

VMware in the Hyperscalers Configuration

NetApp Solutions

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Configuring the virtualization environment in the cloud provider

Details for how to configure the virtualization environment in each of the supported hyperscalers are covered here.

AWS / VMC

This section describes how to set up and manage VMware Cloud on AWS SDDC and use it in combination with the available options for connecting NetApp storage.



In-guest storage is the only supported method of connecting Cloud Volumes ONTAP to AWS VMC.

The setup process can be broken down into the following steps:

- Deploy and Configure VMware Cloud for AWS
- Connect VMware Cloud to FSx ONTAP

View the detailed configuration steps for VMC.

Azure / AVS

This section describes how to set up and manage Azure VMware Solution and use it in combination with the available options for connecting NetApp storage.



In-guest storage is the only supported method of connecting Cloud Volumes ONTAP to Azure VMware Solution.

The setup process can be broken down into the following steps:

- · Register the resource provider and create a private cloud
- · Connect to a new or existing ExpressRoute virtual network gateway
- · Validate the network connectivity and access the private cloud

View the detailed configuration steps for AVS.

GCP / GCVE

This section describes how to set up and manage GCVE and use it in combination with the available options for connecting NetApp storage.



In-guest storage is the only supported method of connecting Cloud Volumes ONTAP and Cloud Volumes Services to GCVE.

The setup process can be broken down into the following steps:

- Deploy and Configure GCVE
- Enable Private Access to GCVE

View the detailed configuration steps for GCVE.

Deploy and configure the Virtualization Environment on AWS

As with on-premises, planning VMware Cloud on AWS is critical for a successful

production-ready environment for creating VMs and migration.

This section describes how to set up and manage VMware Cloud on AWS SDDC and use it in combination with the available options for connecting NetApp storage.



In-guest storage is currently the only supported method of connecting Cloud Volumes ONTAP (CVO) to AWS VMC.

The setup process can be broken down into the following steps:

VMware Cloud on AWS provides for a cloud native experience for VMware based workloads in the AWS ecosystem. Each VMware Software-Defined Data Center (SDDC) runs in an Amazon Virtual Private Cloud (VPC) and provides a full VMware stack (including vCenter Server), NSX-T software-defined networking, vSAN software-defined storage, and one or more ESXi hosts that provide compute and storage resources to your workloads.

This section describes how to set up and manage VMware Cloud on AWS and use it in combination with Amazon FSx for NetApp ONTAP and/or Cloud Volumes ONTAP on AWS with in-guest storage.



In-guest storage is currently the only supported method of connecting Cloud Volumes ONTAP (CVO) to AWS VMC.

The setup process can be broken down into three parts:

Register for an AWS Account

Register for an Amazon Web Services Account.

You need an AWS account to get started, assuming there isn't one created already. New or existing, you need administrative privileges in the account for many steps in this procedure. See this link for more information regarding AWS credentials.

Register for a My VMware Account

Register for a My VMware account.

For access to VMware's cloud portfolio (including VMware Cloud on AWS), you need a VMware customer account or a My VMware account. If you have not already done so, create a VMware account here.

Provision SDDC in VMware Cloud

After the VMware account is configured and proper sizing is performed, deploying a Software-Defined Data Center is the obvious next step for using the VMware Cloud on AWS service. To create an SDDC, pick an AWS region to host it, give the SDDC a name, and specify how many ESXi hosts you want the SDDC to contain. If you don't already have an AWS account, you can still create a starter configuration SDDC that contains a single ESXi host.

1. Log into the VMware Cloud Console using your existing or newly created VMware credentials.

Welcome to	
VMware Cloud Services	
Sign in with your VMware account	
Email address	
usemene@emel.com	
HEST	
New to VMware Cloud?	-
CREATE YOUR VMWARE ACCOUNT	
ENGLISHY	
02021 VMware, Inc. Terms Privacy California Privacy Rights	

2. Configure the AWS region, deployment, and host type and the SDDC name:

VIIIW VMware Cloud		4	0	Will Stower NetApp	
«	charges.				
a Launchpad	v 1. SDDC Properties	Give your SDDC a name, choose a size, and specify the AWS region where it will be			
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Subscriptions					
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B Tools		and a state of the state of the			
Developer Center	Deployment	Single Host O Multi-Host O stretched Cartier W			
	Host Type	💽 13 (Local SSD) 🛈 🔅 I3en (Local SSD) 🛈			
	SDDC Name	ntap-fsx-domo			
	Number of Hosts	1 D 1-host SDDCs expire in 6D days. LEARN MORE			
	Host Capacity	2 Sockets, 36 Cores, 512 GB RAM, 10.37 TiB Storage			
	Total Capacity	2 Sockets, 36 Cores, 512 GB R4M, 10.37 T88 Storage			
	SHOW ADVANCED CONF	IGURATION			
	- agest				
	2. Connect to AWS	Specify the AWS account that you want to connect your SDDC with.			
traile					

3. Connect to the desired AWS account and execute the AWS Cloud Formation stack.

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Single-host configuration is used in this validation.

4. Select the desired AWS VPC to connect the VMC environment with.

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vmw VMware Cloud		∆ ©	Will Stowe NetApp ~	
 kaunchpad SODCs Subscriptions Activity Log Tools Developer Center 	Connect to AWS Aws Account ID 3a4ad01e-f5a7-3860-b1a7-3bf4d70db1db O VPC and subnet Specify the VPC and the subnet to connect to your AWS account. VPC vpc-0c6794aa5e67d2dd1 (10.0.0.0/f6) C Subnet VM:sn (10.0.0.0/24, us west 2d, usw2-az4) To leverage native AWS services on your SDDCs, deploy your AWS EC2 workbadts in the same availability zone to avoid cross A2 traffic change.	Toter Amazon Arrowan Toter Amazon Arrowan Toter AMS VPC Areabolity Zeer 1 HC2 Interaction Arrow Science 2 HC2 Interaction Area Science 2 HC2 Interaction		
	NEXT			

5. Configure the VMC Management Subnet; this subnet contains VMC-managed services like vCenter, NSX, and so on. Do not choose an overlapping address space with any other networks that need connectivity to the SDDC environment. Finally, follow the recommendations for CIDR size notated below.

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Developer Center	 4. Configure Network Management Subnet (optional) 				
	Specify a private subnet range (PFC 1918) to be used for vCenter Server, NSX Manager, and ESX hosts. Choose a range that will not overlap with other networks or SDDC group members that connect to this SDDC. Minimum CIDR size: /23 for up to 27 hosts, /20 for up to 25) hosts, /16 for up to 4091 hosts. Reserved CIDRs 10.0.0.075, 172.310 /046. Menagement Subnet CIDB Reck Defrain 10.2.0.046				
	5. Review and Acknowledge Review and acknowledge cost before deployment				

6. Review and acknowledge the SDDC configuration, and then click deploy the SDDC.



The deployment process typically takes approximately two hours to complete.

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7. After completion, the SDDC is ready for use.

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To connect VMware Cloud to FSx ONTAP, complete the following steps:

 With VMware Cloud deployment completed and connected to AWS VPC, you must deploy Amazon FSx for NetApp ONTAP into a new VPC rather than the original connected VPC (see the screenshot below). FSx (NFS and SMB floating IPs) is not accessible if it is deployed in the connected VPC. Keep in mind that ISCSI endpoints like Cloud Volumes ONTAP work just fine from the connected VPC.



2. Deploy an additional VPC in the same region, and then deploy Amazon FSx for NetApp ONTAP into the new VPC.

Configuration of an SDDC group in the VMware Cloud console enables the networking configuration options required to connect to the new VPC where FSx is deployed. In step 3, verify that "Configuring VMware Transit Connect for your group will incur charges per attachment and data transfers" is checked, and then choose Create Group. The process can take a few minutes to complete.

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3. Attach the newly created VPC to the just created SDDC group. Select the External VPC tab and follow the instructions for attaching an External VPC to the group. This process can take 10 to 15 minutes to complete.

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4. As part of the external VPC process, you are prompted through the AWS console to a new shared resource via the Resource Access Manager. The shared resource is the AWS Transit Gateway managed by VMware Transit Connect.



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5. Create the Transit Gateway Attachment.

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6. Back on the VMC Console, Accept the VPC attachment. This process can take approximately 10 minutes to complete.

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- 7. While in the External VPC tab, click the edit icon in the Routes column and add in the following required routes:
 - A route for the floating IP range for Amazon FSx for NetApp ONTAP floating IPs.
 - A route for the floating IP range for Cloud Volumes ONTAP (if applicable).
 - $\,\circ\,$ A route for the newly created external VPC address space.

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8. Finally, allow bidirectional traffic firewall rules for access to FSx/CVO. Follow these detailed steps for compute gateway firewall rules for SDDC workload connectivity.

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9. After the firewall groups are configured for both the Management and Compute gateway, the vCenter can be accessed as follows:

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System						83 vmc-sddc				
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DHCP Clabal Canfoundia	2				Any.	4m)	dim.	All controles		000
Public IPs			Contexes of paper Ho.		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	752	ng.	ve. opene	• reab	200

The next step is to verify that Amazon FSx ONTAP or Cloud Volumes ONTAP is configured depending on your requirements and that the volumes are provisioned to offload storage components from vSAN to optimize the deployment.

Deploy and configure the Virtualization Environment on Azure

As with on-premises, planning Azure VMware Solution is critical for a successful production-ready environment for creating VMs and migration.

This section describes how to set up and manage Azure VMware Solution and use it in combination with the available options for connecting NetApp storage.

The setup process can be broken down into the following steps:

To use Azure VMware Solution, first register the resource provider within the identified subscription:

- 1. Sign in to the Azure portal.
- 2. On the Azure portal menu, select All Services.
- 3. In the All Services dialog box, enter the subscription and then select Subscriptions.
- 4. To view, select the subscription from the subscription list.
- 5. Select Resource Providers and enter Microsoft.AVS into the search.
- 6. If the resource provider is not registered, select Register.

Home 2 Subscriptions 2		12.22		
Subscriptions « NetApp (cloudcontrolproduction.com)	Subscription	Resour	rce providers	×
+ Add 📋 Manage Policies	P Search (Ctrl+/)	« 🦿 Register 🏷 U	Jnregister 🕐 Refresh	
View list of subscriptions for which you have role-based access control (RBAC) permissions	(Resource groups	^ AVS		×
to manage Azure resources. To view subscriptions for which you have billing	Resources			
access, click here	Preview features	Provider		Status
Don't see a subscription? Switch directories	Usage + quotas	MicrosoftAVS		Registering
My role 🕕 Status 🛈	Policies			
8 selected V 3 selected V	Management certificates			
Apply	A My permissions			
Showing 1 of 1 subscriptions global Show only subscriptions selected in the	SE Resource providers			
subscriptions filter ①	i Deployments			
P Search	Properties			
Subscription name 14	A Resource locks			
< Previous 1 V Next >	Support + troubleshooting	~		

Provider	Status
Microsoft Operations Management	
Microsoft.Compute	Registered
Microsoft.ContainerService	Ø Registered
Microsoft.ManagedIdentity	Registered
Microsoft,AVS	Registered
Microsoft.OperationalInsights	O Registered
Microsoft.GuestConfiguration	📀 Registered

- 7. After the resource provider is registered, create an Azure VMware Solution private cloud by using the Azure portal.
- 8. Sign in to the Azure portal.
- 9. Select Create a New Resource.
- 10. In the Search the Marketplace text box, enter Azure VMware Solution and select it from the results.
- 11. On the Azure VMware Solution page, select Create.
- 12. From the Basics tab, enter the values in the fields and select Review + Create.

Notes:

- For a quick start, gather the required information during the planning phase.
- Select an existing resource group or create a new resource group for the private cloud. A resource group is a logical container in which the Azure resources are deployed and managed.
- Make sure the CIDR address is unique and does not overlap with other Azure Virtual Networks or onpremises networks. The CIDR represents the private cloud management network and is used for the cluster management services, such as vCenter Server and NSX-T Manager. NetApp recommends using a /22 address space. In this example, 10.21.0.0/22 is used.

Prerequisities Basacs lags	Review and Create	
Project details		
Subscription * 💿	SaaS Backup Production	×
Resource group * ①	(New) NimoAVSDemo	Ý
	Create new	
Private cloud details		
Resource name * 💿	nimoarspriv	Ŷ
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	Find	out how many hosts you nee
	There is no metering for the selected subscription data to display.	tion, region, and SKU. No cost
CIDR address block		
Provide IP address for private cloue	d for cluster management. Make sure these are unique tworks.	e and do not overlap with an
other waters or our-premise in		

The provisioning process takes approximately 4–5 hours. After the process is complete, verify that the deployment was successful by accessing the private cloud from the Azure portal. A status of Succeeded is displayed when the deployment is complete.

An Azure VMware Solution private cloud requires an Azure Virtual Network. Because Azure VMware Solution doesn't support on-premises vCenter, additional steps are required to integrate with an existing on-premises environment. Setting up an ExpressRoute circuit and a virtual network gateway is also required. While waiting for the cluster provisioning to complete, create a new virtual network or use an existing one to connect to Azure VMware Solution.

AVS Private cloud		
P Search (Ctrl+/)	Delete	
Overview	A Essentials	
Activity log	Resource group (change) NimoAVSDemo	Address block for private cloud 10.21.0.0/22
Access control (IAM)	Status Succeeded	Primary peering subnet 10.21.0.232/30
Diagnose and solve problems	Location East US 2	Secondary peering subnet 10.21.0.236/30
Settings	Subscription (change) SaaS Backup Production	Private Cloud Management networ 10.21.0.0/26
A Locks	Subscription ID b58a041a-e464-4497-8be9-9048369ee8e1	vMotion network 10.21.1.128/25
Manage		Number of hosts
🜨 Connectivity		3
🖳 Identity	Tags (change) Click here to add tags	
E Clusters		

To create a new Azure Virtual Network (VNet), select the Azure VNet Connect tab. Alternatively, you can create one manually from the Azure portal by using the Create Virtual Network wizard:

- 1. Go to Azure VMware Solution private cloud and access Connectivity under the Manage option.
- 2. Select Azure VNet Connect.
- 3. To create a new VNet, select the Create New option.

This feature allows a VNet to be connected to the Azure VMware Solution private cloud. The VNet enables communication between workloads in this virtual network by automatically creating required components (for example, jump box, shared services such as Azure NetApp Files, and Cloud Volume ONTAP) to the private cloud created in Azure VMware Solution over ExpressRoute.

Note: The VNet address space should not overlap with the private cloud CIDR.

Search (Ctrl+/)	»	🗄 Save 🕐 Refresh		
💁 Overview	^	Azure vNet connect Settings	ExpressRoute Public IP	
Activity log				
Access control (IAM)		This is an optional feature that allows private cloud. A vNet enables the cor	an Azure virtual network to be connected t nmunication between workloads in this virtu	o your Azure VMware Solution al network (for example,
🔷 Tags		Jumpbox) to the private cloud create subnet 'GatewaySubnet' should be se	d in Azure VMware Solution over ExpressRo Sected, You can create a new vNet or use an	ute. Only a vNet with a valid existing one provided the vNet
Diagnose and solve problems		address space does not overlap with network.	your private cloud CIDR. Learn more about a	adding a subnet in a virtual
Settings		Virtual network		~
A Locks			Create new	
Manage		Address block for vnet	×	
🚔 Connectivity		Address block for private cloud	10.21.0.0/22	D
udentity				
and a second				
🔨 Clusters				

4. Provide or update the information for the new VNet and select OK.

This virtual network enait Azure VMware Solution default address range an 172.16.0.0/16). Step 2: Au (e.g. 172.16.1.0/24). Lear	bles the communication between workloads in this virtual n over an Express route. A default address range and a subne id subnet of this virtual network, follow these steps. Step 1: dd a subnet under "Subnets" with the name as "GatewaySu n more about virtual networks Df	etwork (e.g. a Jumphost) to the private cloud crea t is selected for this virtual network. For changing Change the "Address Range" to desired range (e. bnet" and provide subnet's address range in CIDR	ted in the g. Lotatio
Name *	nimoavspriv-vnet		
Address space			
The virtual network's add	dress space specified as one or more address prefixes in CIE	DR notation (e.g. 10.0.0/16).	
Address range	Addresses	Overlap	
173 3400/46	172.24.0.4 - 172.24.255.254 (65531 addresses)	None	10
172,24,0,0/10			
172,240,0/10	(0 Addresses)	None	
Subnets	(0 Addresses)	None	
Subnets The subnet's address ran	(0 Addresses) Ige in CIDR notation (e.g. 10.0.0.0/24). It must be contained	None by the address space of the virtual network.	
Subnets The subnet's address ran Subnet name	(0 Addresses) age in CIDR notation (e.g. 10.0.0.0/24). It must be contained Address range	None by the address space of the virtual network. Addresses	
Subnets The subnet's address ran Subnet name GatewaySubnet	(0 Addresses) age in CIDR notation (e.g. 10.0.0.0/24). It must be contained Address range 172.24.0.0/24	None by the address space of the virtual network. Addresses 172.24.0.4 - 172.24.0.254 (251 addresses)	1

The VNet with the provided address range and gateway subnet is created in the designated subscription and resource group.

 (\mathbf{i})

If you create a VNet manually, create a virtual network gateway with the appropriate SKU and ExpressRoute as the gateway type. After the deployment is complete, connect the ExpressRoute connection to the virtual network gateway containing Azure VMware Solution private cloud using the authorization key. For more information, see Configure networking for your VMware private cloud in Azure.

Validate the network connect and access to Azure VMware Solution private cloud

Azure VMware Solution does not allow you to manage a private cloud with on-premises VMware vCenter. Instead, jump host is required to connect to the Azure VMware Solution vCenter instance. Create a jump host in the designated resource group and sign in to the Azure VMware Solution vCenter. This jump host should be a Windows VM on the same virtual network that was created for connectivity and should provide access to both vCenter and the NSX Manager.

Creat	e a vi	rtual ma	chine						
Basics	Disks	Networking	Management	Advanced	Tags	Review + create			
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Azure Sp	ot instanc	* ©							
Size * (D.		Standard	D25_V3 - 2 VC	pus, 8 Gi	8 memory (\$130.67/month)	~		
			See all size	HS .					

After the virtual machine is provisioned, use the Connect option to access RDP.

Virtual machine	ct …					
Search (Ctrl+/) ≪	${f A}$ To improve security, enable just-in-time access on this VM, $ ightarrow$					
Overview						
Activity log	RDP SSH BASTION					
Access control (IAM)	Connect with BDP					
	To connect to your virtual machine via RDP, select an IP address, optionally change the port number, and download the					
💎 lags	To connect to your virtual machine via RDP, select an IP address, optionally change the port number, and download the					
 P Diagnose and solve problems 	To connect to your virtual machine via RDP, select an IP address, optionally change the port number, and download the RDP file.					
Iags Diagnose and solve problems	To connect to your virtual machine via RDP, select an IP address, optionally change the port number, and download the RDP file. IP address *					
lags Diagnose and solve problems	To connect to your virtual machine via RDP, select an IP address, optionally change the port number, and download the RDP file. IP address * Public IP address (52:138.103.135)					
	To connect to your virtual machine via RDP, select an IP address, optionally change the port number, and download the RDP file. IP address * Public IP address (52:138:103:135) Port number *					
Iags Diagnose and solve problems Settings Networking Connect	To connect to your virtual machine via RDP, select an IP address, optionally change the port number, and download the RDP file. IP address * Public IP address (52.138.103.135) Port number * 3389					
	To connect to your virtual machine via RDP, select an IP address, optionally change the port number, and download the RDP file. IP address * Public IP address (52.138.103.135) Port number * 3389 Download RDP File					

Sign in to vCenter from this newly created jump host virtual machine by using the cloud admin user . To access the credentials, go to the Azure portal and navigate to Identity (under the Manage option within the private cloud). The URLs and user credentials for the private cloud vCenter and NSX-T Manager can be copied from here.

AVS Private cloud	indeg a		
Search (Ctrl+/)	« Login credentials		
Access control (IAM)	 vCenter credentials 		
🧳 Tags	Web client URL ①	https://10.21.0.2/	Ð
Diagnose and solve problems	Admin username	cloudadmin@vsphere.local	D
Settings	Admin password ①	6	
🔒 Locks	Certificate thumbprint ①	AE26B15A5CE38DC069D35F045F088CA6343475EC	Ð
Manage	NSX-T Manager credentials		
🧙 Connectivity	Web client URL ①	https://10.21.0.3/	D
👊 Identity	Admin usamama (i)	admin	Ib
🐚 Clusters	Admin üsemanle 🕤		чц
Placement policies (preview)	Admin password ③		
+ Add-ons	Certificate thumbprint ①	B2B722EA683958283EE159007246D5166D0509D3	Ð

In the Windows virtual machine, open a browser and navigate to the vCenter web client URL ("https://10.21.0.2/") and use the admin user name as **cloudadmin@vsphere.local** and paste the copied password. Similarly, NSX-T manager can also be accessed using the web client URL ("https://10.21.0.3/") and use the admin user name and paste the copied password to create new segments or modify the existing tier gateways.



	vc.beeb9fd29eab4cbea81e62.eastus	2.avs.az	ure.com	DN5 -			
vc.beeb9/d29eab4cbea81e SDDC-Datacenter	Sum. Mon. Confl. Permiss. Datace.	Hosts & C.	V. Datast.	Netw_	Linked vCenter Server	Exten	
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		1					
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Task Name 🗢 Target	v Status v Details v Initiator	~ Quece	d For 🗸 Start Time	4 4	Completion Time ~ Server		
	VMware vRops		08/12/20	21 11 38 11	08/12/2021 11:38:11		

The Azure VMware Solution SDDC is now deployed and configured. Leverage ExpressRoute Global Reach to connect the on-premises environment to Azure VMware Solution private cloud. For more information, see Peer on-premises environments to Azure VMware Solution.

Deploy and configure the Virtualization Environment on Google Cloud Platform (GCP)

As with on-premises, planning Google Cloud VMware Engine (GCVE) is critical for a successful production-ready environment for creating VMs and migration.

This section describes how to set up and manage GCVE and use it in combination with the available options for connecting NetApp storage.

The setup process can be broken down into the following steps:

To configure a GCVE environment on GCP, login to the GCP console and access the VMware Engine portal.

Click on the "New Private Cloud" button and enter the desired configuration for the GCVE Private Cloud. On "Location", make sure to deploy the private cloud in the same Region/Zone where CVS/CVO is deployed, to ensure the best performance and lowest latency.

Pre-requisites:

- Setup VMware Engine Service Admin IAM role
- Enable VMWare Engine API access and node quota
- Make sure that the CIDR range doesn't overlap with any of your on-premises or cloud subnets. The CIDR range must be /27 or higher.

13	Debute Claud same 1	
UCS Home	Private Cloud name	
0	Nemogeve	
esources	Location *	
P	us-east4 > v-zone-a > VE Placement Group 2	•
4etwork	Node type *	
602	ve1-standard-72	
CO.	2x2.6 GHz, 36 Cores (72 HT), 768 GB RAM 19.2 TB Raw, 3.2 TB Cache (All-Flash)	
Account	Node count *	
	3	
	(3 to 3)	
	vSphere/vSAN subnets CIDR range *	
	192.168.100.0	22 •
	IP Range: 192.168.100.0 - 192.168.103.255	
	HCX Deployment Network CIDR range	
	192.168.104.0	/ 26 •
	IP Ranse: 192.168.104.0 - 192.168.104.63	

Once the Private Cloud is provisioned, configure private access to the Private Cloud for high-throughput and low-latency data-path connection.

This will ensure that the VPC network where Cloud Volumes ONTAP instances are running is able to communicate with the GCVE Private Cloud. To do so, follow the GCP documentation. For the Cloud Volume Service, establish a connection between VMware Engine and Cloud Volumes Service by performing a one-time peering between the tenant host projects. For detailed steps, follow this link.

Tenant P 🕅 🗍 🌲	Service	\$ Region	$\frac{1}{2}$	Routing Mode	$\frac{d}{T}$	Peered Project ID 👙	Peered VPC	$\frac{A}{T}$	VPC Peering Sta ≑	Region Status
ke841388caa56b	VPC Network	europe-west3		Global		cv-performance-te	cloud-volumes-vpc		Active	 Connected
jbd729510b3ebbf	NetApp CVS	europe-west3		Global		y2b6c17202af6dc	netapp-tenant-vpc		 Active 	 Connected

Sign in to vcenter using the CloudOwner@gve.local user. To access the credentials, go to the VMware Engine portal, Go to Resources, and select the appropriate private cloud. In the Basic info section, click the View link for either vCenter login info (vCenter Server, HCX Manager) or NSX-T login info (NSX Manager).

Googl	e Cloud VMware Engine						0	4		ď	۲
	Resources										
B	← gcve-cvs-hw-eu-west3					B LAUNCH	VSPHE	RE CLI	NT	⊘ ADD	NODES
Resources	SUMMARY CLUSTERS	SUBNETS ACTIVITY	VSPHERE MANAGE	MENT NETWORK	ADVANCED VCENTER SETTIN	IGS DNS	N.				
(A) Network		Name gcve-cvs-hw-eu-west3		Operational		Cloud Monitor	ing 😐				- 1
କ୍ଳ	(i)	Clusters 1		Location europe-west3 > v-zor	Private Cloud DNS Servers D 10.0.16.8, 10.0.16.9 Copy						
Account	Basic Info	vSphere/vSAN subnets CIDR rang 10.0.16.0/24	te	Expandable No		Upgradeable No					
		vCenter login info View Reset password		NSX-T login info View Reset password							1
	<u>∩</u> t	Total nodes 4		Total CPU capacity 144 cores		Total RAM 3072 GB					
	Capacity	Total storage capacity 76.8 TB Raw, 12.8 TB Cache, All-F	lash								

In a Windows virtual machine, open a browser and navigate to the vCenter web client URL ("https://10.0.16.6/") and use the admin user name as CloudOwner@gve.local and paste the copied password. Similarly, NSX-T manager can also be accessed using the web client URL ("https://10.0.16.11/") and use the admin user name and paste the copied password to create new segments or modify the existing tier gateways.

For connecting from an on-premises network to VMware Engine private cloud, leverage cloud VPN or Cloud Interconnect for appropriate connectivity and make sure the required ports are open. For detailed steps, follow this link.



Deploy NetApp Cloud Volume Service supplemental datastore to GCVE

Refer Procedure to deploy supplemental NFS datastore with NetApp CVS to GCVE

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