Specify the virtual appliance settings to use for the VMware Aria Suite Lifecycle deployment.

Virtual Appliance

FQDN: arialcm.vmuglab.local

NSX Tier 1 Gateway

IP Address: 192.168.210.253

System Administrator

Create Password: ••••••••••••

Confirm Password: ••••••••••••

SSH Root Account

Create Password: ••••••••••••

Confirm Password: ••••••••••••

CANCEL BACK NEXT

VMware Aria Suite Lifecycle Installation

1 Network Settings

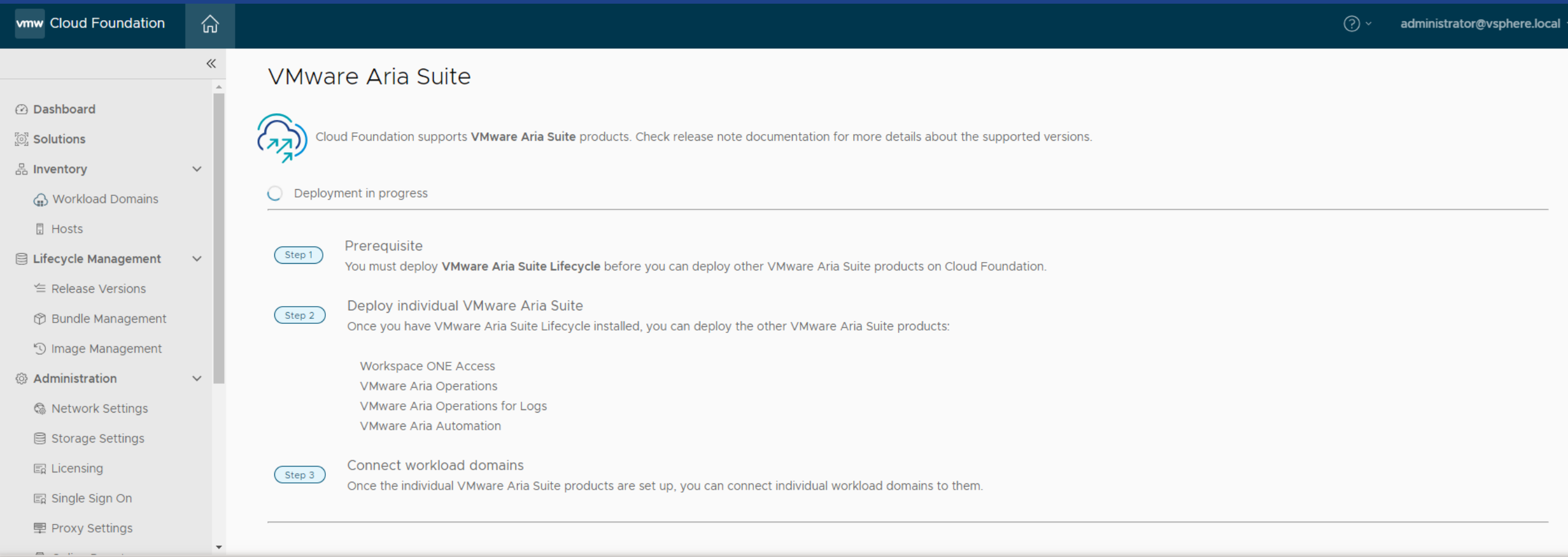
2 Appliance Settings

3 Review Summary

Review Summary

Network Settings	
Application Virtual Network	VLAN210_192-168-210-0-24
Network	192.168.210.0
Subnet Mask	255.255.255.0
Gateway	192.168.210.254
DNS	192.168.202.1, 192.168.202.2
NTP	192.168.202.1, 192.168.202.2
Appliance Settings	
FQDN	arialcm.vmuglab.local
NSX Tier-1 Gateway IP	192.168.210.253

CANCEL BACK FINISH


vmw Cloud Foundation
administrator@vsphere.local
Dashboard
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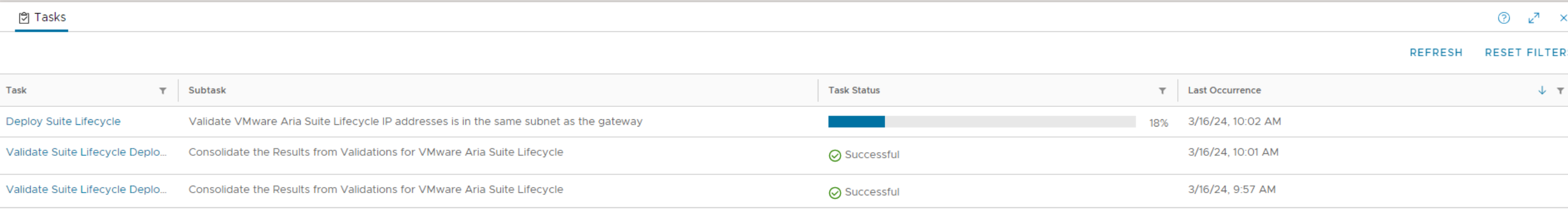
Lifecycle Management
Release Versions
Bundle Management
Image Management
Administration
Network Settings
Storage Settings
Licensing
Single Sign On
Proxy Settings
VMware Aria Suite
Cloud Foundation supports VMware Aria Suite products. Check release note documentation for more details about the supported versions.
Deployment in progress
Step 1
Prerequisite
You must deploy VMware Aria Suite Lifecycle before you can deploy other VMware Aria Suite products on Cloud Foundation.
Step 2
Deploy individual VMware Aria Suite
Once you have VMware Aria Suite Lifecycle installed, you can deploy the other VMware Aria Suite products:
Workspace ONE Access
VMware Aria Operations
VMware Aria Operations for Logs
VMware Aria Automation
Step 3
Connect workload domains
Once the individual VMware Aria Suite products are set up, you can connect individual workload domains to them.


Tasks
REFRESH
RESET FILTER
Task
Subtask
Task Status
Last Occurrence
Deploy Suite Lifecycle
Validate VMware Aria Suite Lifecycle IP addresses is in the same subnet as the gateway
18%
3/16/24, 10:02 AM
Validate Suite Lifecycle Deplo...
Consolidate the Results from Validations for VMware Aria Suite Lifecycle
Successful
3/16/24, 10:01 AM
Validate Suite Lifecycle Deplo...
Consolidate the Results from Validations for VMware Aria Suite Lifecycle
Successful
3/16/24, 9:57 AM

VMware Aria Suite

Cloud Foundation supports **VMware Aria Suite** products. Check release note documentation for more details about the supported versions.

Deployment in progress

Tasks

REFRESH RESET FILTER

Task	Subtask	Task Status	Last Occurrence
Deploy Suite Lifecycle	Deploy VMware Aria Suite Lifecycle	34%	3/2/24, 1:56 PM
Validate Suite Lifecycle Deployment Parameters	Consolidate the Results from Validations for VMware Aria Suite Lifecycle	Successful	3/2/24, 1:56 PM

VMUG usercon

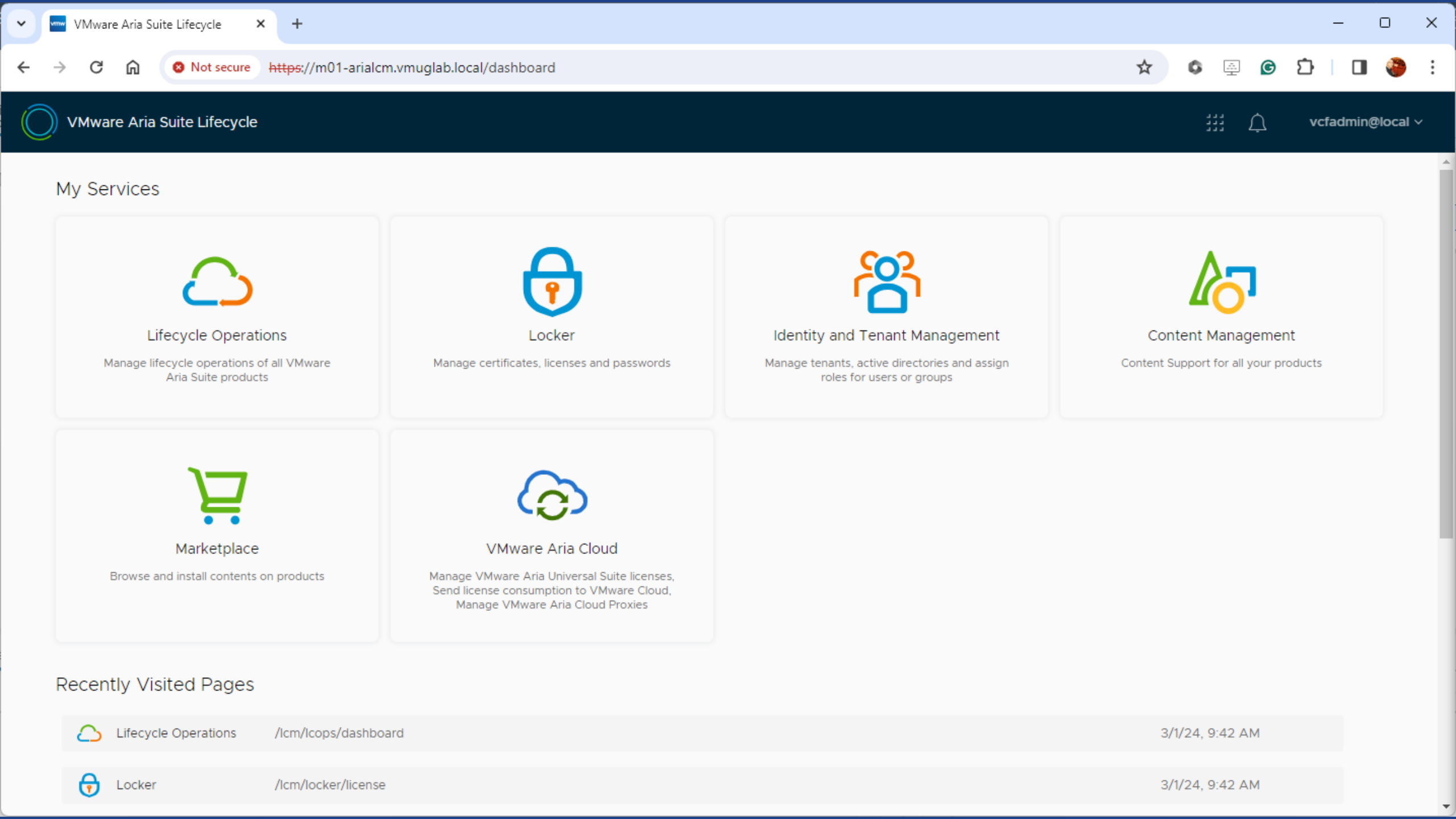
Tasks

Deploy Suite Lifecycle

REFRESH RESET FILTERS

SUBTASK TASK INFO

Subtask	Task Status	Last Occurrence
Deploy VMware Aria Suite Lifecycle	Running	3/2/24, 1:57 PM
Consolidate the Results from Validations for VMware Aria Suite Lifecycle	Successful	3/2/24, 1:57 PM
Validate the gateway connectivity	Successful	3/2/24, 1:57 PM
Validate OVA for VMware Aria Suite Lifecycle	Successful	3/2/24, 1:57 PM
Validate Passwords for VMware Aria Suite Lifecycle	Successful	3/2/24, 1:57 PM
Prepare passwords for validation	Successful	3/2/24, 1:57 PM
Validate VMware Aria Suite Lifecycle IP addresses is in the same subnet as the gateway	Successful	3/2/24, 1:57 PM
Validate IP in Network	Successful	3/2/24, 1:57 PM
Validate VMware Aria Suite Lifecycle IP addresses is in the same subnet as the gateway	Successful	3/2/24, 1:57 PM
Validate Standalone NSX Tier1 IP is not duplicating in VMware Aria Suite Lifecycle IP addresses	Successful	3/2/24, 1:57 PM
Validate Fully Qualified Domain Names and IP Addresses for VMware Aria Suite Lifecycle	Successful	3/2/24, 1:57 PM
Validate NSX Tier1 gateway ip, name and availability for VMware Aria Suite Lifecycle deployment	Successful	3/2/24, 1:57 PM
Validate resource names exist in vCenter.	Successful	3/2/24, 1:56 PM
Automation Helper Action	Successful	3/2/24, 1:56 PM
Retrieve network information for cross-region VMware Aria deployment from inventory	Successful	3/2/24, 1:56 PM
Retrieve OVA file for VMware Aria Suite Lifecycle	Successful	3/2/24, 1:56 PM
Preparation step for VMware Aria Suite Lifecycle deployment	Successful	3/2/24, 1:56 PM
Obtain Deployment Lock for VMware Aria Suite Lifecycle Deployment	Successful	3/2/24, 1:56 PM
Release Deployment Lock for VMware Aria Suite Lifecycle Deployment	Pending	3/2/24, 1:56 PM
Update status of VMware Aria Suite Lifecycle deployment after failure	Pending	3/2/24, 1:56 PM
Release Deployment Lock for VMware Aria Suite Lifecycle Deployment	Pending	3/2/24, 1:56 PM
Update status of VMware Aria Suite Lifecycle deployment	Pending	3/2/24, 1:56 PM
Create and Configure NSX Tier-1 Gateway	Pending	3/2/24, 1:56 PM
Create NSX Tier-0 Interface	Pending	3/2/24, 1:56 PM
Create Tier-1 Static Routes	Pending	3/2/24, 1:56 PM
Update VMware Aria Tier-1 default name	Pending	3/2/24, 1:56 PM


VMware Aria Suite Lifecycle
Not secure
https://m01-arialcm.vmuglab.local/dashboard
VMware Aria Suite Lifecycle
vcfadmin@local
My Services
Lifecycle Operations
Manage lifecycle operations of all VMware Aria Suite products
Locker
Manage certificates, licenses and passwords
Identity and Tenant Management
Manage tenants, active directories and assign roles for users or groups
Content Management
Content Support for all your products
Marketplace
Browse and install contents on products
VMware Aria Cloud
Manage VMware Aria Universal Suite licenses, Send license consumption to VMware Cloud, Manage VMware Aria Cloud Proxies
Recently Visited Pages
Lifecycle Operations /lcm/lcops/dashboard 3/1/24, 9:42 AM
Locker /lcm/locker/license 3/1/24, 9:42 AM

Dashboard | VMware Aria Suite

Not secure https://m01-arialcm.vmuglab.local/lcm/lcops/dashboard

VMware Aria Suite Lifecycle | Lifecycle Operations

vcfadmin@local

- Dashboard
- Create Environment
- Datacenters
- Environments
- Requests
- Settings

Create Environment

Manage Environments

Manage Datacenters

View Requests

Recent Requests

- GET SDDC Manager CEIP ...
  Friday, March 1, 2024 at 9:31:17 AM GMT-06:00
- GET SDDC Manager CEIP ...
  Friday, March 1, 2024 at 9:31:15 AM GMT-06:00
- GET SDDC Manager CEIP ...
  Friday, March 1, 2024 at 9:30:05 AM GMT-06:00
- vcf-vcenter in Datacenter...
  Friday, March 1, 2024 at 9:14:43 AM GMT-06:00
- Created password with al...
  Friday, March 1, 2024 at 9:14:22 AM GMT-06:00

Environments

SHOW COMPLETED

Datacenters

Dashboard
Create Environment
Datacenters
Environments
Requests
Settings

Settings

System Administration

- System Details
- Logs
- System Patches
- Product Support Pack
- System Upgrade
- Time Settings
- Proxy
- Change Certificate
- Authentication Provider
- Outbound Notifications
- System Settings
- Load Balancer

Servers & Accounts

- NTP Servers
- SNMP
- DNS
- My VMware
- Binary Mapping

Settings | VMware Aria Suite Lif

Not secure https://m01-arialcm.vmuglab.local/lcm/lcops/settings/authentication-provider

VMware Aria Suite Lifecycle | Lifecycle Operations

vcfadmin@local

- Dashboard
- Create Environment
- Datacenters
- Environments
- Requests
- Settings

Home > Settings > Authentication Provider

Authentication Provider

Authentication Provider information will appear after installing VMware Identity Manager.

Add Password | VMware Aria Su

Not secure https://m01-arialcm.vmuglab.local/lcm/locker/password/add-password

VMware Aria Suite Lifecycle | Locker

vcfadmin@local

Certificates
Licenses
Passwords

Home > Passwords > Add Password

Add Password

Required fields are marked with *

Password Alias * MRH VMware Account

Password * ••••••••••••

Confirm Password * ••••••••••••

Password Description Credential for matt@tcwd.net VMware Account

User Name matt@tcwd.net

ADD CANCEL

Licenses | VMware Aria Suite Lif

Not secure https://m01-arialcm.vmuglab.local/lcm/locker/license

VMware Aria Suite Lifecycle | Locker

vcfadmin@local

- Certificates
- Licenses
- Passwords

Home > Licenses

Licenses

Click on refresh to sync latest license(s) from My VMware . Click here to add My VMware account.

RETRIEVE LICENSES | ADD LICENSE MANUALLY

License Alias	Health Status	Quantity	Expiry	Account	License Type	Description

No Data

No Licenses 1 / 1

Licenses | VMware Aria Suite Lif

VMware Aria Suite Lifecycle

Not secure https://m01-arialcm.vmuglab.local/lcm/lcops/settings/my-vmware

VMware Aria Suite Lifecycle | Lifecycle Operations

vcfadmin@local

- Dashboard
- Create Environment
- Datacenters
- Environments
- Requests
- Settings

Home > Settings > My VMware

My VMware

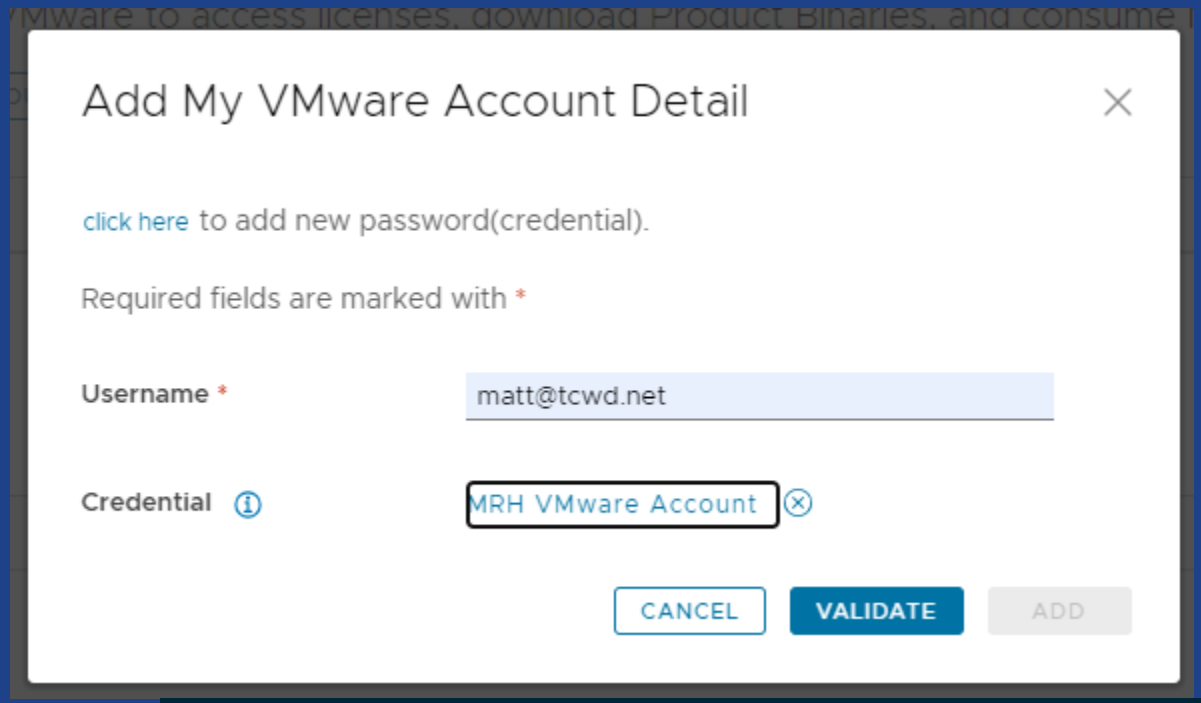
Register with My VMware to access licenses, download Product Binaries, and consume Marketplace content.

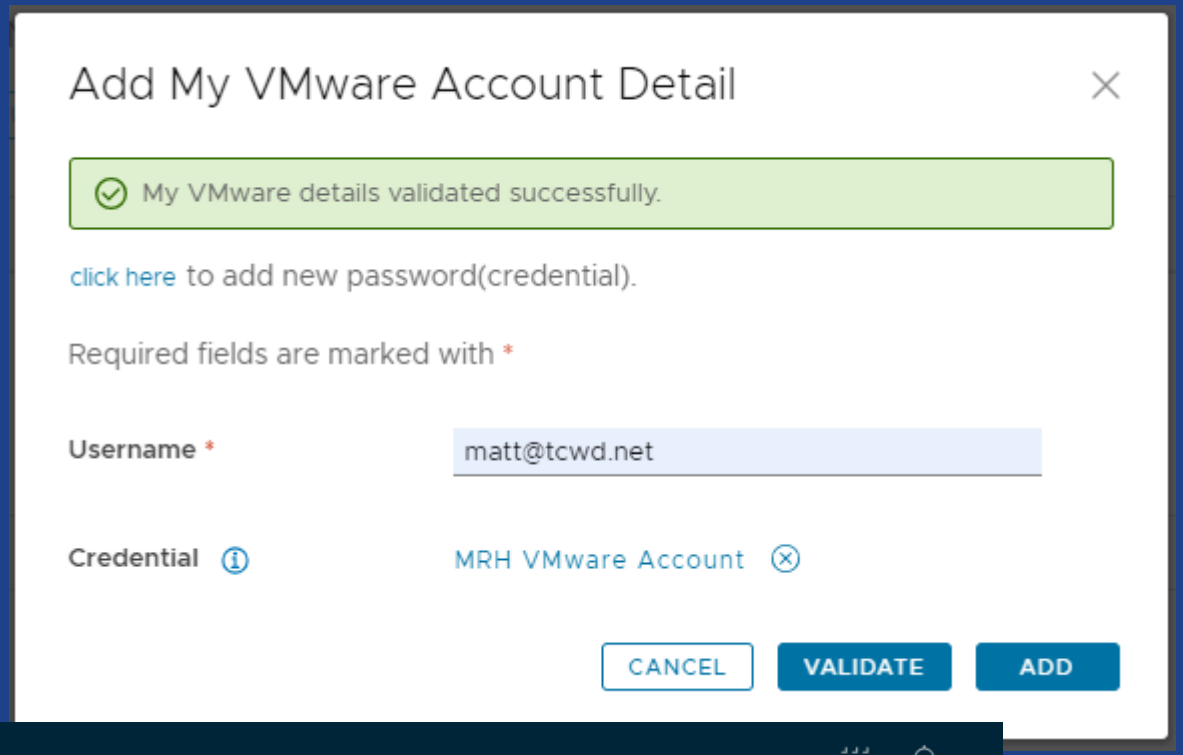
ADD MY VMWARE ACCOUNT

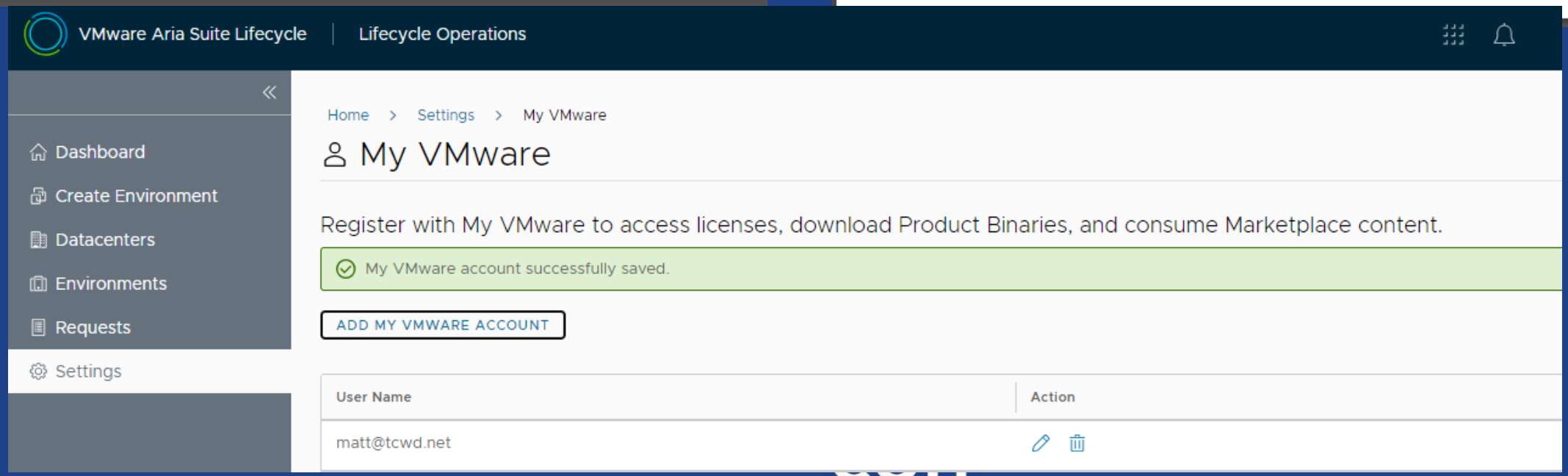
User Name	Action

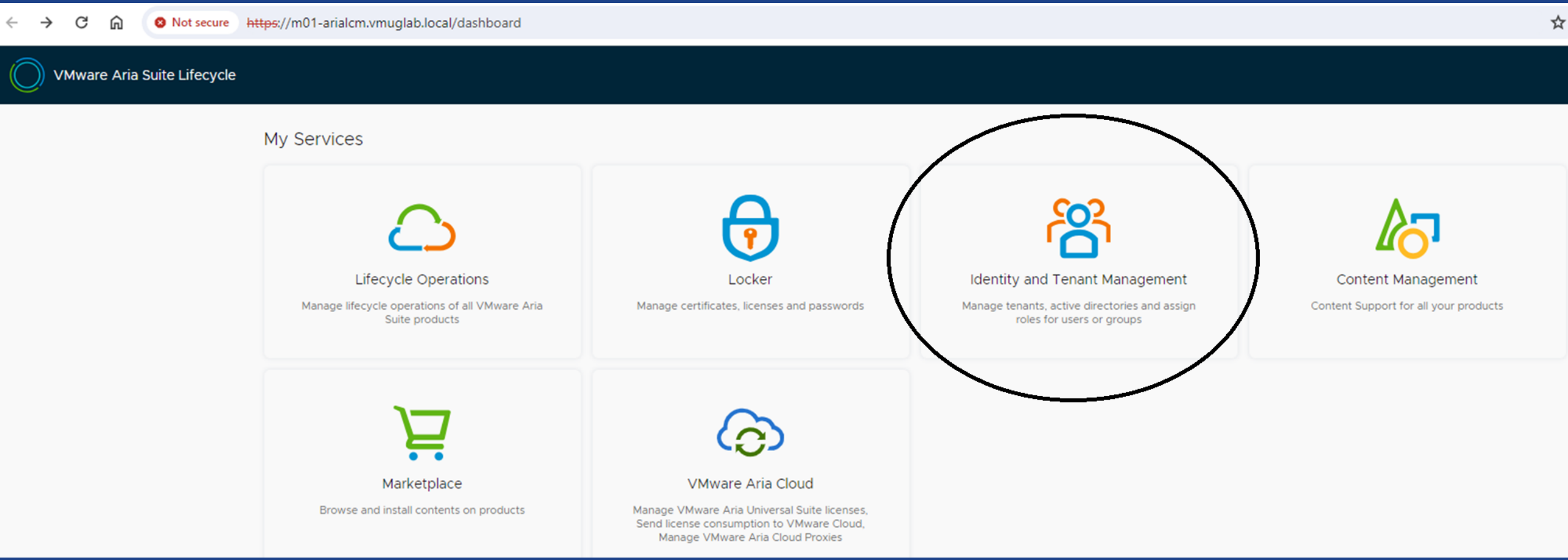
No Accounts

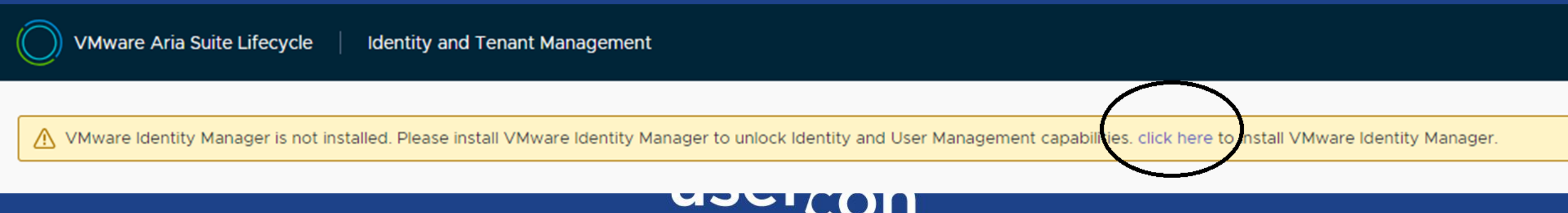
No Accounts 1 / 1


Add My VMware Account Detail
click here to add new password(credential).
Required fields are marked with *
Username *
matt@tcwd.net
Credential
MRH VMware Account
CANCEL
VALIDATE
ADD


Add My VMware Account Detail
My VMware details validated successfully.
click here to add new password(credential).
Required fields are marked with *
Username *
matt@tcwd.net
Credential
MRH VMware Account
CANCEL
VALIDATE
ADD


VMware Aria Suite Lifecycle
Lifecycle Operations
Dashboard
Create Environment
Datacenters
Environments
Requests
Settings
Home > Settings > My VMware
My VMware
Register with My VMware to access licenses, download Product Binaries, and consume Marketplace content.
My VMware account successfully saved.
ADD MY VMWARE ACCOUNT
User Name
Action
matt@tcwd.net


Not secure
https://m01-arialcm.vmuglab.local/dashboard
VMware Aria Suite Lifecycle
My Services
Lifecycle Operations
Manage lifecycle operations of all VMware Aria Suite products
Locker
Manage certificates, licenses and passwords
Identity and Tenant Management
Manage tenants, active directories and assign roles for users or groups
Content Management
Content Support for all your products
Marketplace
Browse and install contents on products
VMware Aria Cloud
Manage VMware Aria Universal Suite licenses, Send license consumption to VMware Cloud, Manage VMware Aria Cloud Proxies


VMware Aria Suite Lifecycle
Identity and Tenant Management
VMware Identity Manager is not installed. Please install VMware Identity Manager to unlock Identity and User Management capabilities. click here to install VMware Identity Manager.

Dashboard | VMware Aria Suite | Create Environment | VMware A | VMware Aria Suite | Create Environment | VMware A

Not secure https://m01-arialcm.vmuglab.local/lcm/lcops/environment-workflow

VMware Aria Suite Lifecycle | Lifecycle Operations

vcfadmin@local

Home > Create Environment

Create Environment

Environment | Select Product

Environment

Before you create an environment to deploy a product, you must download or discover the Product Binaries. If you are creating an environment and importing existing product deployments, you do not need configure product binaries.

Common

Required fields are marked with *

Install Identity Manager Enable to Install/Import Identity Manager

Environment Name * Environment Name

Environment Description Environment Description

Default Password * Select Default Password

Datacenter * ---Select Datacenter---

Activate SDDC Manager Integration Activate SDDC Manager Integration on the environment

JSON Configuration Enable to use a JSON Configuration

Customer Experience Improvement Program

VMware's Customer Experience Improvement Program ("CEIP") provides VMware with information that enables VMware to improve its products and services, to fix problems, and to advise you on how best to deploy and use our products. As part of the CEIP, VMware collects technical information about your organization's use of VMware products and services on a regular basis in association with your organization's VMware license key(s). This information does not personally identify any individual.

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Binary Mapping

My Evaluations

View all your current and expired product evaluations and migration licenses. For active evaluations or migrations, check the number of days remaining and access licensing information. To access download application binaries, evaluation guides, videos, and other materials to get you started, go to the product evaluation centers. Buying guidance and purchase information are also available.

Current Evaluations | Expired Evaluations | Custom Evaluations

Product: VMware vRealize Suite 2019 Enterprise (Per PLU) | DOWNLOAD | Back

Evaluation License Keys	Entitlement Quantity	Days Remaining	Created Date	Expiry Date
3562K-QNLEP-Q8KF8-01C22-94JMN	16	40	2023-03-04	2024-04-10

Objects per page 10

Download Product

Select Version: 3.3.7

Documentation: Release Notes

Release Date: 2023-01-26

Type: Product Binaries

Product Resources

- View My Download History
- Product Info
- Documentation
- Community
- Blogs

Product Downloads | Drivers & Tools | Open Source | Custom ISOs | OEM Addons

File	Information	
VMware Identity Manager		
VMware Identity Manager SVA File size: 4.57 GB File type: ova Read More		DOWNLOAD NOW
VMware Identity Manager offline upgrade package File size: 1.87 GB File type: zip Read More		DOWNLOAD NOW
VMware Identity Manager offline upgrade package for vRealize LCM customers		
VMware Identity Manager offline upgrade package for vRLCM only File size: 3.78 GB File type: gz		DOWNLOAD NOW

Add Product Binary

Required fields are marked with *

Location Type * (•) Local ( ) NFS ( ) My VMware

Required fields are marked with *

Base Location * /data/lcmcontents

DISCOVER

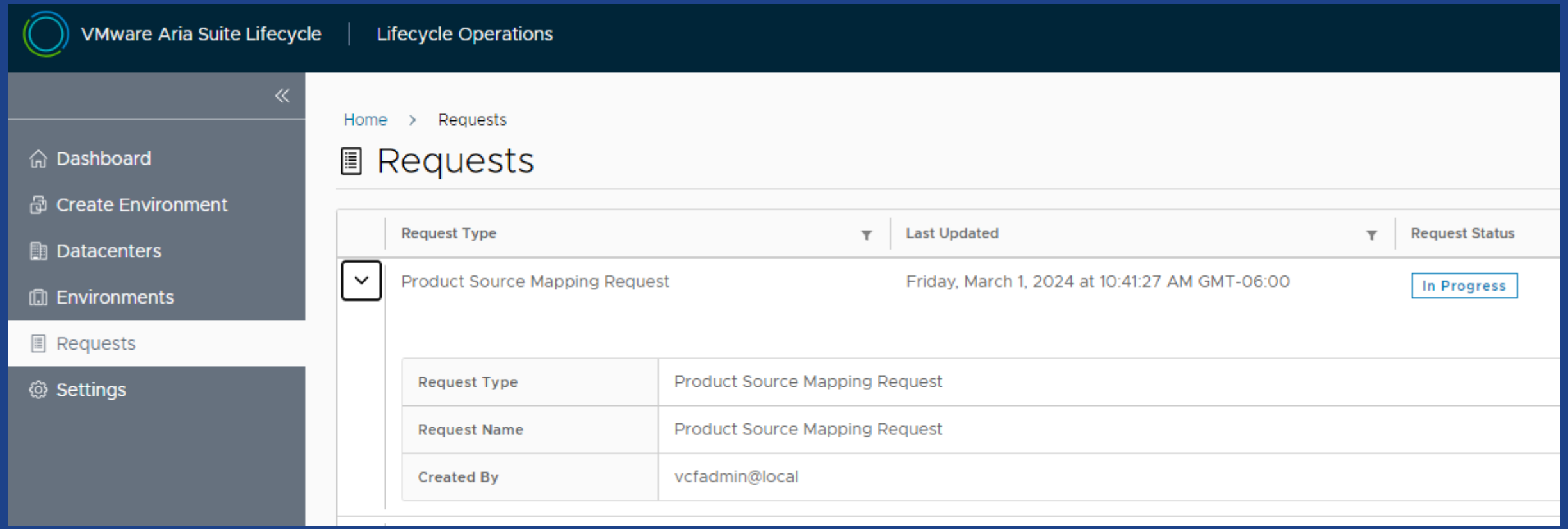
Click here to view supported product versions for Install.

	Name	Type
☐	APUAT-for-8.10.x-8.12.0.21598331.pak	upgrade
☐	APUAT-for-8.10.x-8.14.0.22512651.pak	upgrade
☑	identity-manager-3.3.7.0-21173100_OVF10.ova	install

1 — 11 - 13 of 13 Binaries — 2 / 2

Selected product binaries are automatically mapped to product versions.

CANCEL ADD



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Dashboard
Create Environment
Datacenters
Environments
Requests
Settings

Install Identity Manager

Environment | Select Product

Environment

Before you create an environment to deploy a product, you must download or discover the Product Binaries. If you are creating an environment and importing existing product deployments, you do not need configure product binaries.

Common

Required fields are marked with *

Install Identity Manager — Enable to Install/Import Identity Manager

Environment Name * — globalenvironment

Environment Description — Environment Description

Default Password * — WS1Access-admin

Datacenter * — NESTVCF1

Activate SDDC Manager Integration — Activate SDDC Manager Integration on the environment

JSON Configuration — Enable to use a JSON Configuration

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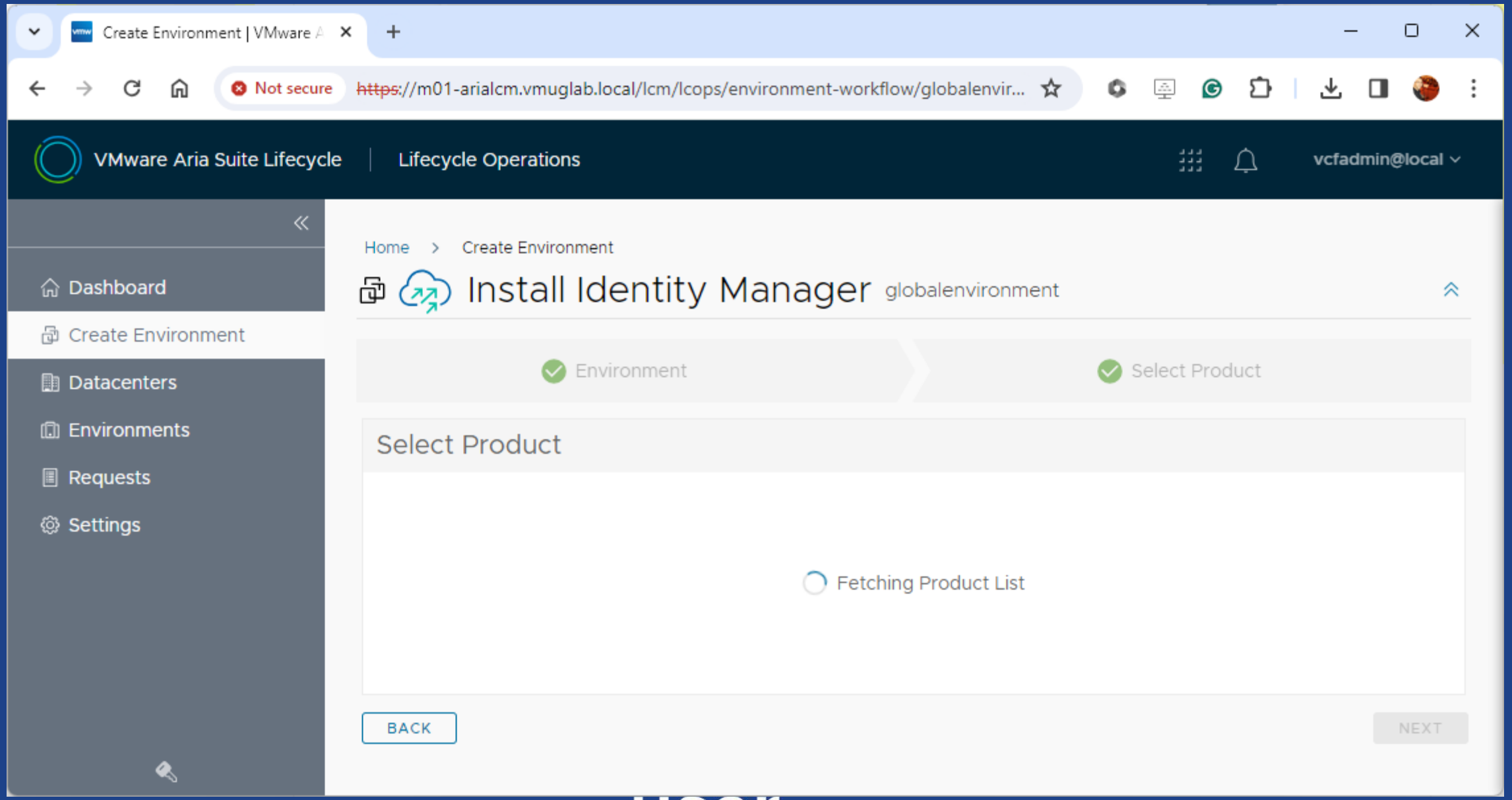
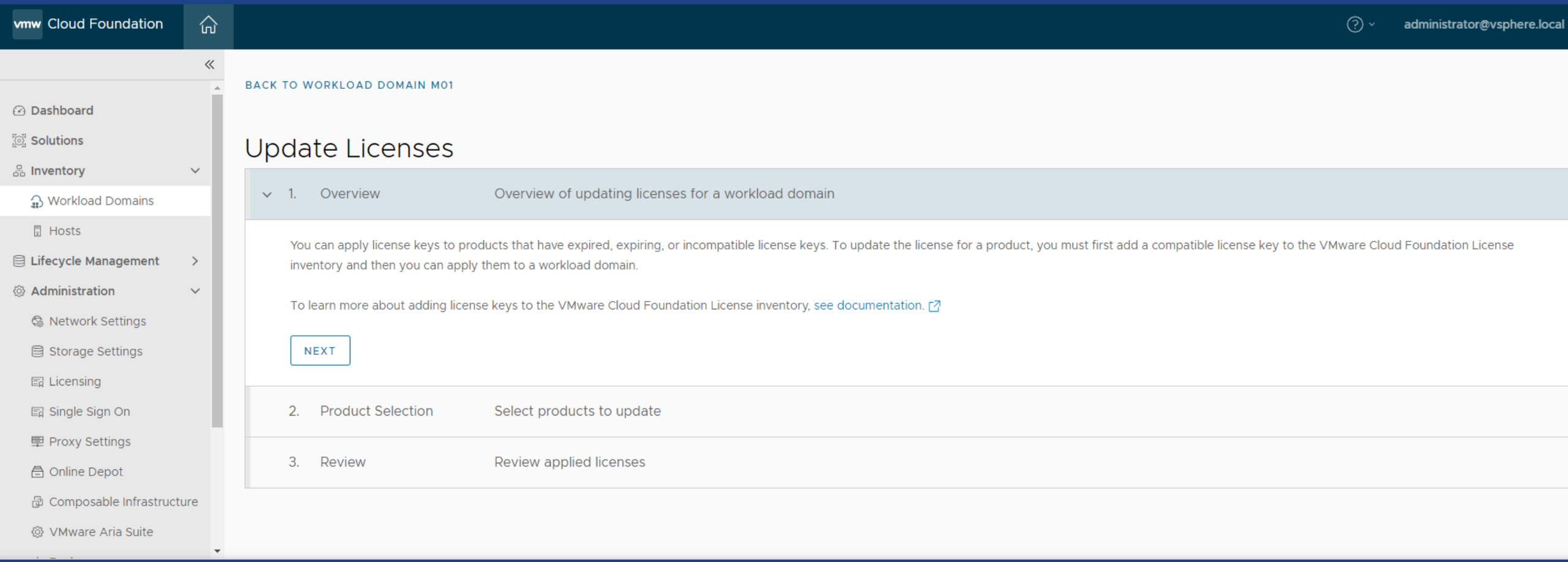

Create Environment | VMware
Not secure
https://m01-arialcm.vmuglab.local/lcm/lcops/environment-workflow/globalenvir...
VMware Aria Suite Lifecycle
Lifecycle Operations
vcfadmin@local
Dashboard
Create Environment
Datacenters
Environments
Requests
Settings
Home
Create Environment
Install Identity Manager
globalenvironment
Environment
Select Product
Select Product
Fetching Product List
BACK
NEXT

If there is time – Live Stuff!

Adding an Identity Source via SDDC Manager

Adding a host to the Management Cluster



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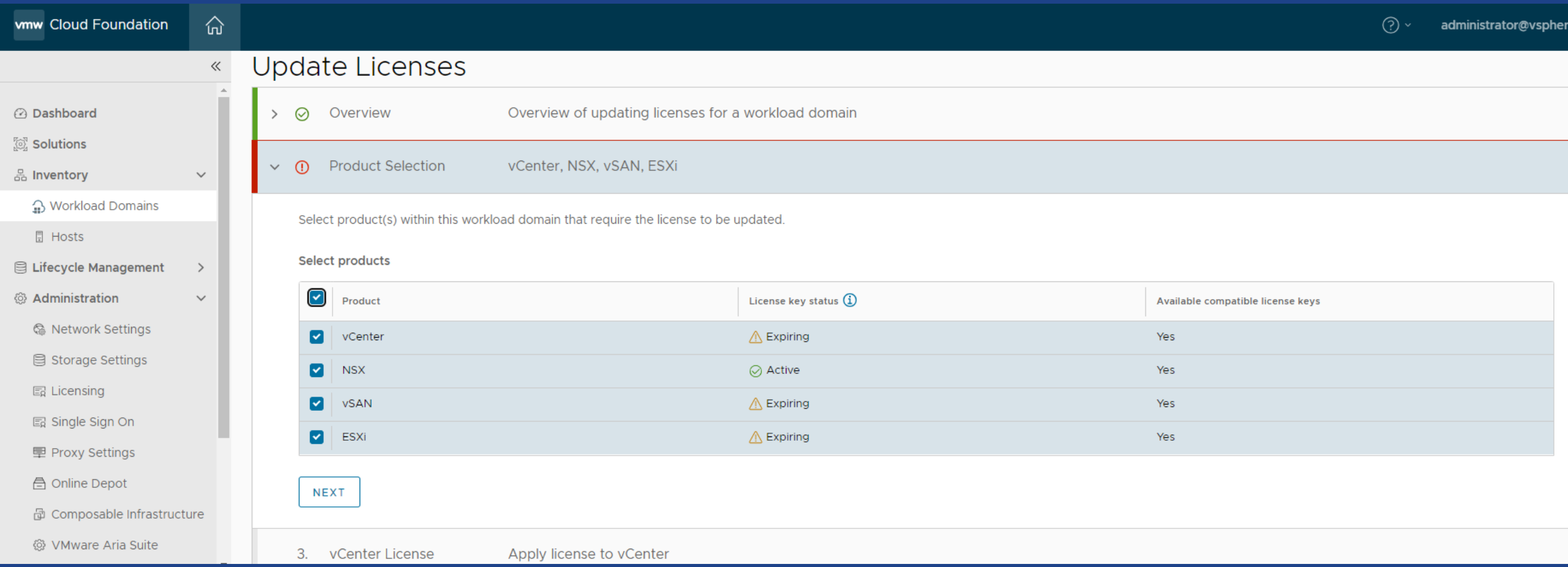

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Link to my presentation on my GitHub

VCF 5.1 Documentation
https://docs.vmware.com/en/VMware-Cloud-Foundation/index.html

Adding a Certificate Authority to VCF
https://my-sddc.net/creating-a-vcf-lab-on-top-of-vcd-part-2a-certificates/

Tips on powering down your VCF environment
https://my-sddc.net/vcf-on-vcd-shut-down/

William Lam's Holodeck 2.0 on VCF 5.1 Blog
https://williamlam.com/2023/03/self-contained-automated-vmware-cloud-foundation-vcf-deployment-using-new-vlc-holodeck-toolkit.html

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Questions? If not, please:

TAKE THE SESSION SURVEY

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Elements

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