VERZEO AZURE MAJOR PROJECT.

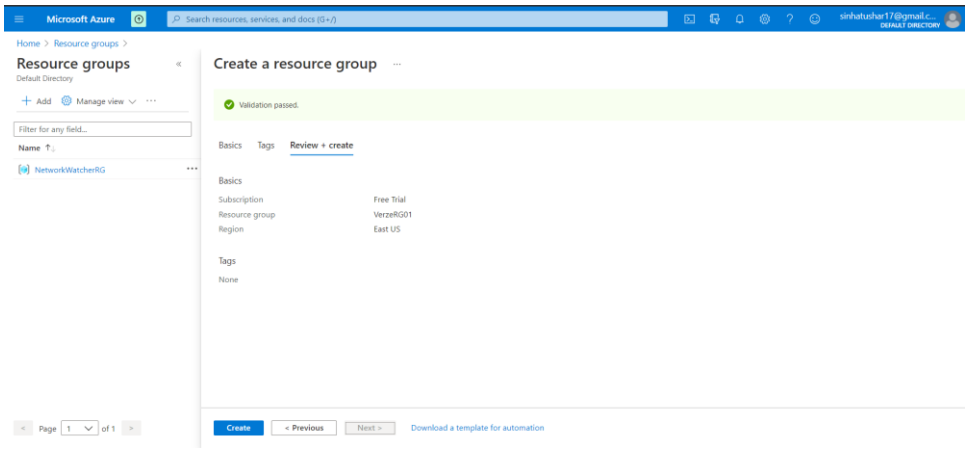
To do in the Project :

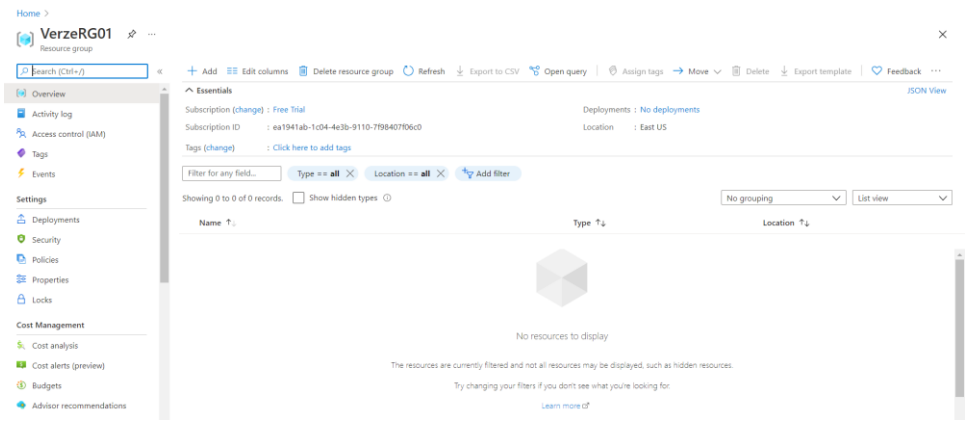
Azure Major Project

- Create a Resource group by Name (VerzeRG01)
- Create a virtual network (verzvnet01)
- Create a virtual machine in the portal(VerzVM01)
- Create blob storage(VerzSTR01)
    - Create a File Share (Verzfs01)and mount on the (VerzVM01)
- Create a network security group
- Configure an inbound security port rule to allow RDP
- Configure an outbound security port rule to deny Internet access
- Create an Azure Policy to only allow certain locations (Southeast Asia), try to create a resource in any other location and check the policy evaluation.(You can use any other region)
- Apply a lock on the (VerzeRG01) and test if you are allowed to delete any resource.
- Setup CPU Threshold alert for the VM (VerzVM01)
- Create Action(Verzactgrp) Group for the above alert with your email id.
- Check if you are receiving the alert
- Create a Recovery Services vault (Vezvault01) in the Resource Group (VerzeRG01)
- Setup Backup for the Virtual Machine (VerzVM01) and ensure backup is completed successfully.

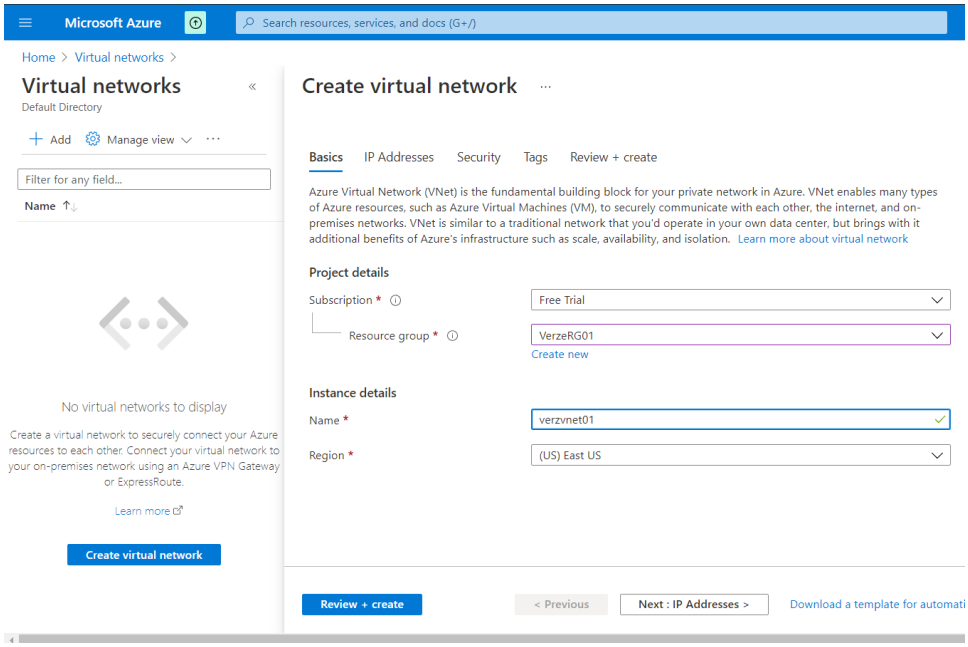
Output – Create a Word Document and attach all the screenshots of the above activity along with one liner description

*Step 1: Resource Group ‘VerzeRG01’ creation -

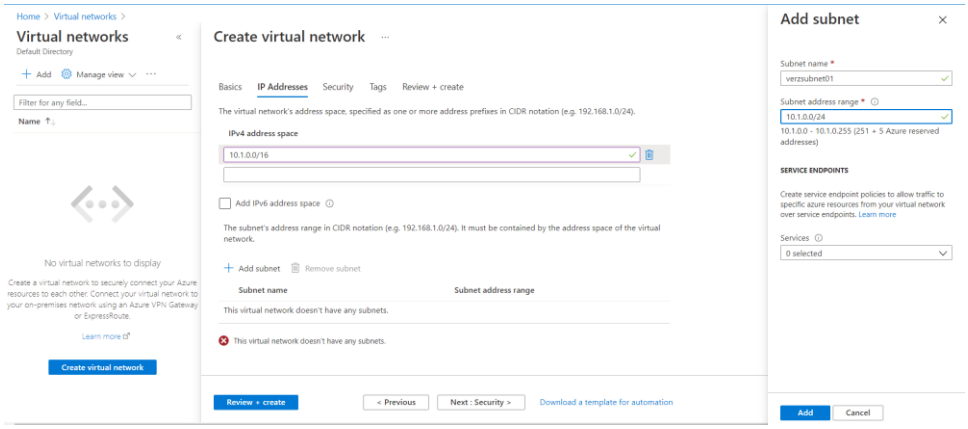


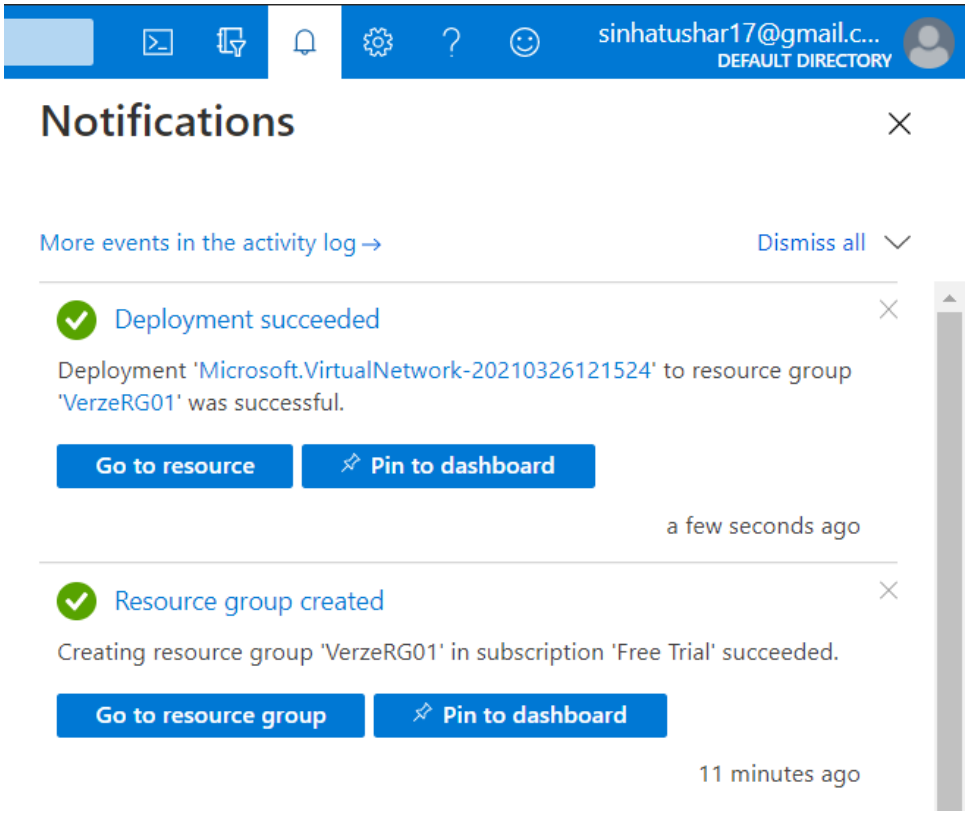


*Step 2: Virtual Network ‘verzvnet01’ creation -



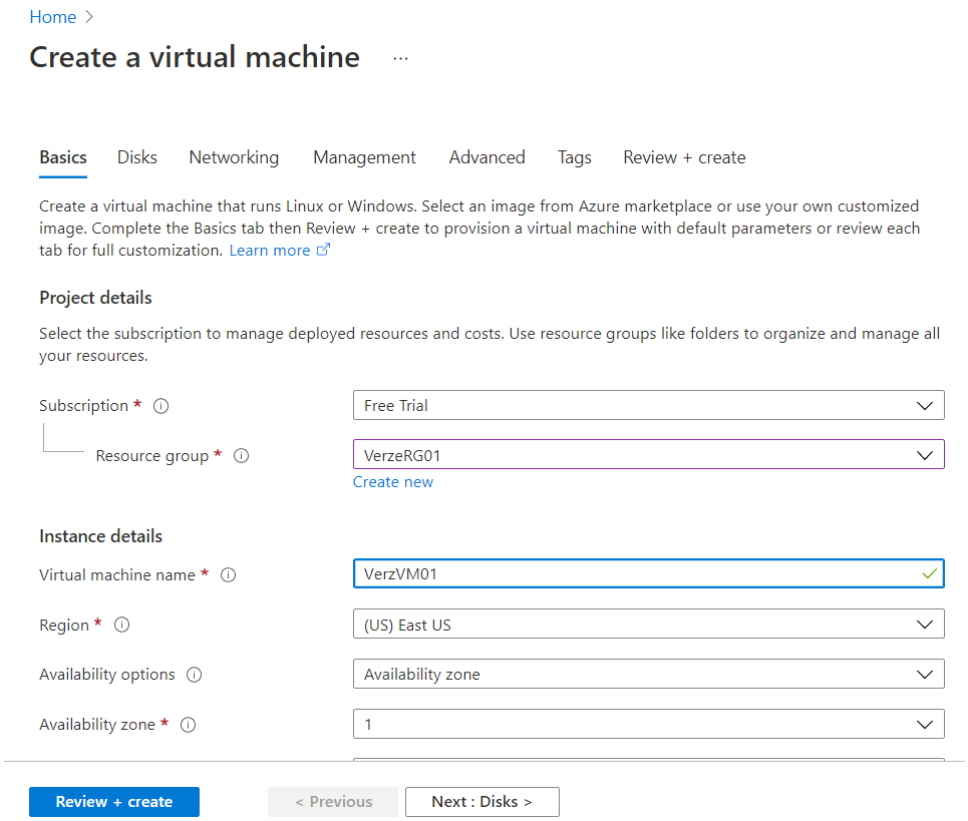
Added Subnet ‘verzsubnet01’

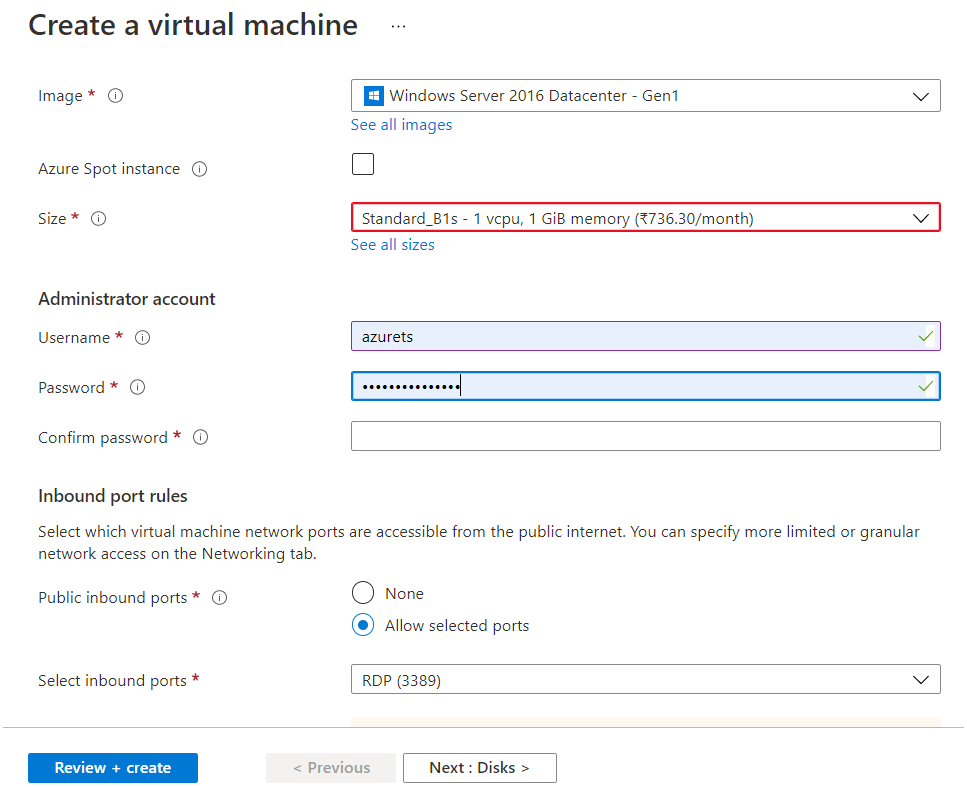




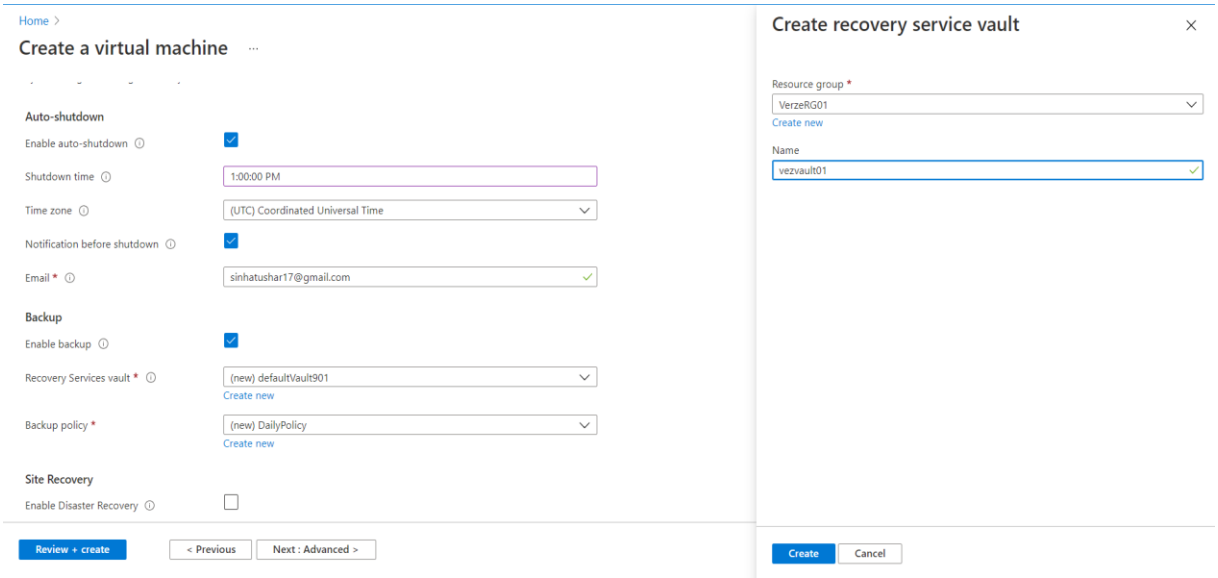
Successfully created VNet with a Subnet.

*Step 3: Virtual Machine 'VerzVM01' creation -

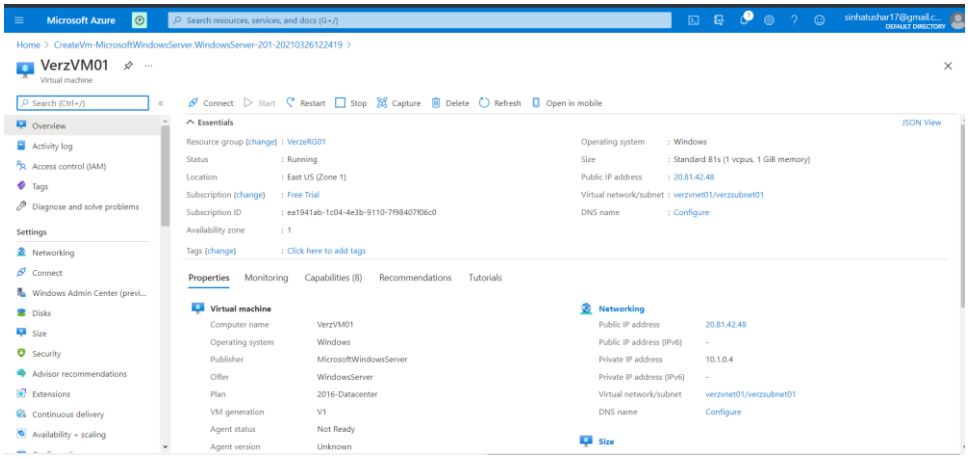




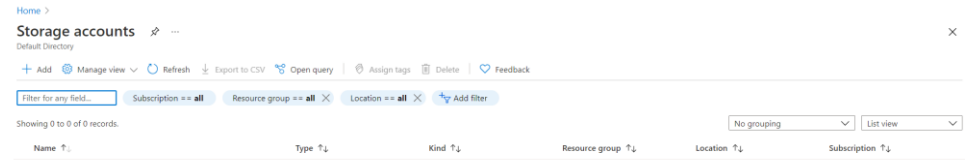
Enabling the Backup Option (Backup policy: DailyPolicy) and Creating a Recovery Service Vault ‘verzvault01’.



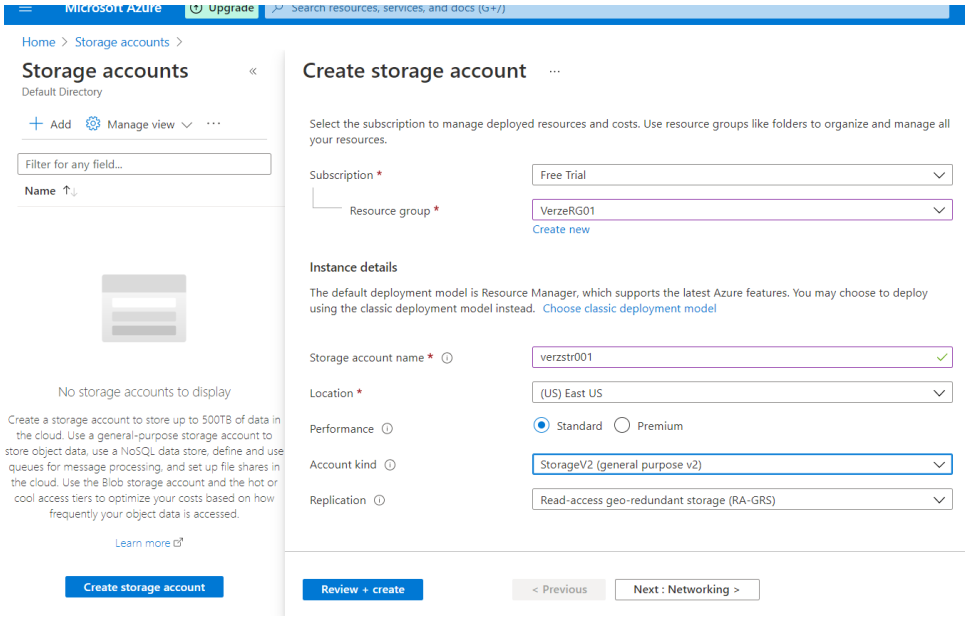
VM successfully created.

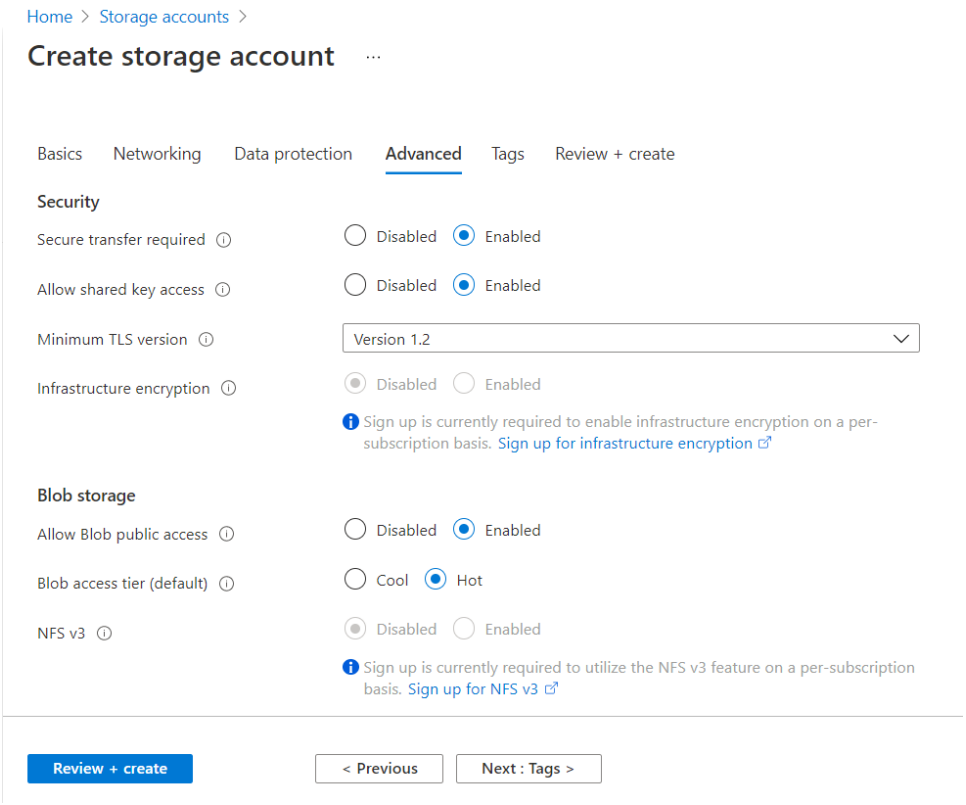


*Step 4: Creating a Blob Storage 'verzstr001' -



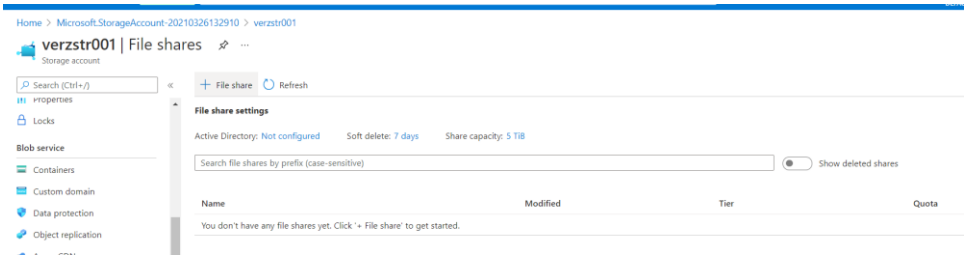
Clicked on Add option to add/create a new storage of type Blob.



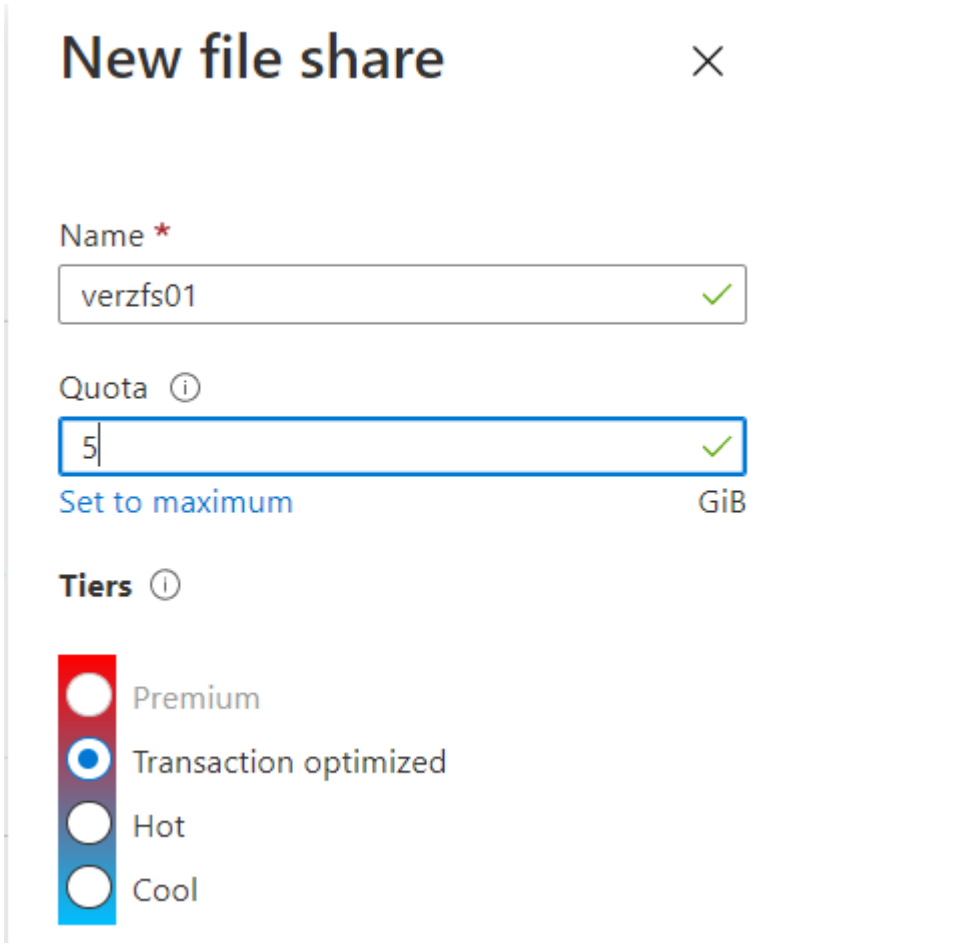


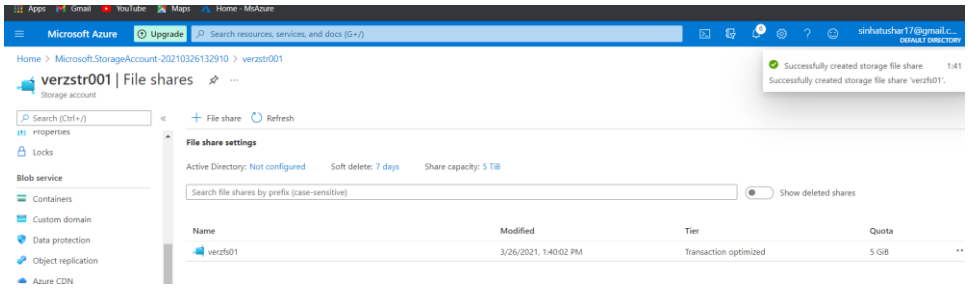
Blob Storage successfully created.

*Step5: Creating a File Share ‘verzfs01’ -



Giving it a maximum size of 5GB.

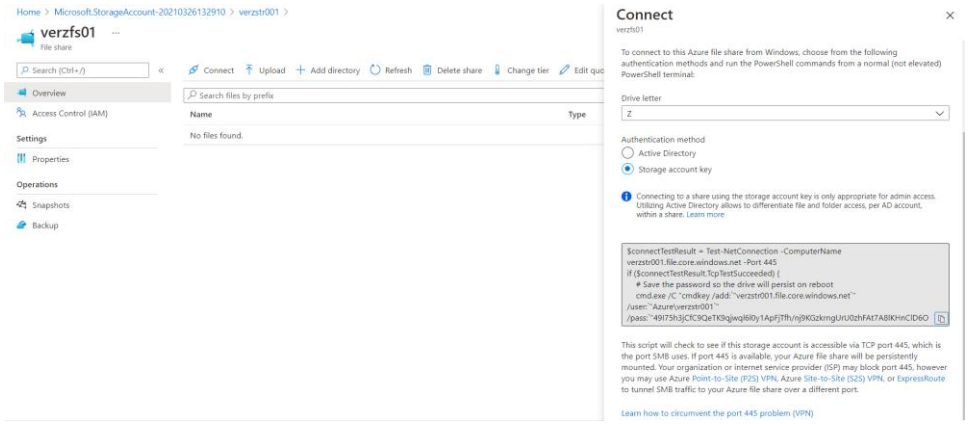


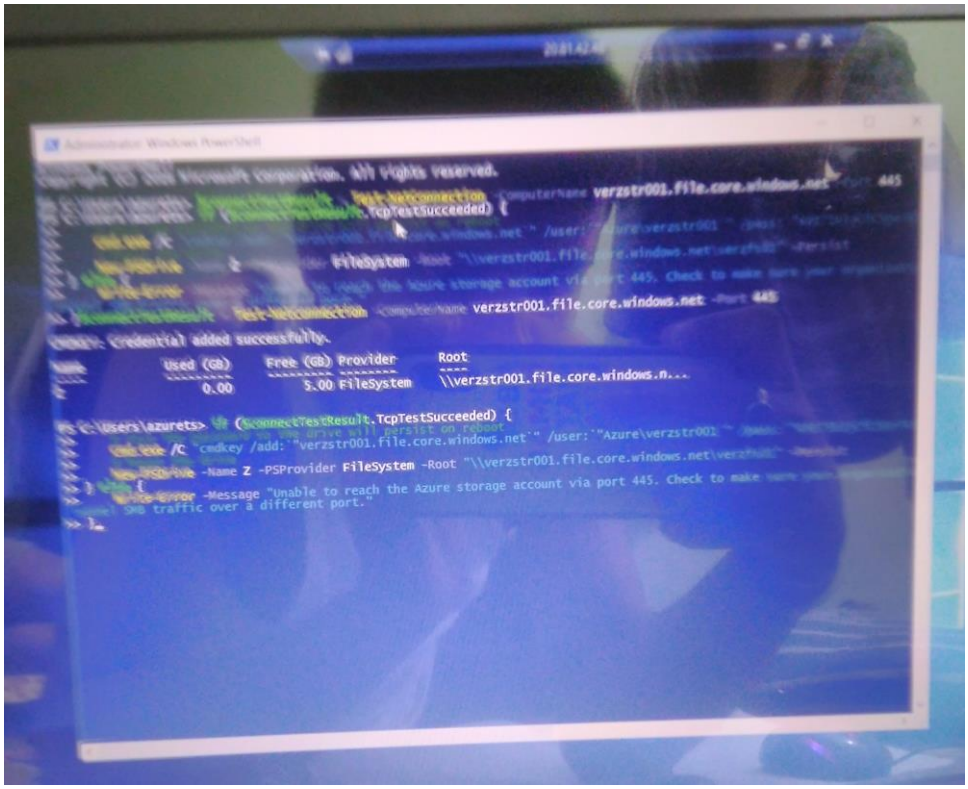


Successfully created the required File Share.

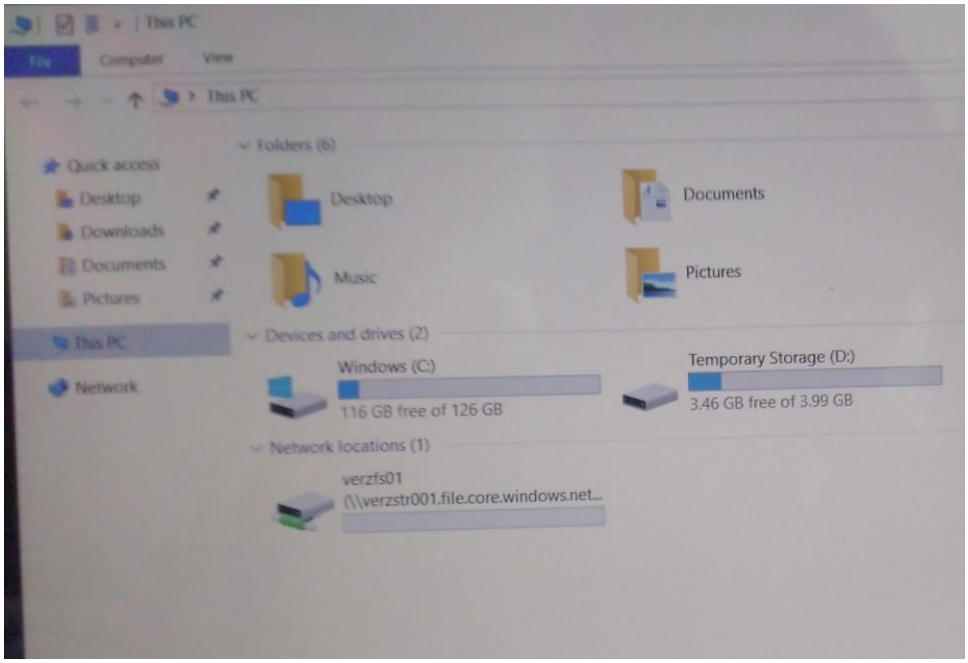
***Step 6: Mounting File Share ‘verzfs01’ on the VM ‘VerzVM01’ -**

Clicked on Connect option and Copied the Code inside the first box and then Running it in PowerShell.



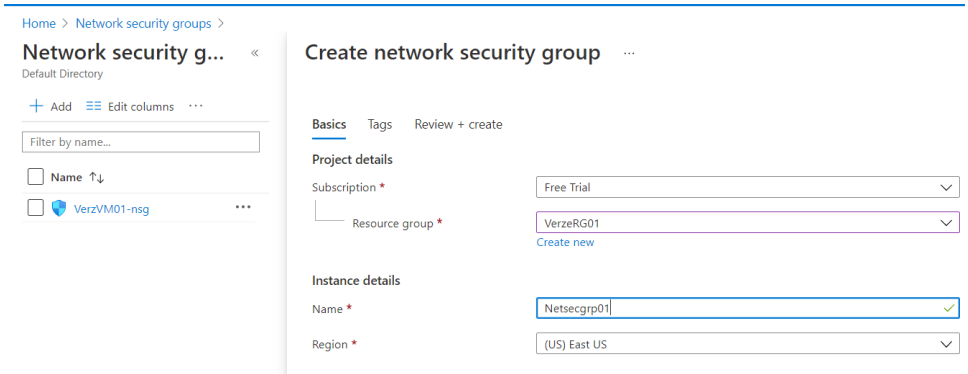


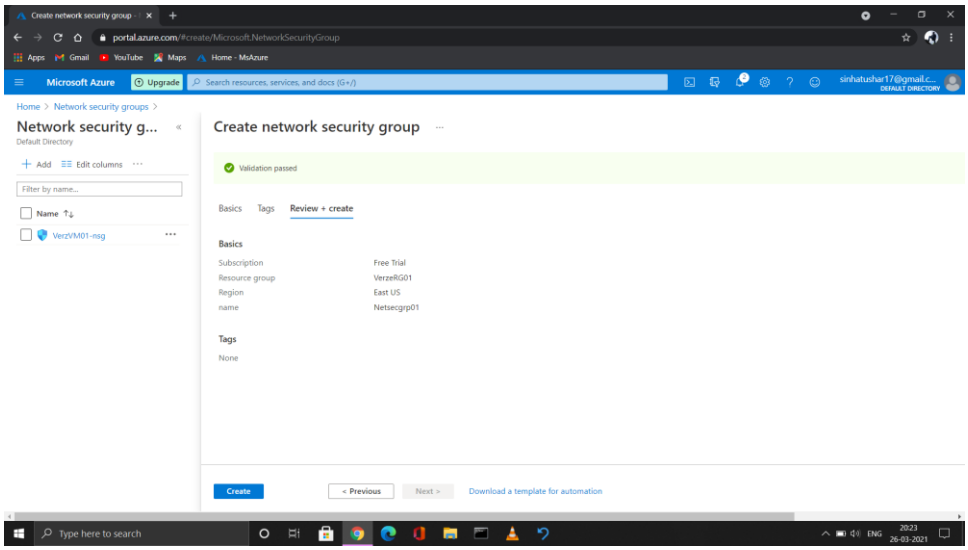
After running the code in PowerShell. Connected to the VM and Logged in... Then, going to MyPC We got to see a Disk ‘verzfs01’ attached to it. Thus, this proves that file share has been mounted into VM.



*Step 7: Creating a Network Security Group ‘Netsecgrp01’ -

Entered NSG menu and Clicked on Add and further continued to create an NSG.

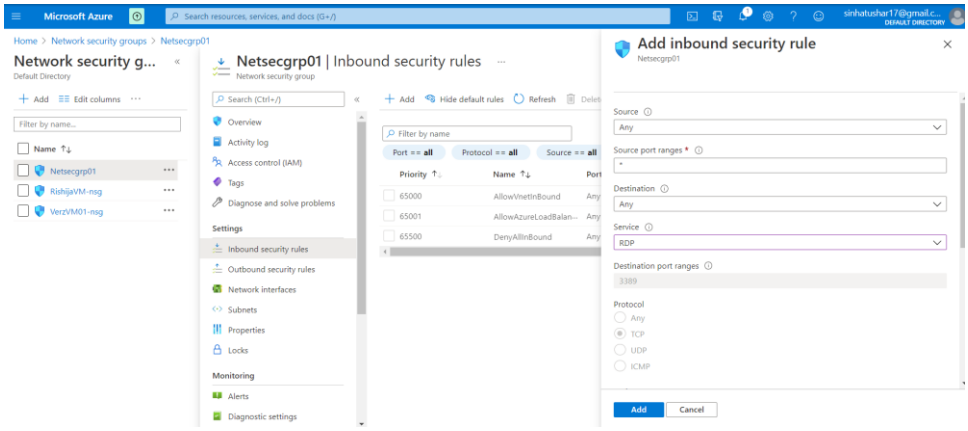




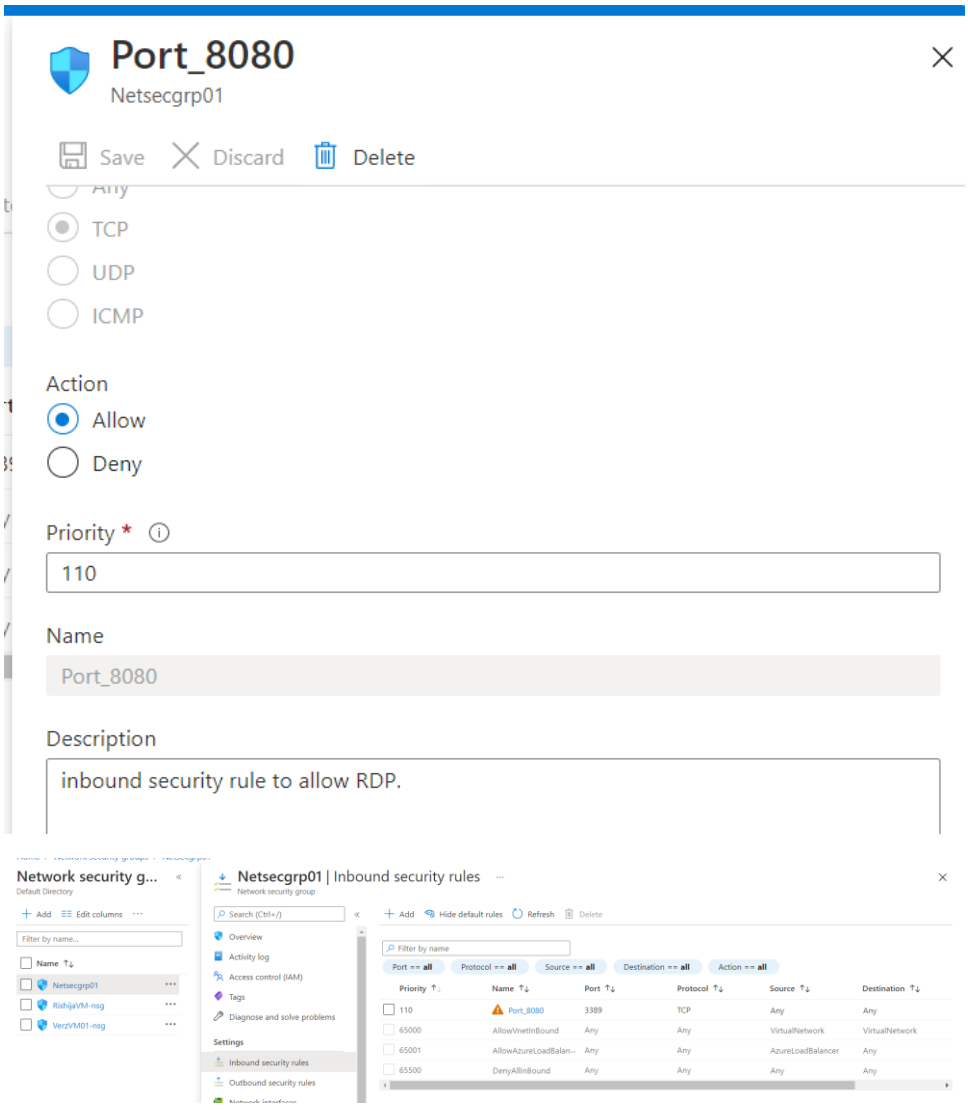
***Step 8: Configuring a Inbound security port rule to allow RDR.**

Went to NSG menu < Inbound Security Rules < Add

Then, added a port rule to allow RDP



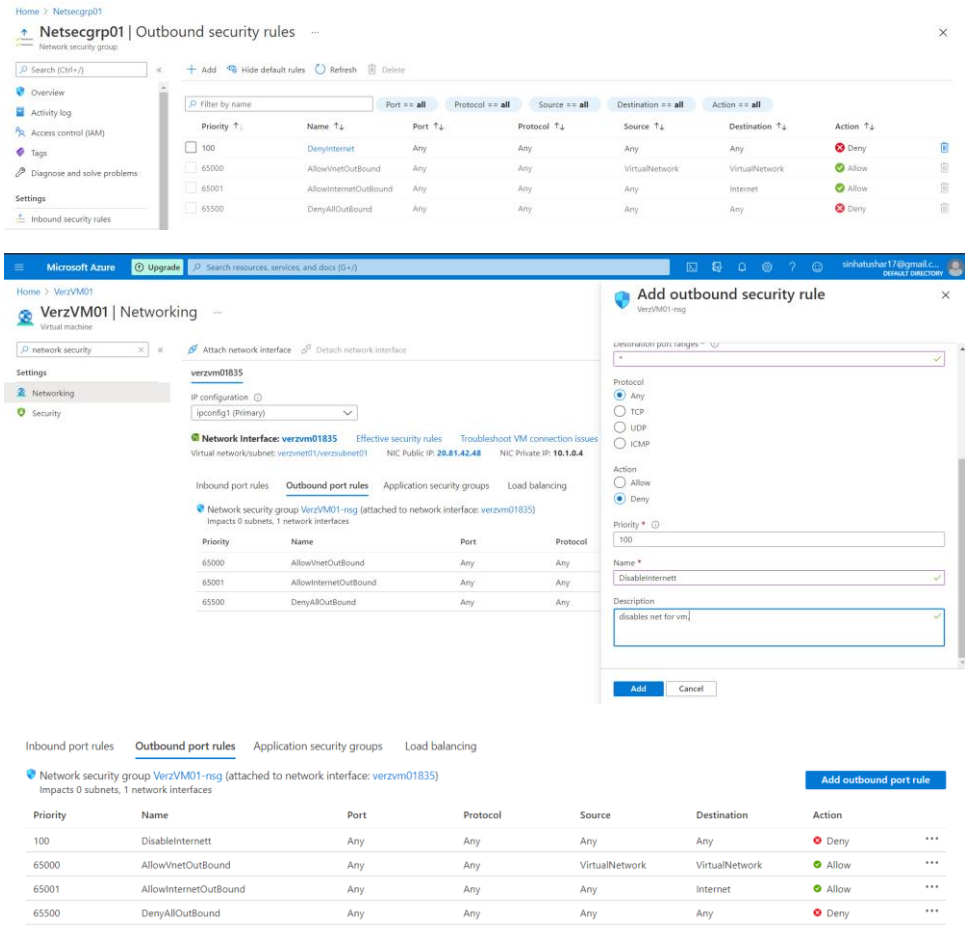
The Port_8080 Allows RDP.



***Step 9: Configuring an Outbound Security Port Rule to Deny Internet Access to VM.**

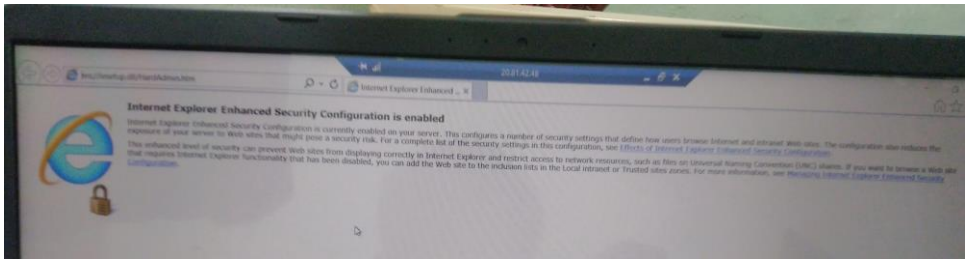
Went to NSG < Outbound Security Rules <Add

Then, clicked on add outbound port rule 'DisableInternett' to add the required outbound rule and Denied Action to Deny Internet access.



To check the outbound rule's Validation – Logged into VM < opened Internet Explorer < then searched for Batman.

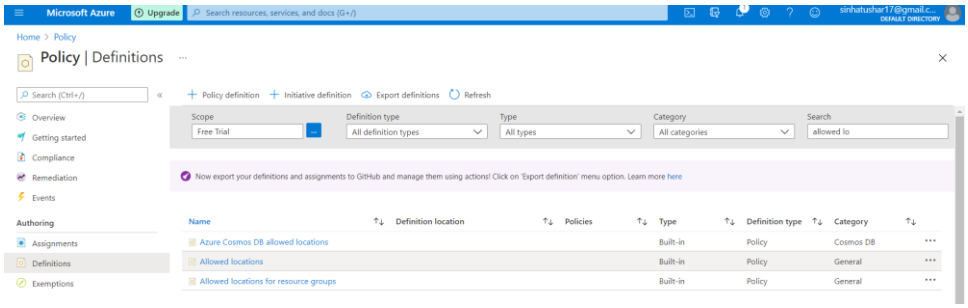
The search 'Batman' over Internet was not completed. Which proves that due to outbound port rule there is NO internet access for the VM.



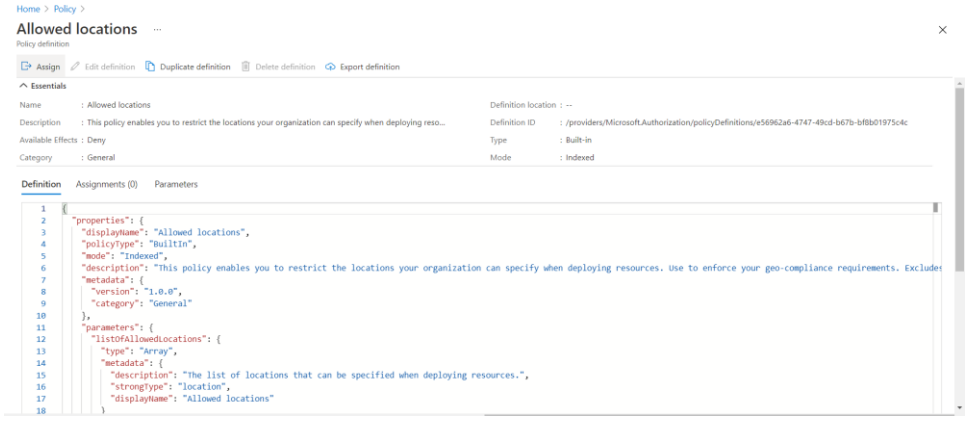
***Step 10: Creating an Azure policy to only allow Southeast Asia Location for Resource creation and then Verifying the Policy -**

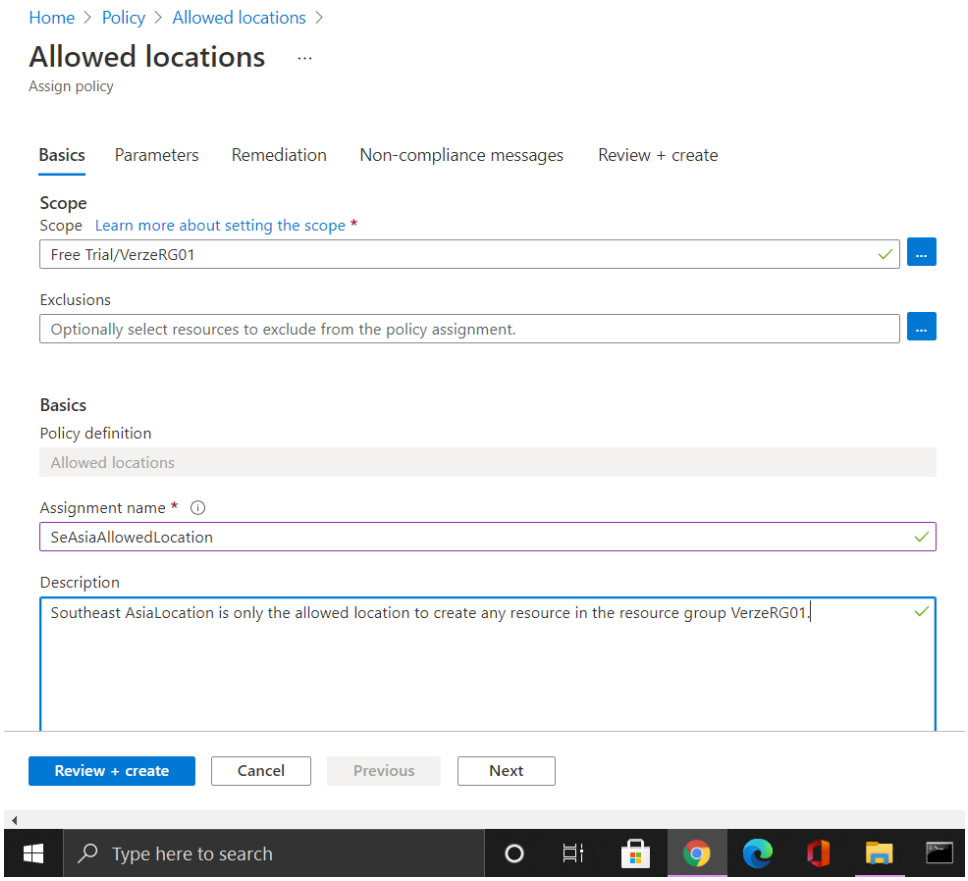
Went to Policy < Definitions

Searched Allowed Locations and entered into it. This tells that there are certain pre-defined policies.

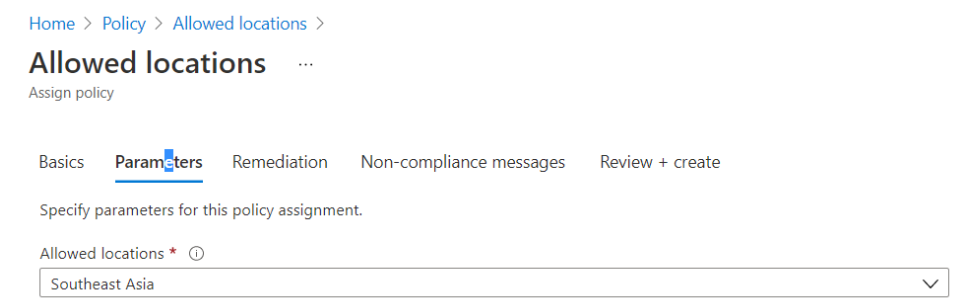


Inside Allowed Locations clicked on Assign to create a new policy.

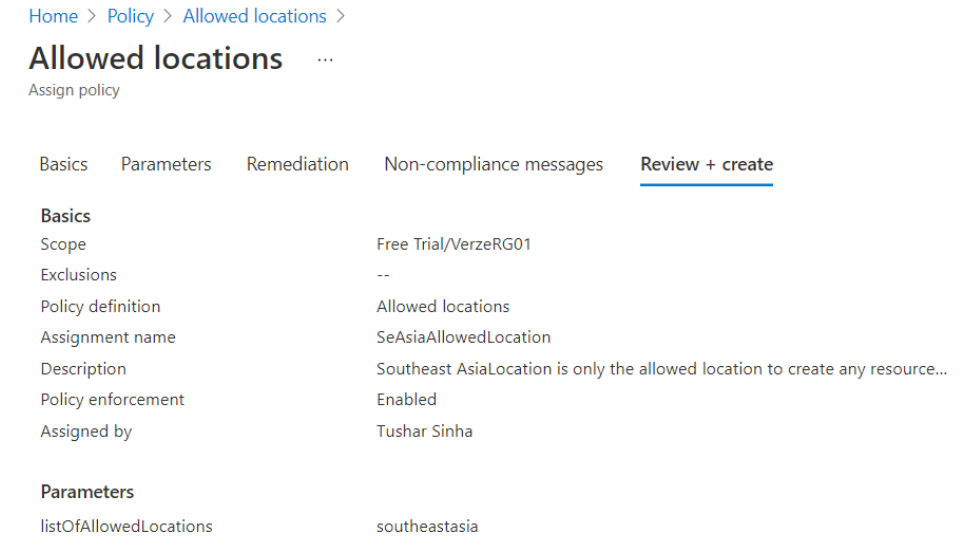


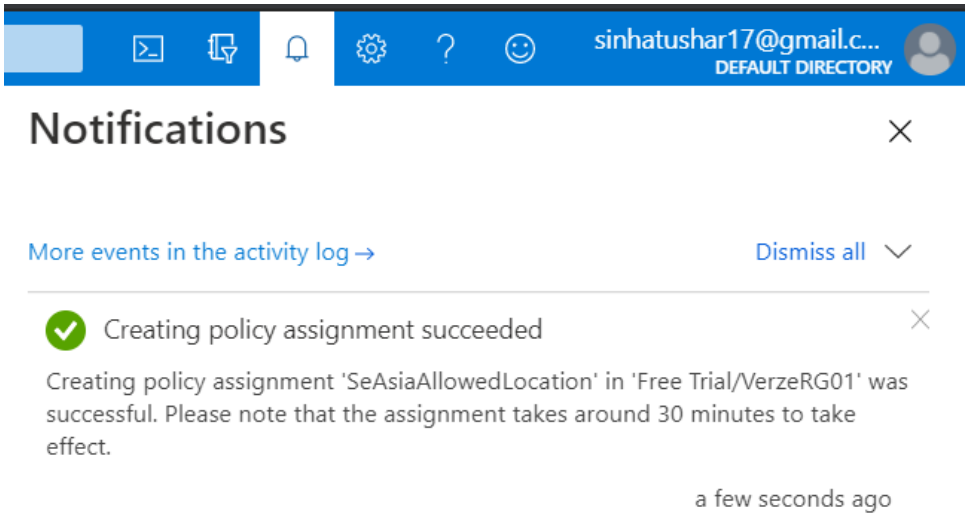


Inside Parameters section selected the Location I.e 'Southeast Asia' in which we had to allow any resource creation.



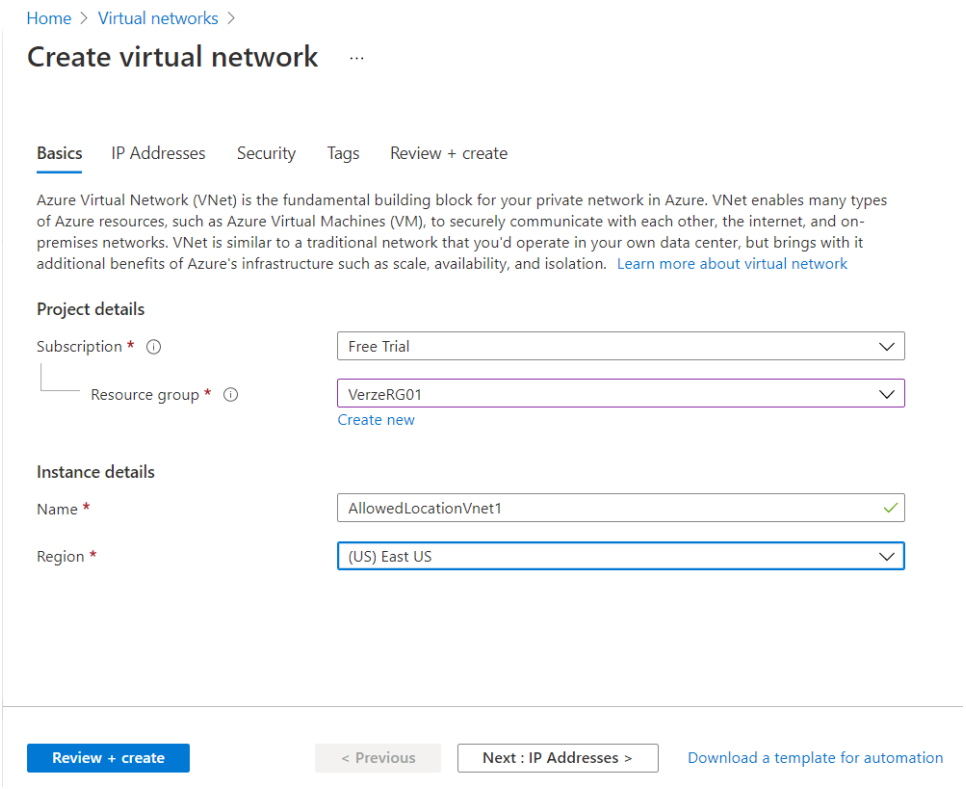
Proceeded further and Finally created the Policy.

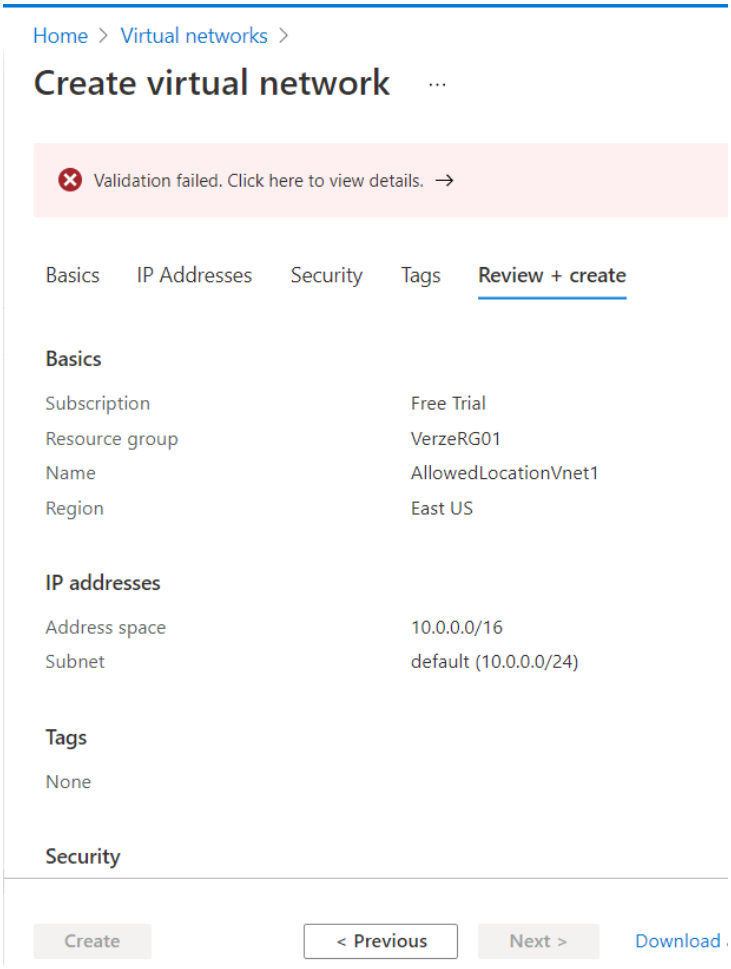




Checking the Policy Evaluation/Effect -

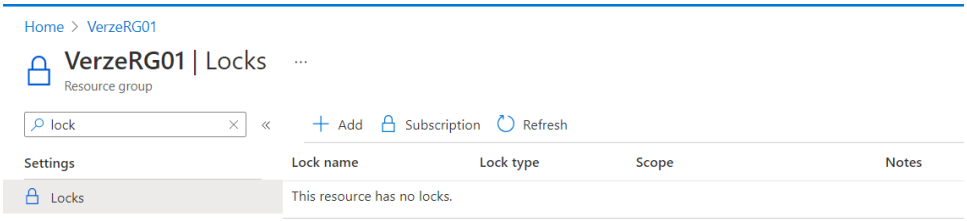
Tried to create a VM in East US Location but its creation was Unsuccessful due to the policy.


Home > Virtual networks >
Create virtual network ...
Basics IP Addresses Security Tags Review + create
Azure Virtual Network (VNet) is the fundamental building block for your private network in Azure. VNet enables many types of Azure resources, such as Azure Virtual Machines (VM), to securely communicate with each other, the internet, and on-premises networks. VNet is similar to a traditional network that you'd operate in your own data center, but brings with it additional benefits of Azure's infrastructure such as scale, availability, and isolation. Learn more about virtual network
Project details
Subscription * Free Trial
Resource group * VerzeRG01
Create new
Instance details
Name * AllowedLocationVnet1
Region * (US) East US
Review + create
< Previous
Next : IP Addresses >
Download a template for automation

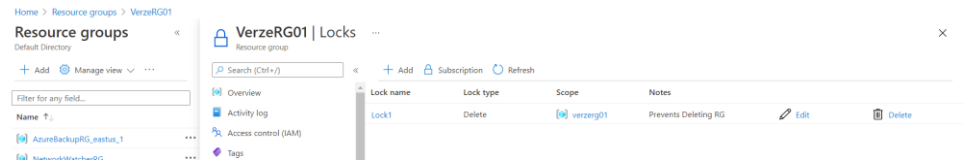

Home > Virtual networks >
Create virtual network ...
Validation failed. Click here to view details. →
Basics IP Addresses Security Tags Review + create
Basics
Subscription Free Trial
Resource group VerzeRG01
Name AllowedLocationVnet1
Region East US
IP addresses
Address space 10.0.0.0/16
Subnet default (10.0.0.0/24)
Tags
None
Security
Create
< Previous
Next >
Download

***Step 11: Applying a Lock on Resource Group ‘VerzeRG01’ and testing if I was able to delete any resource inside it or not. -**

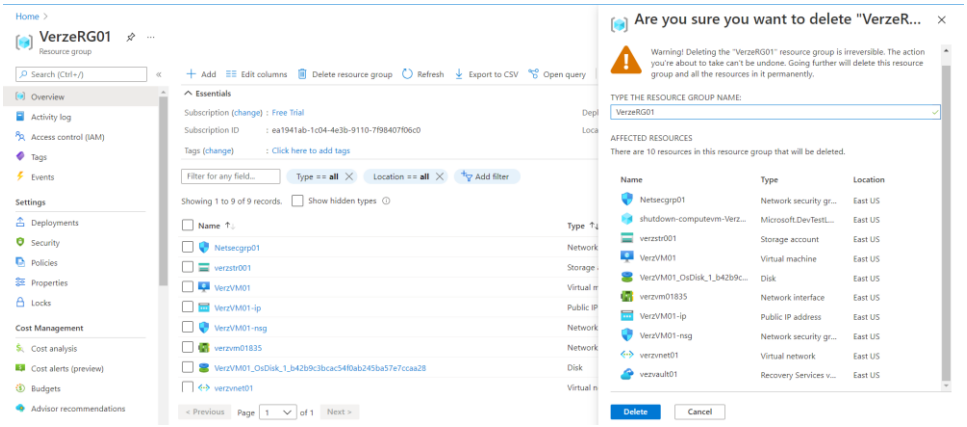
Entered the RG ‘VerzeRG01’ < Locks < Add

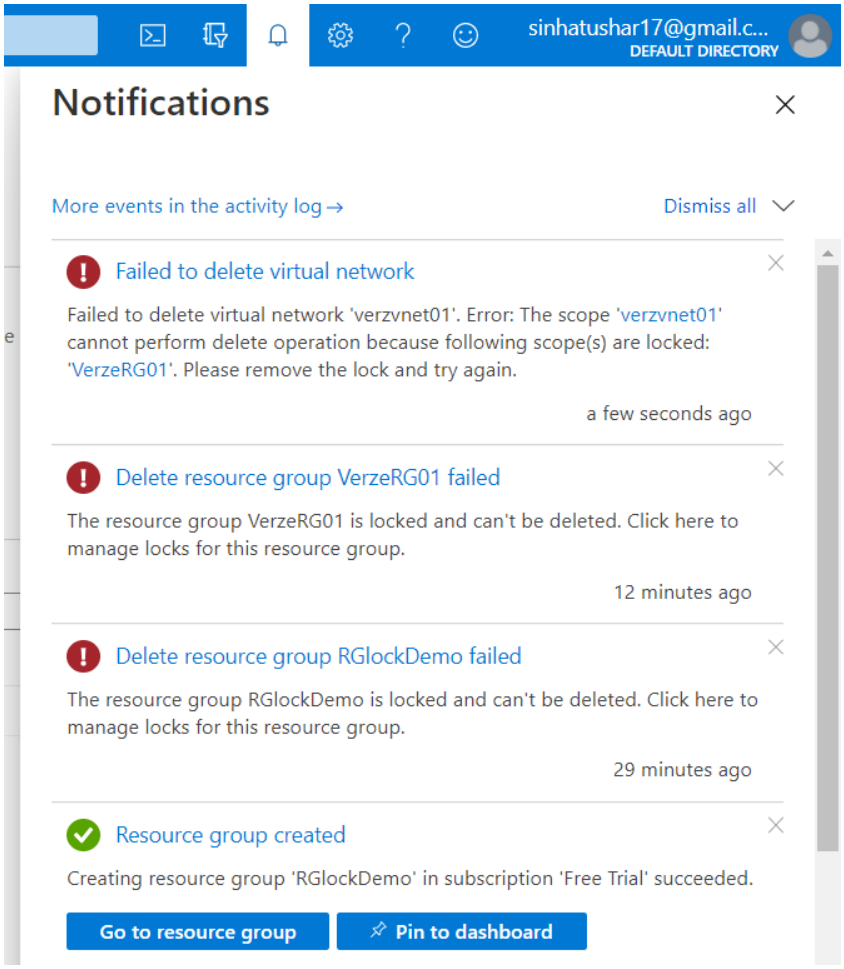


Added a Delete type Lock ‘Loc1’ that will restrict Resource Deletion.



Checking the Lock – Tried to Delete the Whole Resource Group ‘VerzeRG01’ and a Virtual Network ‘verzvnet01’, But Deletion Failed. This proves that the Lock1 is Effective.

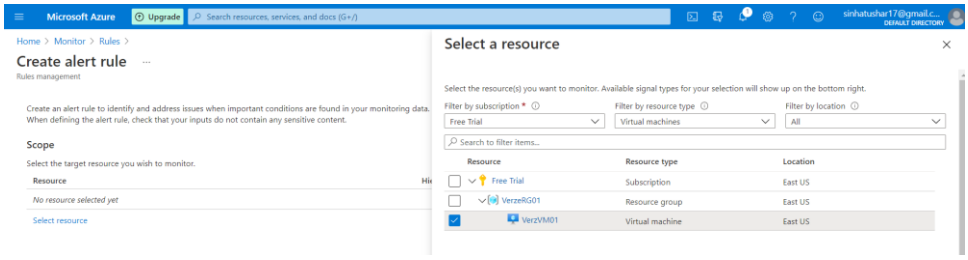




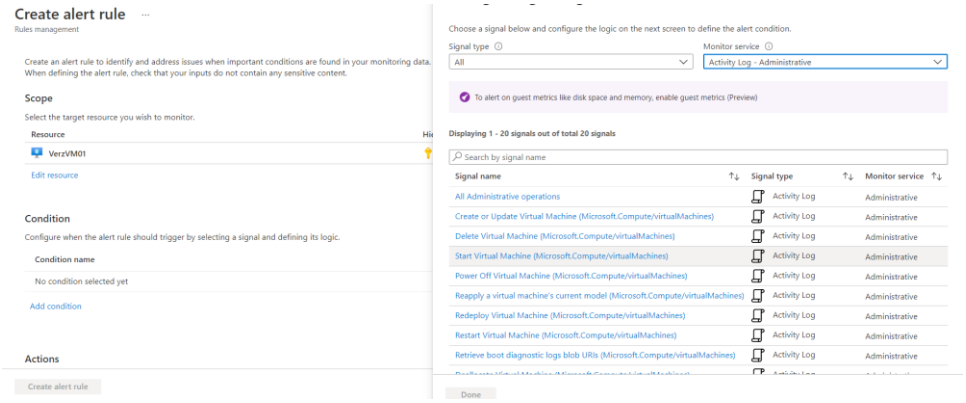
***Step 12: Setting up CPU Threshold Alert for the VM 'VerzeVM01' -**

Gone to – Monitor < Alerts <Manage alert rules < Add alert rule (to create a new required alert rule).

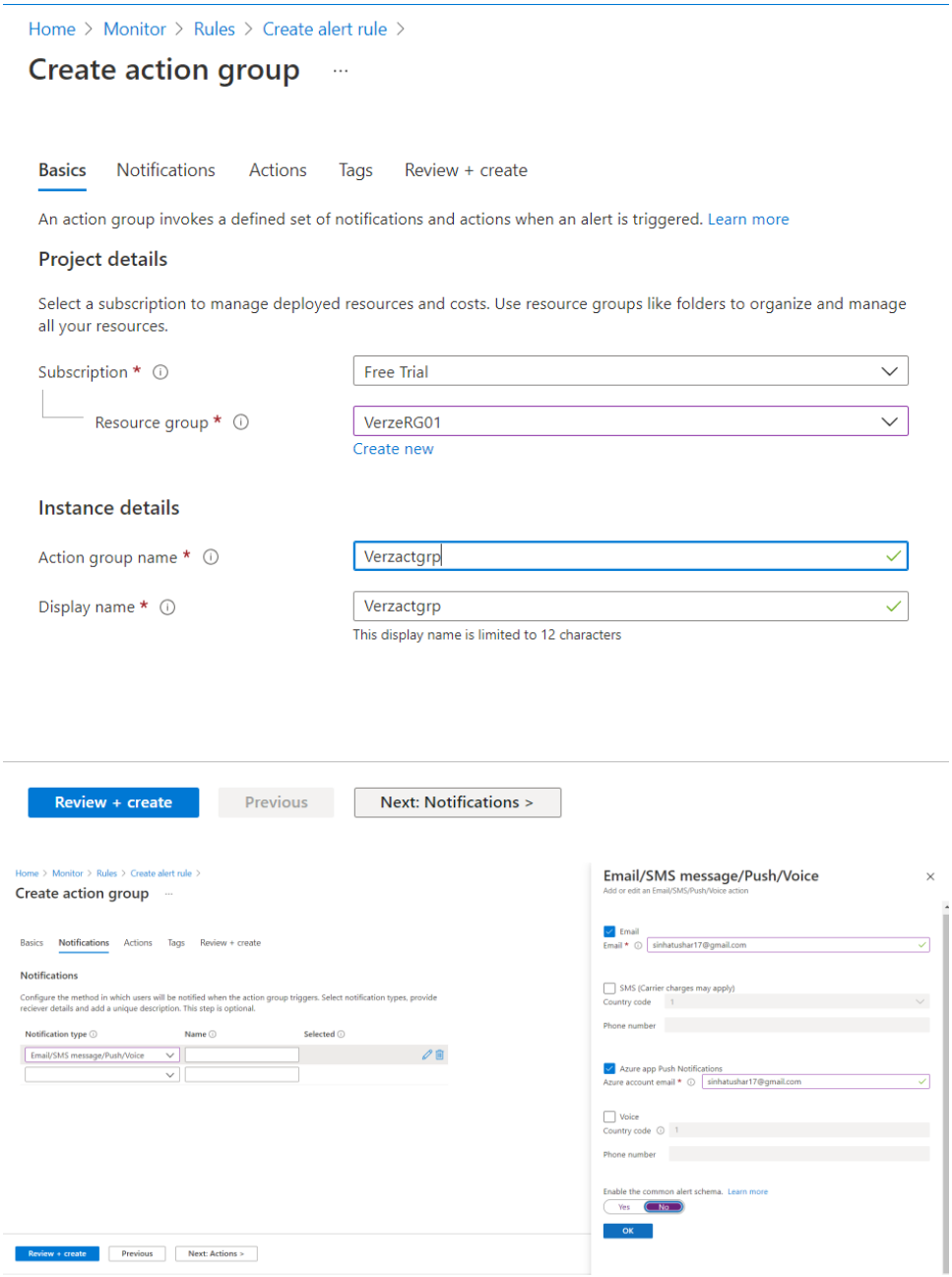
Then Selected the resource group for which we want the action group to work. (VM 'VerzVM01' is inside this resource group only)



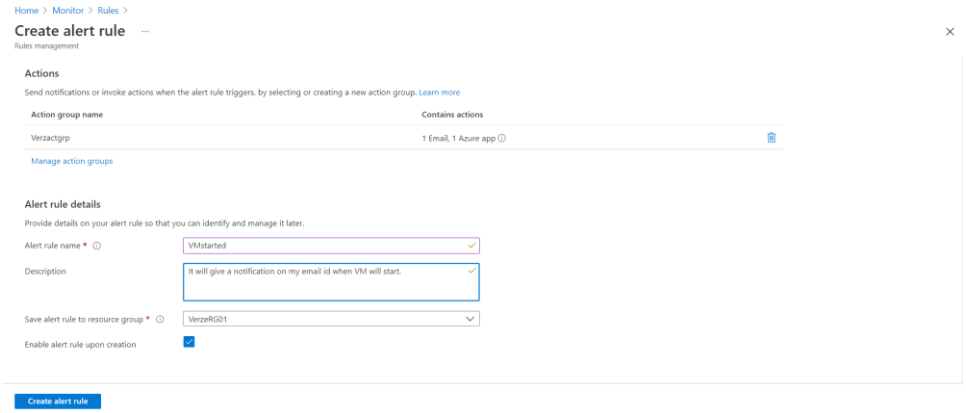
Selected the Start Virtual Machine in Signal type to get the notification whenever my VM Starts.

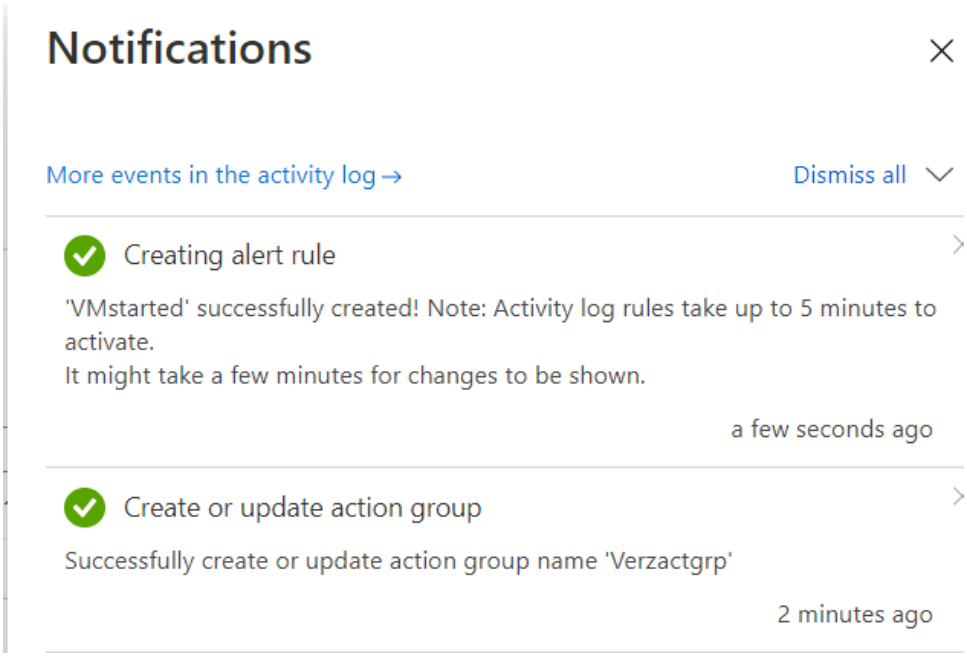


*Step 13: Creating Action Group 'Verzactgrp' for the Alert Rule-



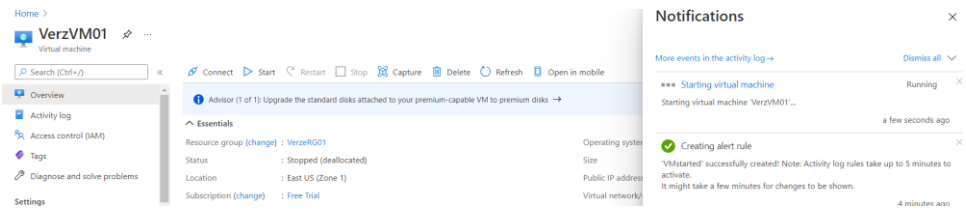
Filling the alert rule details and finally completing Alert Rule creation. -



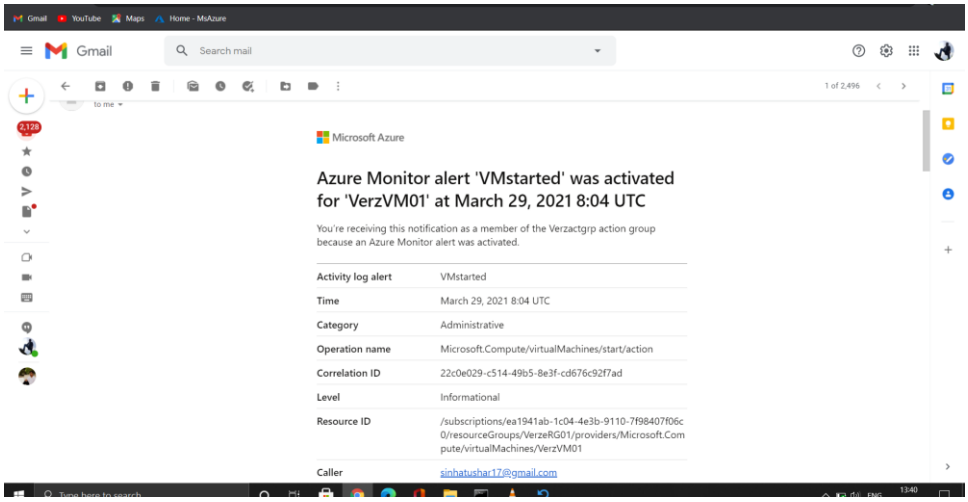


***Step 14: Checking whether if we are receiving the Alert or not. -**

Started the VM 'VerzVM01'

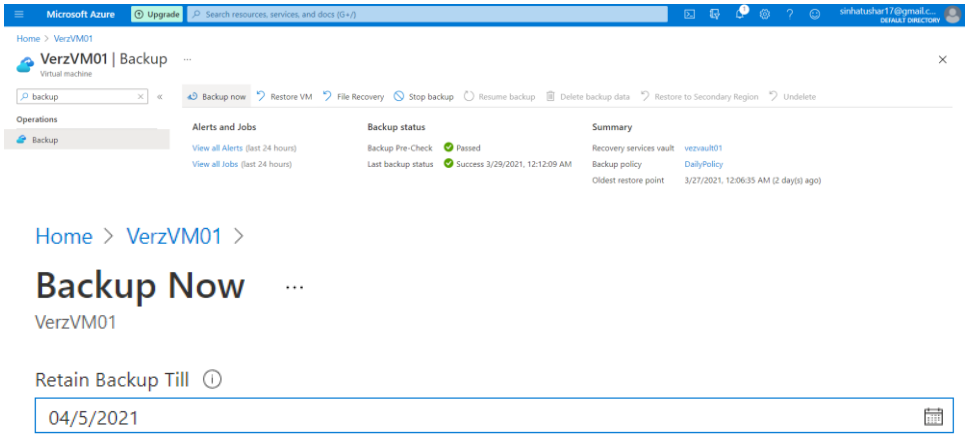


Successfully received the VM Start Notification on my Email Id.

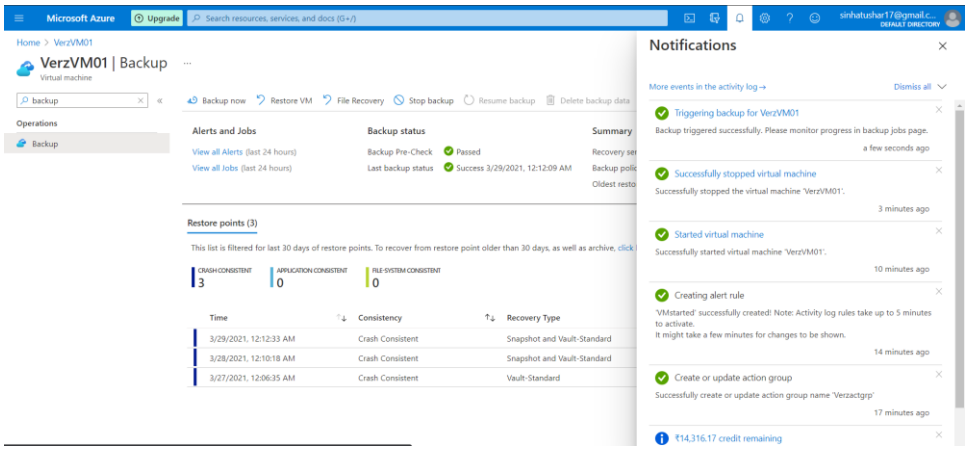


***Step 15: setting up Backup for VM 'VerzVM01'. -**

Inside the VM clicked on "Backup Now" to create its Backup.



Backup was successful as we got its Notification.



(This was all the required Steps which I had to in this Project)

- **Thankyou.**

- **Submitted By: Tushar Sinha**
- **Email Id: sinhatushar17@gmail.com**
- **Contact Number: 8294222970**
- **Project Group : AZCC02-SB1**