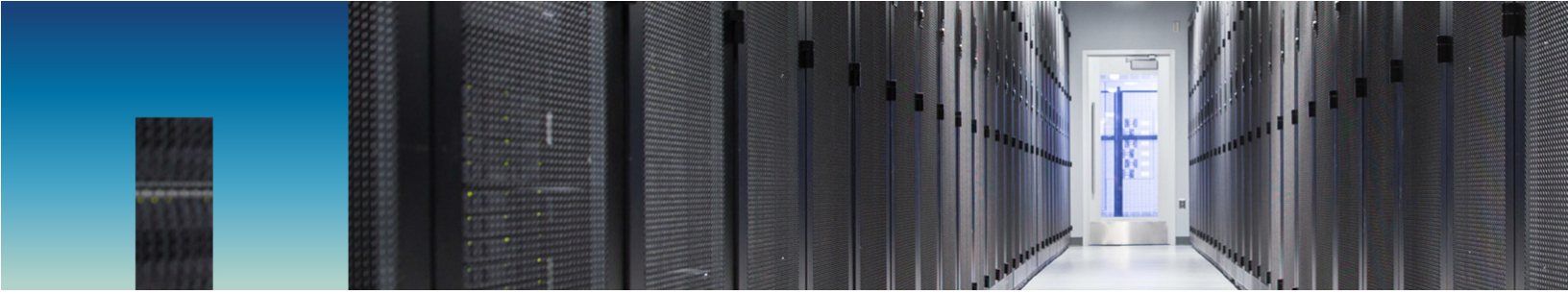

How to configure VMC for guest OS access to NetApp Cloud Volumes Service

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Abstract

This document provides instructions to help users configure VMC for guest OS access to NetApp Cloud Volumes Service.

NetApp®

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1 Overview

This document provides instructions to help users configure VMware Cloud (VMC) for guest OS access to NetApp Cloud Volumes Service for AWS (CVS).configure VMC for guest OS access to NetApp Cloud Volumes Service

2 Requirements

This section details the requirements to access VMC and Cloud Volumes Service for AWS.

Administrative

The following administrative tasks are required to access Cloud Volumes Service for AWS:

- An active VMC account

  NOTE: The ID for the VMC AWS account is sent to NetApp to enable access to Cloud Volumes Service for AWS in the AWS Marketplace.
- An active CVS account

Skills and Knowledge

The following skills and information are required to access Cloud Volumes Service for AWS:

- Access to and knowledge of VMC and AWS.
- Access to and knowledge of AWS.
- Knowledge of your SDDC and AWS.

Compute Resources

The following compute resources are required to access Cloud Volumes Service for AWS:

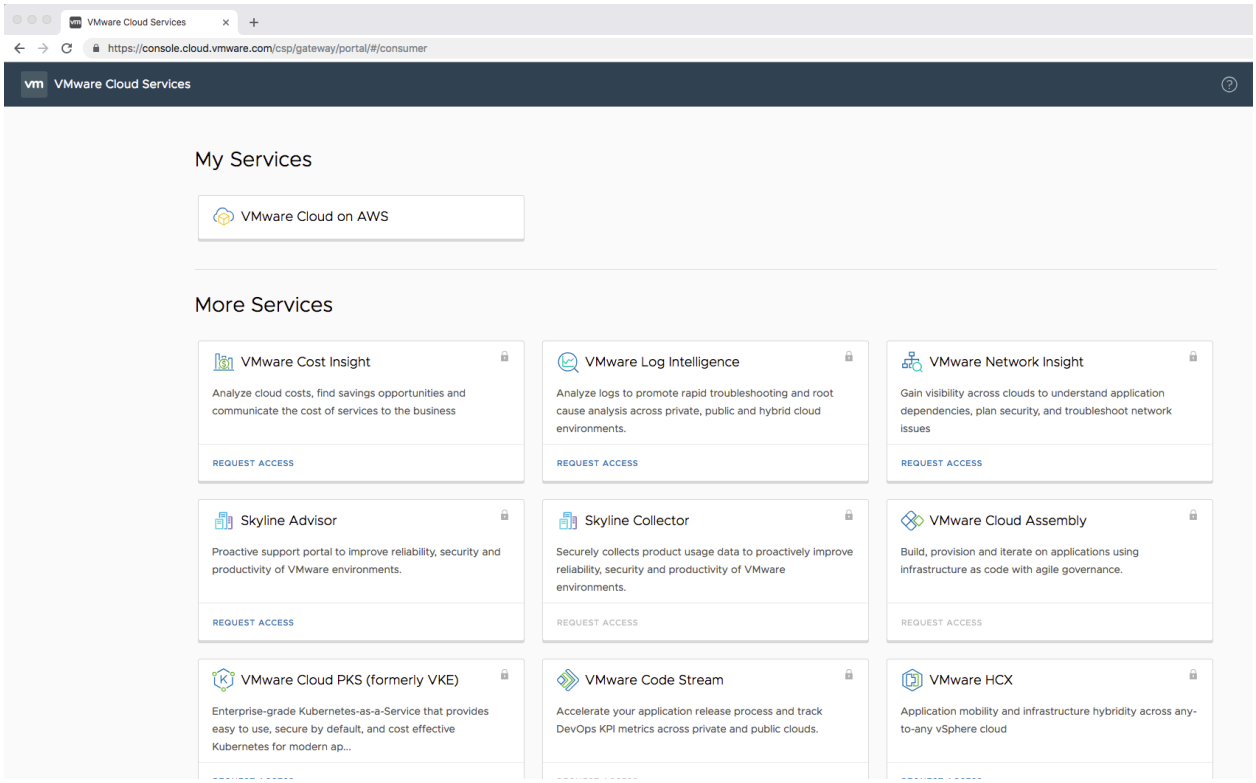
- A valid AWS account.

  NOTE: All AWS compute and other resources used are the sole responsibility of the user.
- An Internet browser

3 Configure VMC for guest OS access to NetApp Cloud Volumes Service

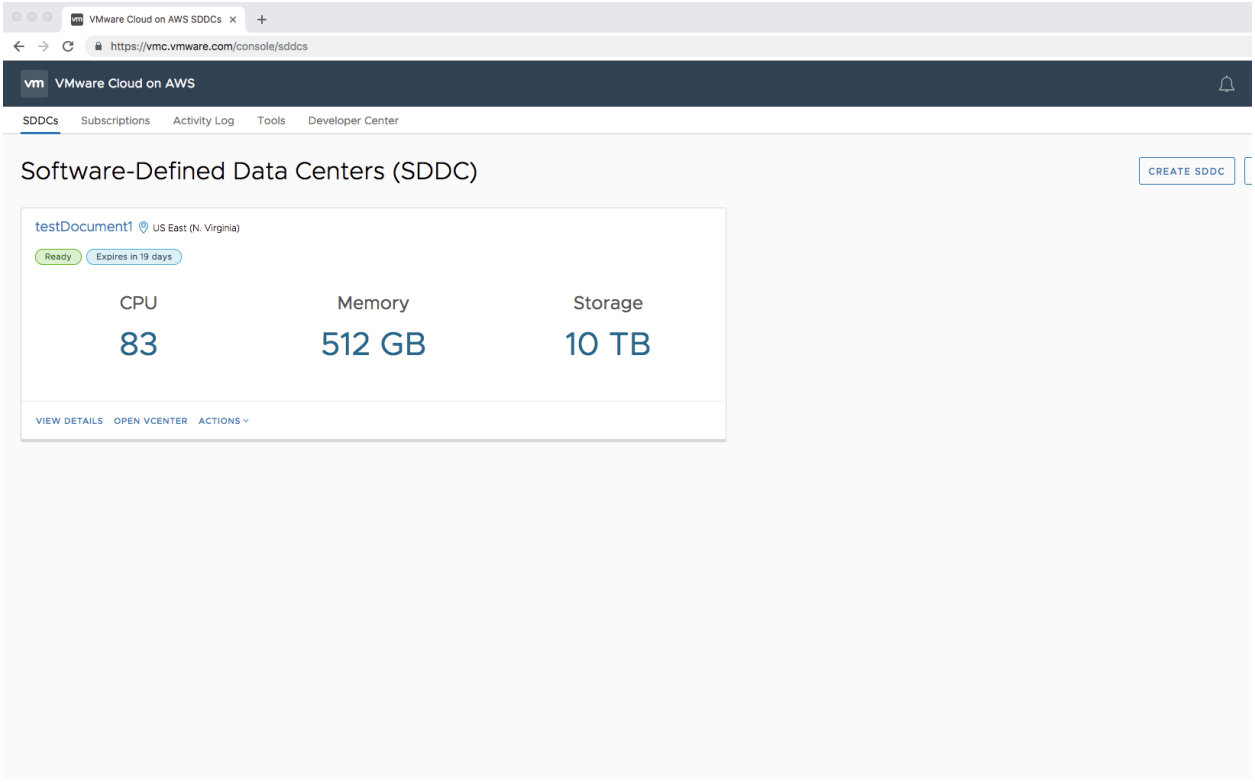
3.1 Configure VMC:

Login in VMC console



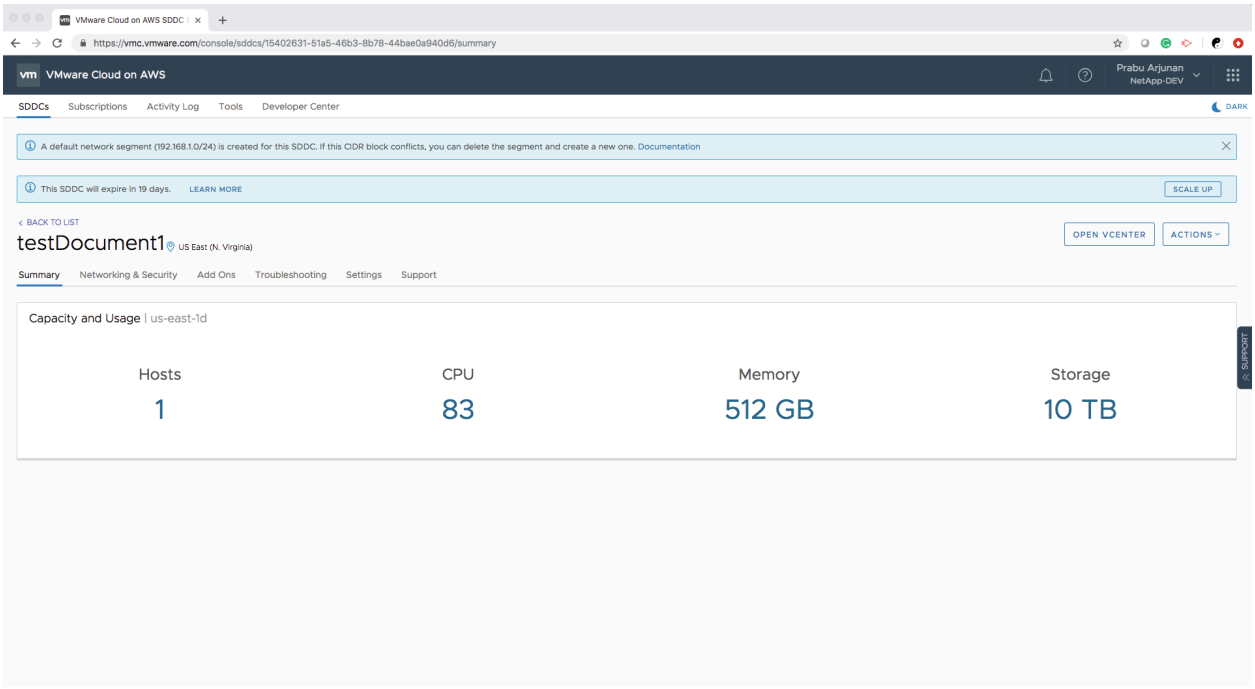
Click on VMware Cloud on AWS,

If you already have a SDDC deployed, click on the deployed “SDDC”, else create SDDC by clicking on "Create SDDC". Refer the link to deploy the SDDC,
https://docs.vmware.com/en/VMware-Cloud-on-AWS/services/com.vmware.vmc-aws.getting-started/GUID-EF198D55-03E3-44D1-AC48-6E2ABA31FF02.html
I already have my SDDC deployed.



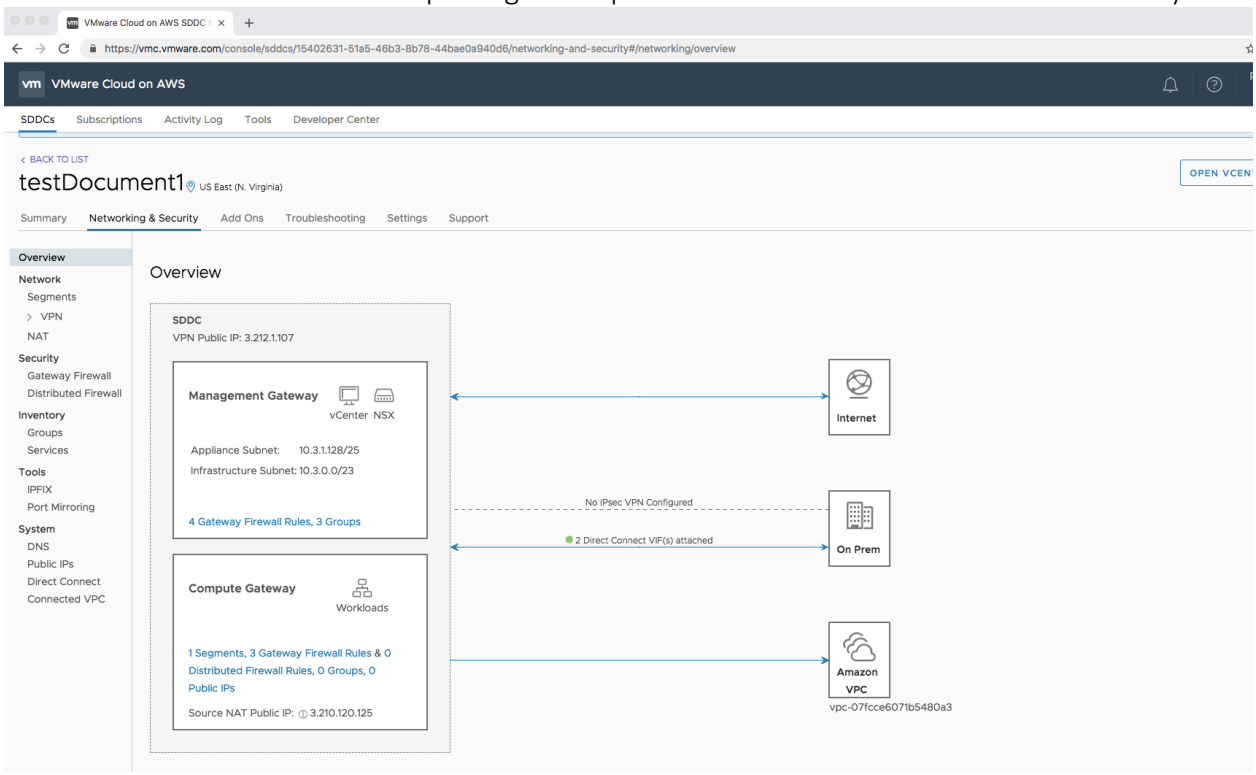
3.2 Configure SDDC:

Click on the SDDC.



The Summary section shows the “Capacity and usage and the region where the SDDC is configured.” Click on “Networking & Security.”

The user should have the Admin privileges and permissions to edit the network and security.



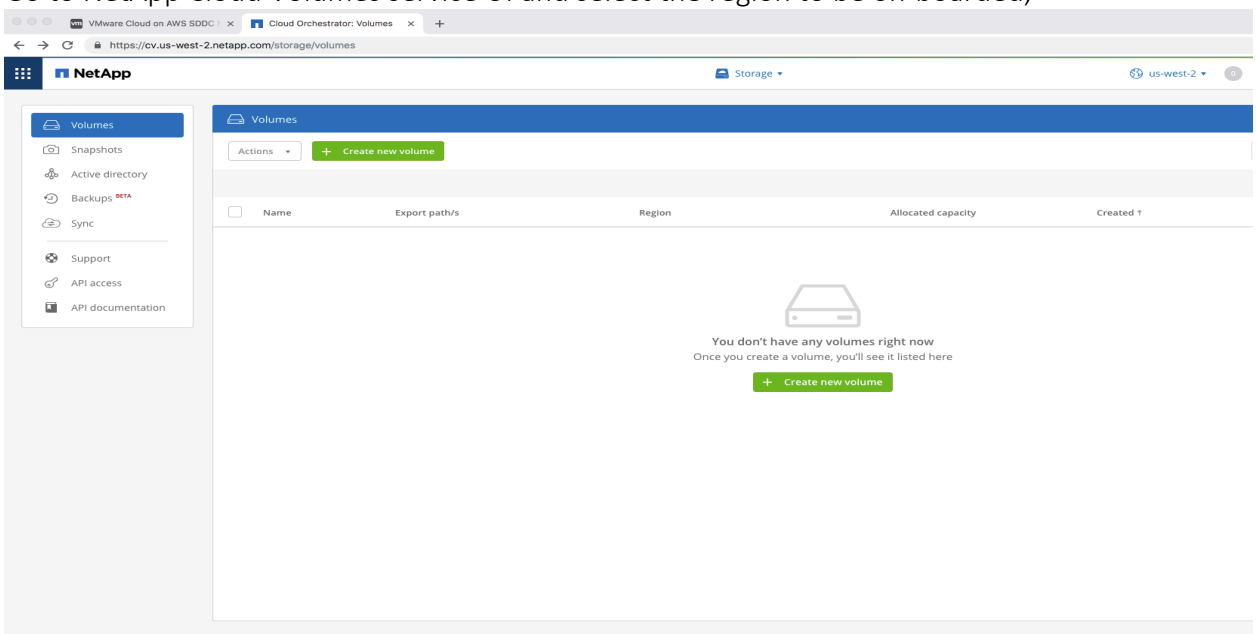
As you can see the solid lines indicate the configuration is already done.

Configure Virtual Interface Direct Connect:

In the “Direct connect “section make note of “AWS account ID” and “BGP Local ASN” number.

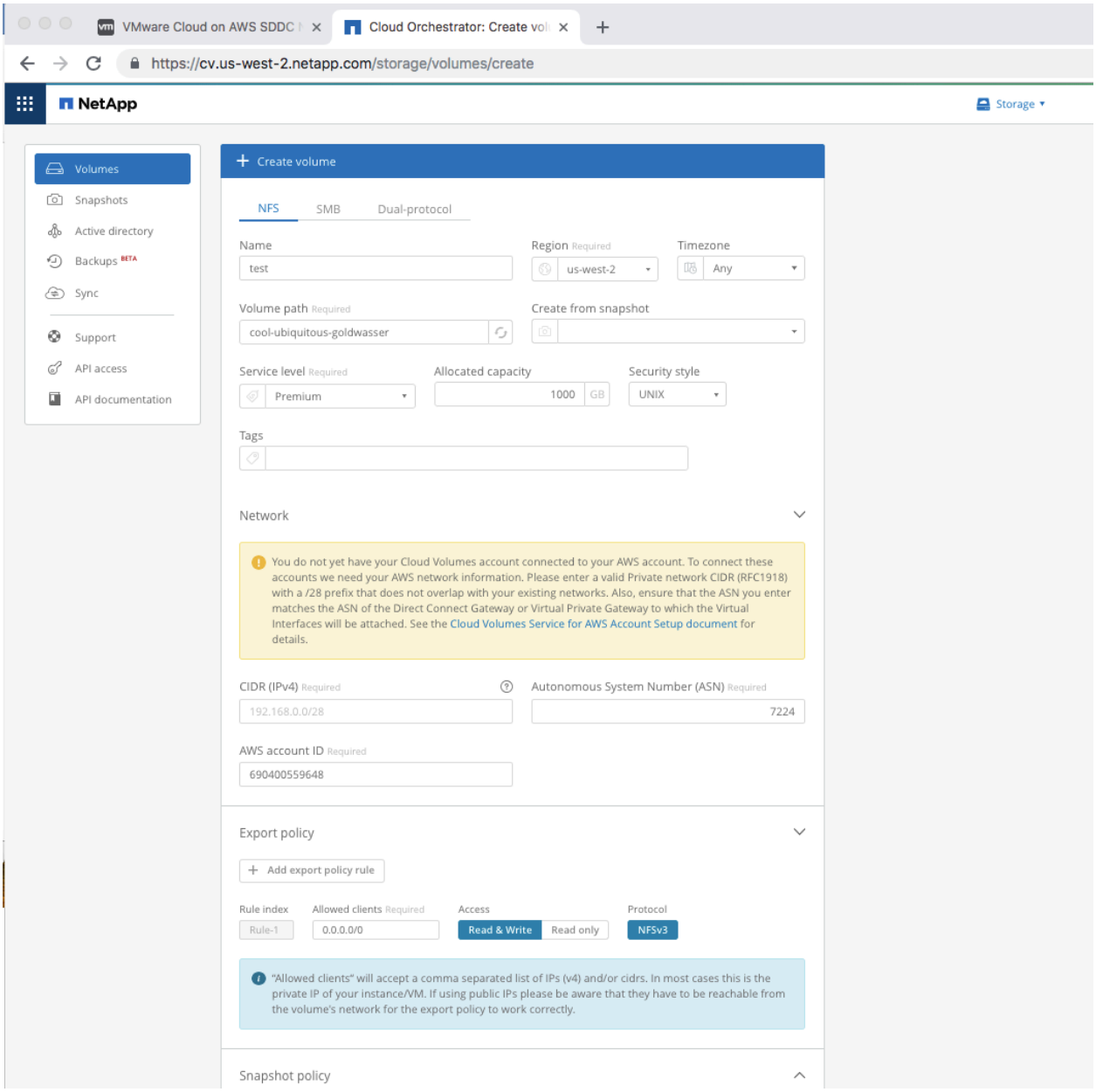
The values are required to connect NetApp cloud volumes service with VMware VMC.

Go to NetApp Cloud Volumes service UI and select the region to be on-boarded,



3.3 Create NetApp cloud volumes service volume:

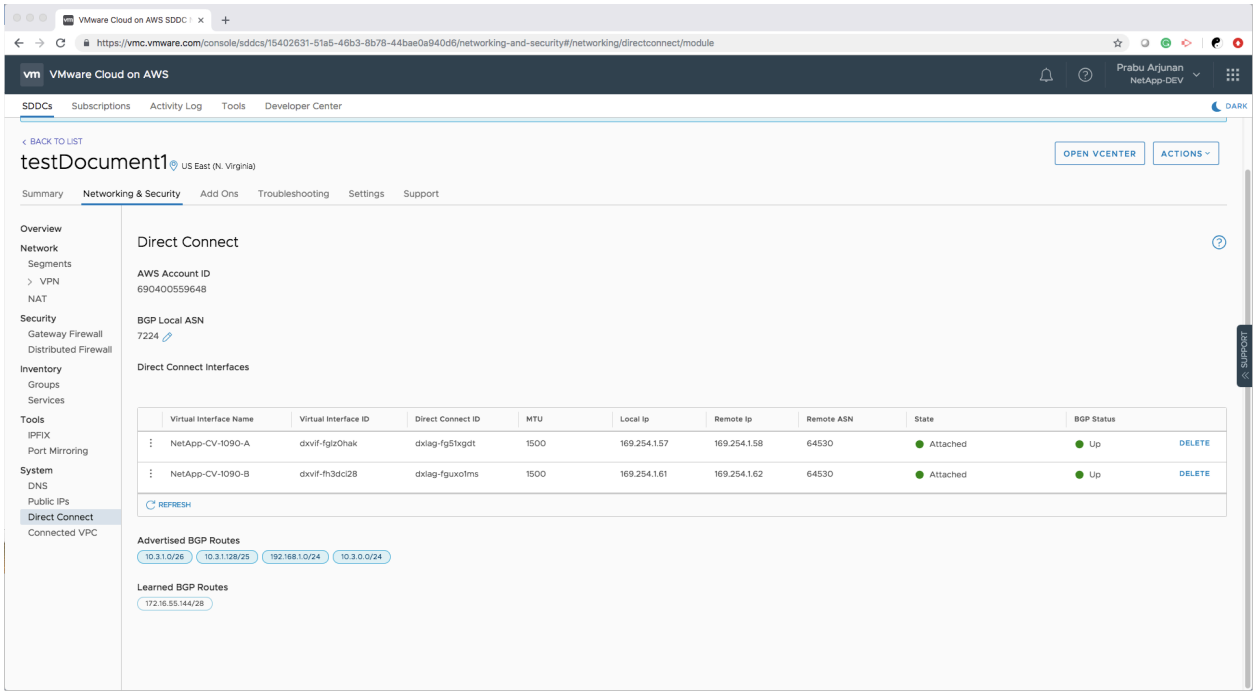
Click on “Create new volume.”



- Enter the required details, under “Network” section pass the noted “AWS account ID” and “ASN” number of the SDDC. As documented in the self subscription document the CIDR range should not overlap.
- Click “Create Volume” will establish the Virtual interface between the VMC and CVS.
- Click on the “Direct Connect” and you will see the virtual interfaces under Direct Connect interfaces.
- Click on each virtual interface and click attach the virtual interfaces. The status should say “Attached” and “BGP status” should be “Up.”
- The volume creation will be successful on the NetApp cloud volumes service side.
- Refer to the self subscription doc in the below link,

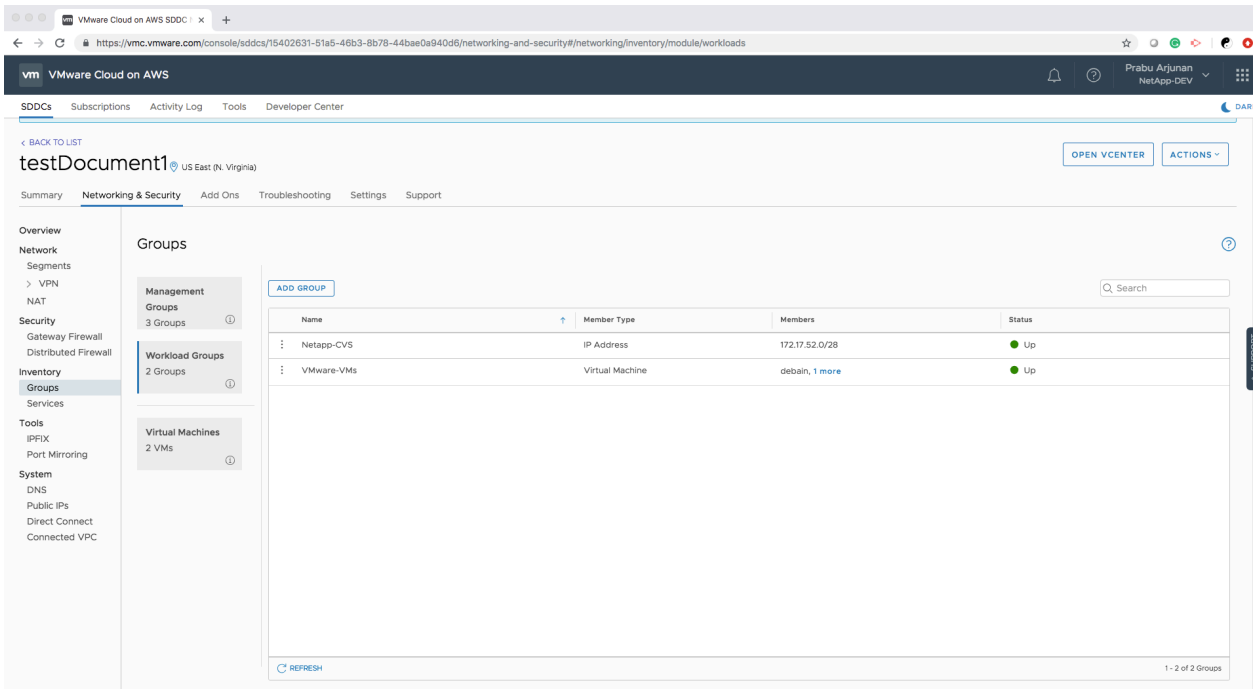
- https://docs.netapp.com/us-en/cloud_volumes/aws/media/cvs_aws_account_setup.pdf

- The attached virtual interfaces will be displayed under “Direct Connect” section.
- Create/Edit the firewall settings for the VMs to communicate to NetApp cloud volumes service.



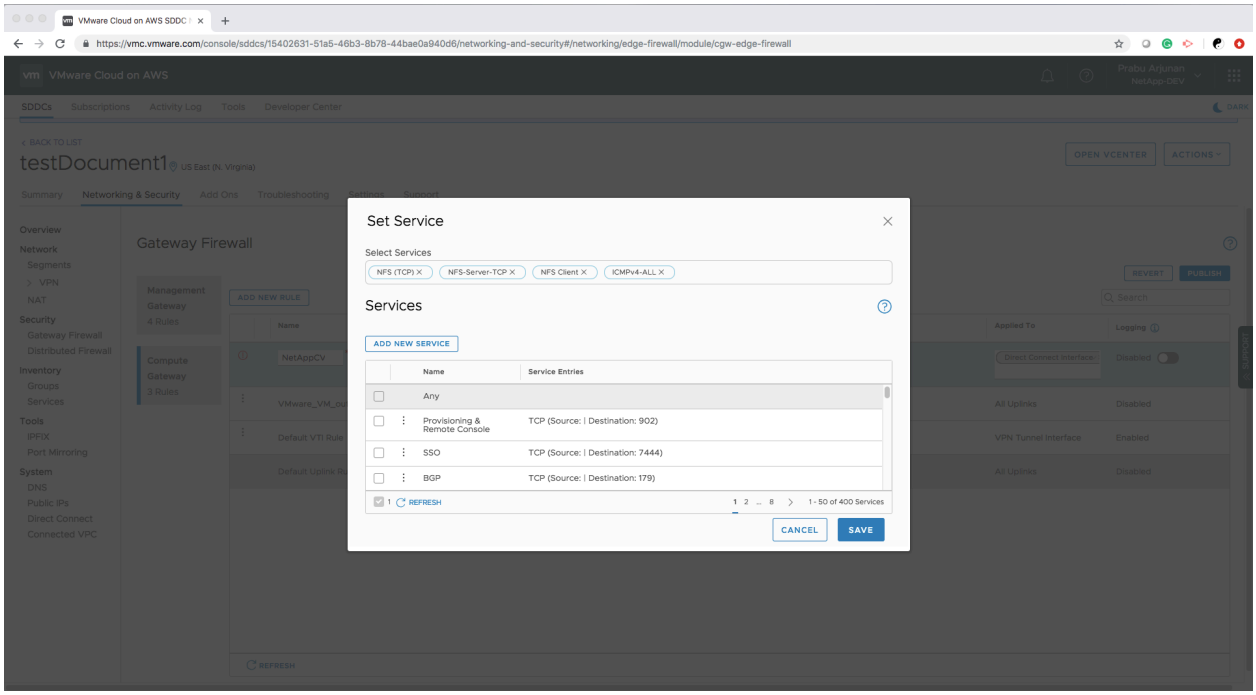
3.4 Configure groups and firewall:

How to configure Gateway Firewall for the Integration/communication of VMs and CVS:
Configure Groups for VMs and CVS:

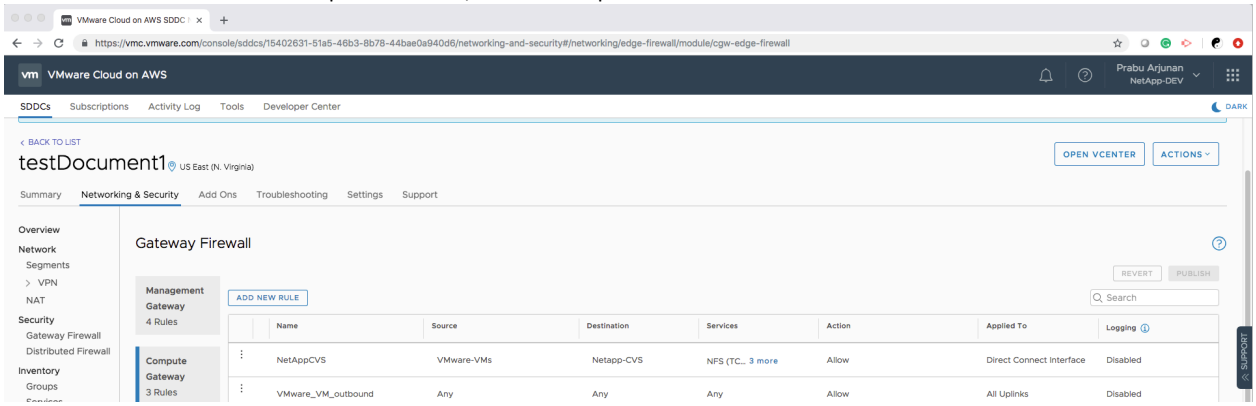


- Create two groups, one for VMware VMs and another group for NetApp cloud volumes service.
- For the NetApp cloud volumes group, set “IP address”(CIDR range) as member type.
- For the VMware VMs, set “Virtual Machine” as member type. You can choose the required VM’s to communicate to NetApp CVS.
- Configure compute gateway to allow/disallow based on the protocol.

Configure Compute Gateway:

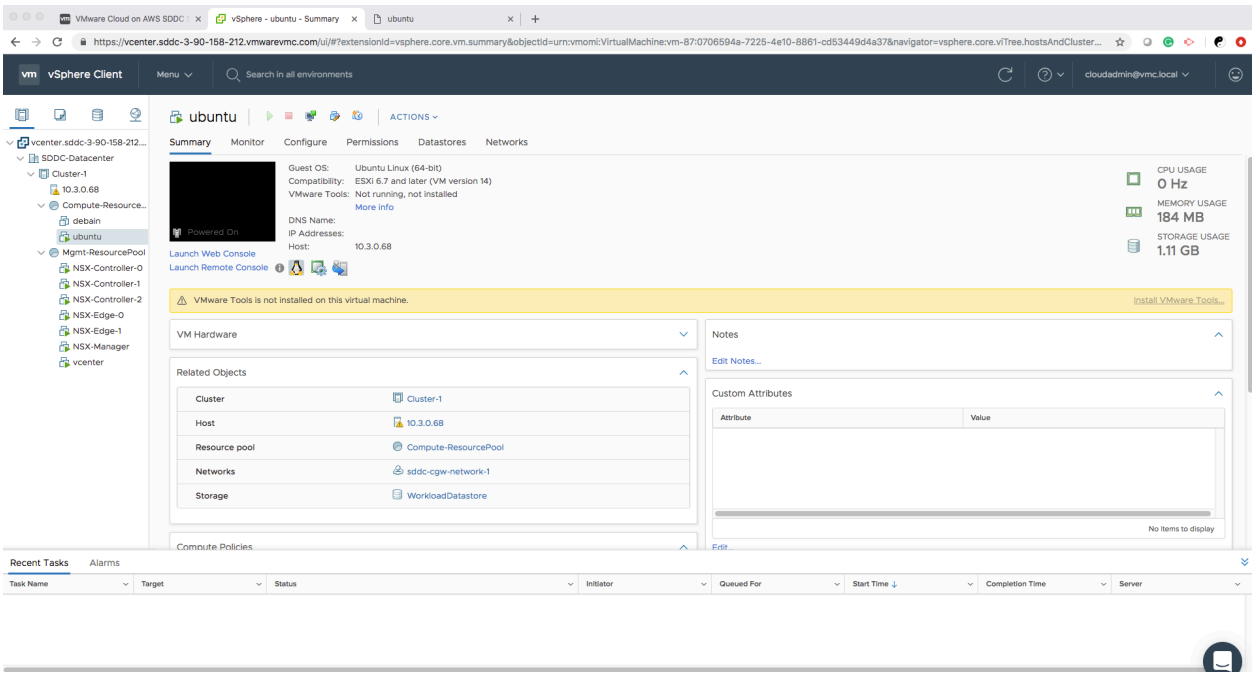


- Create a new rule by selecting source as “VMware VMs”, destination as “NetApp CVS” and services as NFS and ICMP. If you need any other service, select accordingly.
- Once selected the required filed, click on “publish” to create the rule.

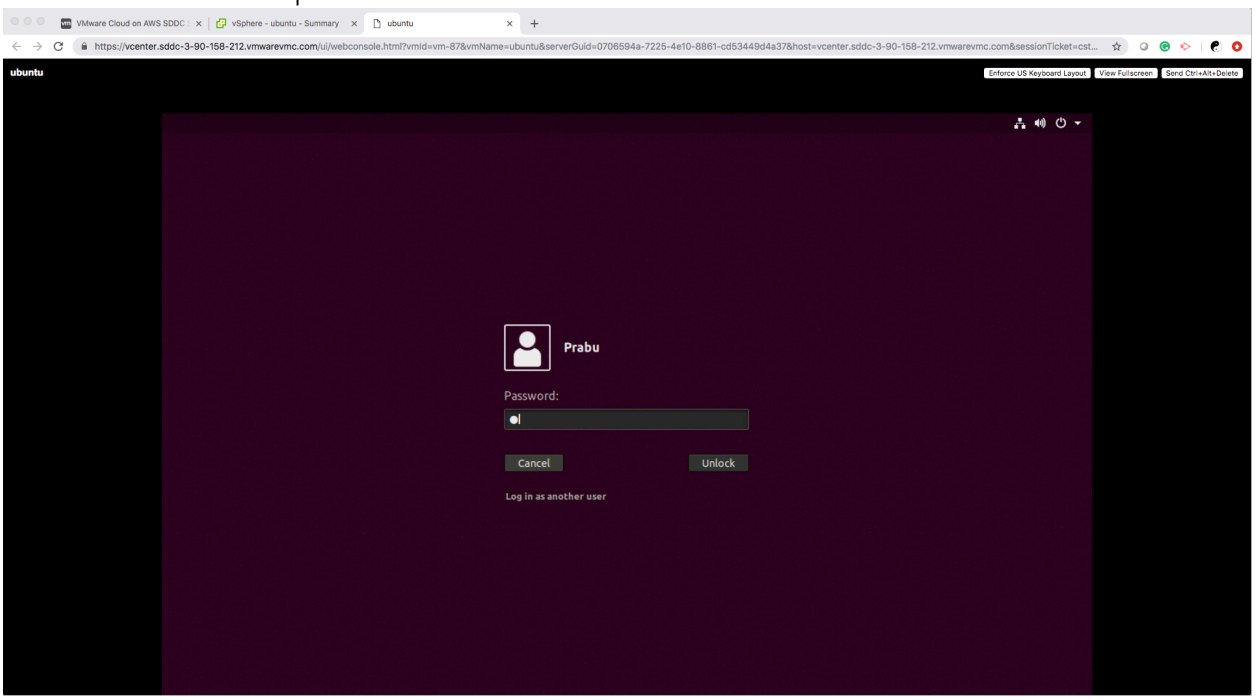


3.5 How to mount NetApp cloud volumes service volume in the VM?

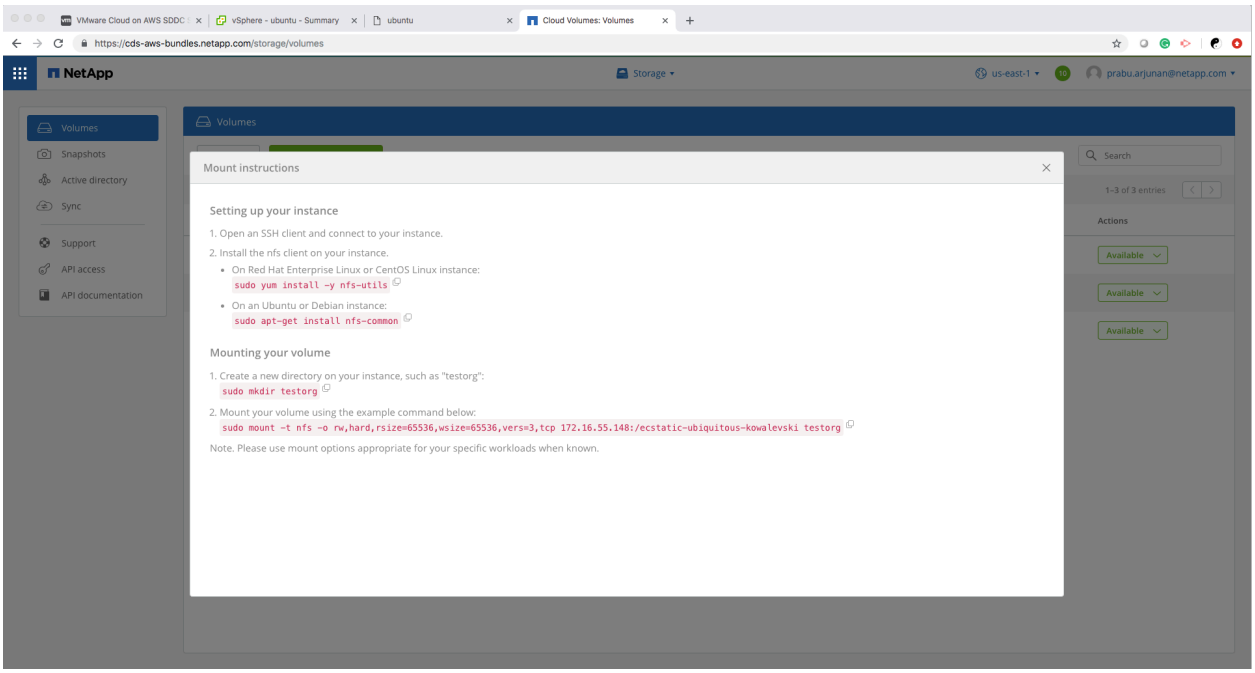
- I created two VMs, One Ubuntu and Debian VM.
- Click on the Ubuntu VM and click on the “Launch Web console”



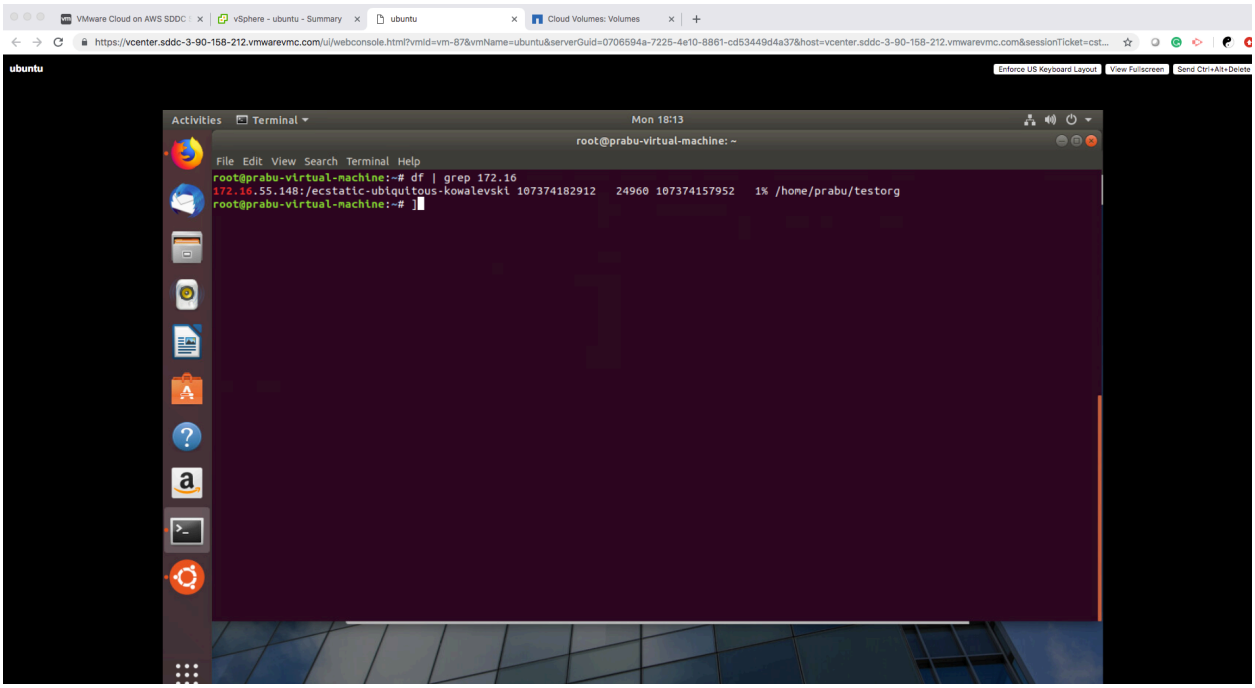
- The web console will open in another tab.



- Enter the password and login.
- Go to NetApp CVS UI and click on the instructions to mount the volume.



- Once you have successfully mounted the volume type “df -h” command to see the mounted volumes.



- The volume are mounted successfully and ready to use.

Common errors messages

References

The following references were used in this document:

- NetApp cloud volumes service Self subscription doc in the below link,

https://docs.netapp.com/us-en/cloud_volumes/aws/media/cvs_aws_account_setup.pdf

Version History

Version	Date	Document Version History
Version 1.0	May 2019	Initial release.