



Microsoft-Azure Cloud NSG Configuration

How To Secure Azure VM instances Inbound traffics

1st step go log in to your **Microsoft Azure account**,



Pick an account

Which account do you want to sign out of?

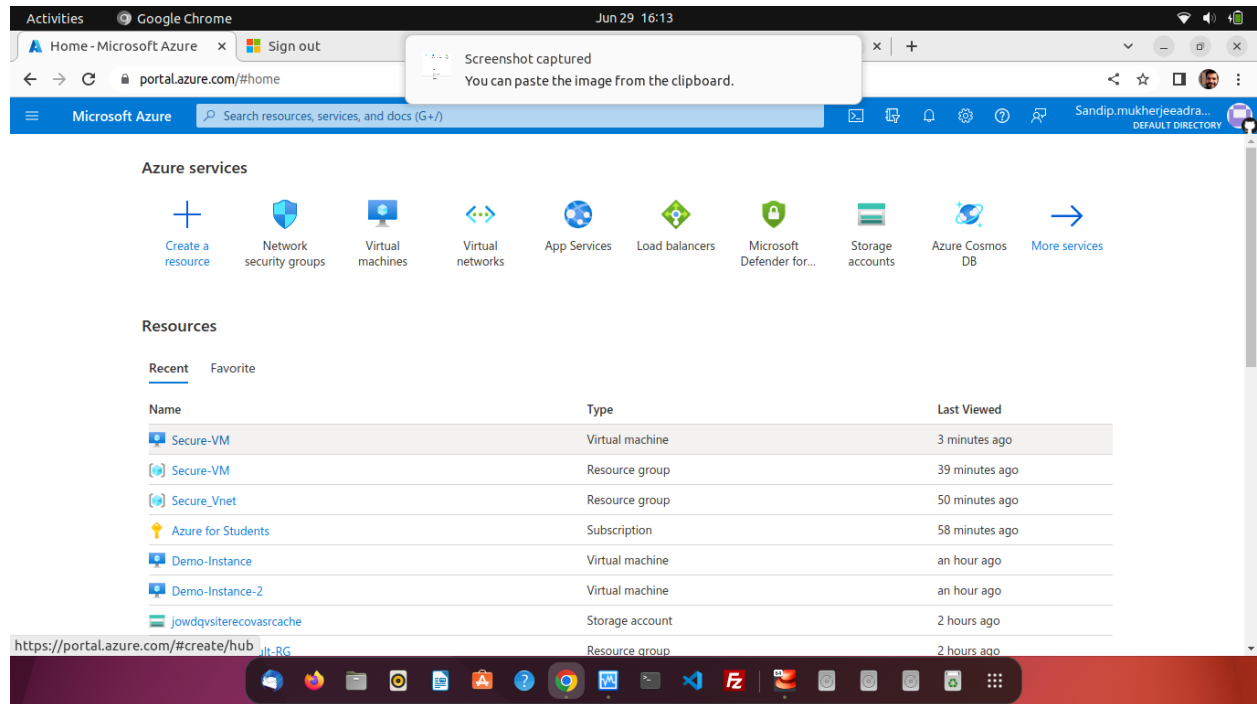


Sandip Mukherjee
Sandip.mukherjeeadra@outlook.in
Signed in



Sandip Mukherjee
sandip.mukherjee@cogenerate.in
Signed in

You will redirect to **Home** section of Microsoft Azure,



Select the 1st one recent part “**Secure-VM**” of Azure Home name type by Virtual Machine. It is not recommended that you can choose whatever name you have created in VM initialization time.

Next Step, Click on your Azure VM with respected name, after click you will get the below configuration panel.

Activities Google Chrome Jun 29 16:17

Secure-VM - Microsoft Azure Sign out node.js - Is there any Azure? Untitled document - Google Docs

portal.azure.com/#@Sandipmukherjeeadraoutlook.onmicrosoft.com/resource/subscriptions/b66e7c1e-315e-4a50-9679-ff8bd39907df/resourcegroups/Secure-VM/p...

Microsoft Azure Search resources, services, and docs (G+)

Home >

Secure-VM

Virtual machine

Search (Ctrl+/)

Connect Start Restart Stop Capture Delete Refresh Open in mobile CLI / PS

Overview

- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems

Settings

- Networking
- Connect
- Disks
- Size
- Microsoft Defender for Cloud
- Advisor recommendations
- Extensions + applications

Essentials

Resource group (move) : [Secure-VM](#)

Status : Running

Location : Australia East

Subscription (move) : [Azure for Students](#)

Subscription ID : b66e7c1e-315e-4a50-9679-ff8bd39907df

Tags (edit) : [Click here to add tags](#)

Operating system : Linux (ubuntu 20.04)

Size : Standard D2s v3 (2 vcpus, 8 GiB memory)

Public IP address : [20.5.96.198](#)

Virtual network/subnet : [Secure-VM-vnet/default](#)

DNS name : [Not configured](#)

JSON View

Properties Monitoring Capabilities (7) Recommendations Tutorials

Virtual machine

Computer name : Secure-VM

Health state : -

Networking

Public IP address : [20.5.96.198](#)

Public IP address (IPv6) : -

Feedback

https://portal.azure.com/#@Sandipmukherjeeadraoutlook.onmicrosoft.com/resource/subscriptions/b66e7c1e-315e-4a50-9679-ff8bd39907df/resourcegroups/Secure-VM/providers/Microsoft...

Below the **“Secure-VM”** Heading have another subheading name **“Setting”**. Under the settings section have another option **“Networking”**, select networking option. After selecting the **networking** option again you will get details of networking configurations. After selecting the networking option you will see full details of allowed **Inbound port rules**.

Activities Google Chrome Jun 29 16:26

Secure-VM - Microsoft Azure Untitled document - Google Docs

portal.azure.com/#@Sandipmukherjeeadraoutlook.onmicrosoft.com/resource/subscriptions/b66e7c1e-315e-4a50-9679-ff8bd39907df/resourcegroups/Secure-VM/p...

Microsoft Azure Search resources, services, and docs (G+)

Home > Secure-VM

Secure-VM | Networking

Virtual machine

Search (Ctrl+/)

Attach network interface Detach network interface Feedback

IP configuration ⓘ

ipconfig1 (Primary)

Network Interface: **secure-vm929** Effective security rules Troubleshoot VM connection issues Topology

Virtual network/subnet: [Secure-VM-vnet/default](#) NIC Public IP: [20.5.96.198](#) NIC Private IP: [10.6.0.4](#) Accelerated networking: **Enabled**

Inbound port rules Outbound port rules Application security groups Load balancing

Network security group [Secure-VM-nsg-security](#) (attached to network interface: [secure-vm929](#))

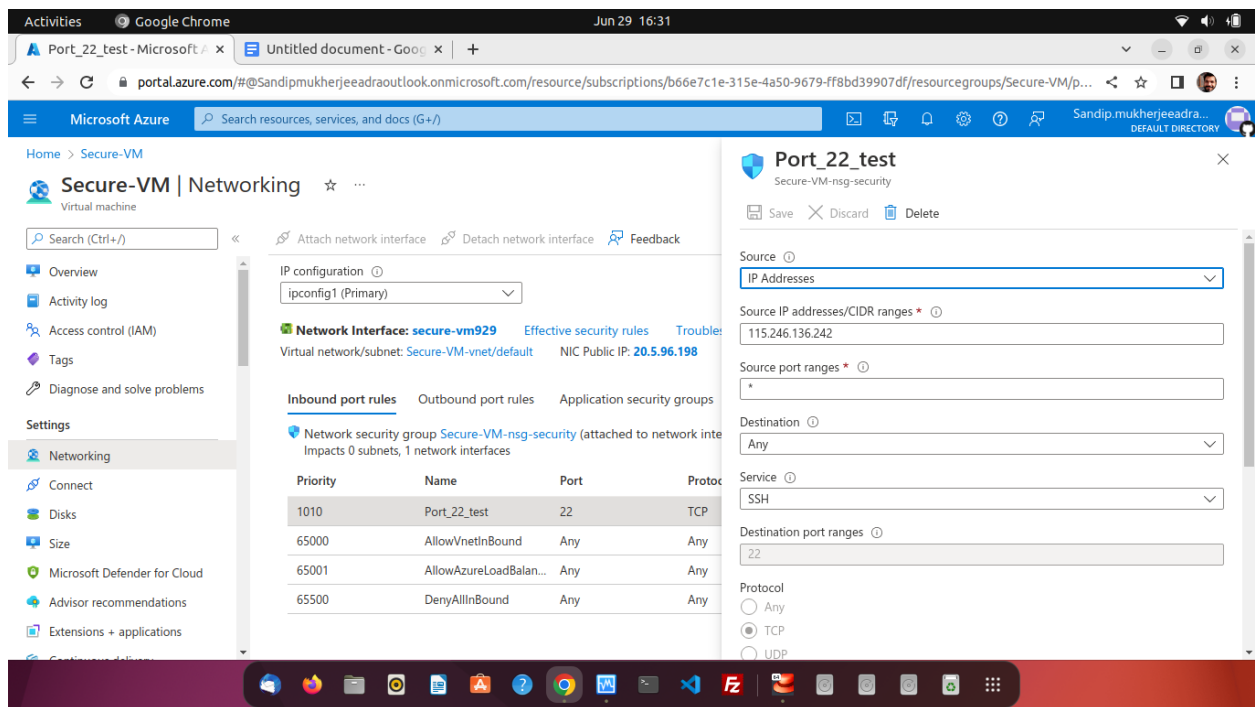
Impacts 0 subnets, 1 network interfaces

Add inbound port rule

Priority	Name	Port	Protocol	Source	Destination	Action
1010	Port_22_test	22	TCP	115.246.136.242	Any	Allow ...
65000	AllowVnetInBound	Any	Any	VirtualNetwork	VirtualNetwork	Allow ...
65001	AllowAzureLoadBalan...	Any	Any	AzureLoadBalancer	Any	Allow ...
65500	DenyAllInBound	Any	Any	Any	Any	Deny ...

Go to the “**Add Inbound port rule**” and follow the procedure below to make your instance access only the **selected ip address**. Nobody can access your Azure VM instance with other network interfaces or other ISP. Now this is high time to know how to make your VM your selected ip access.

Please follow carefully the process,



This page will pop-up on your screen, but you have to focus only on the Inbound Rule add section part, which I have attached below respectively.



Port_22_test

Secure-VM-nsg-security



Save



Discard



Delete

Source ⓘ

IP Addresses



Any

IP Addresses

Service Tag

Application security group

Destination ⓘ

Any



Service ⓘ

SSH



Destination port ranges ⓘ

22

Protocol



Any




TCP




UDP


Choose 1st one **IP Addresses** in “Source” type.


 **Port_22_test**

Secure-VM-nsg-security

×

 Save

 Discard

 Delete

Source ⓘ

IP Addresses

Source IP addresses/CIDR ranges * ⓘ

115.246.136.242

Source port ranges * ⓘ

*

Destination ⓘ

Any

Service ⓘ

SSH

Destination port ranges ⓘ

22

Protocol

☐ Any

☒ TCP

☐ UDP

Next, **Source IP addresses/CIDR ranges** . In that section you have to enter the selected ip address that you want to allow the instances for SSH access or whatever you want to give access with the selected ip address. **Source port ranges** you can allow with star “*” , because the ip respectively secure by your end what is hypothetically considered. Next **Destination** you can process with “Any” . “**Service**” there I have chosen “SSH” , you can choose whatever you want as per your IT requirements. The “**Destination port ranges**” automatically select by the system, “**Protocol**” fill will automatically select by the system again. In next section you have no need to change anything.



Port_22_test

Secure-VM-nsg-security



Save



Discard



Delete

Protocol

- ☐ Any
- ☒ TCP
- ☐ UDP
- ☐ ICMP

Action

- ☒ Allow
- ☐ Deny

Priority * ⓘ

1010



Name

Port_22_test

Description

[LEAVE THE SECTION, NO NEED TO MODIFY]

After the end of the whole manual configuration, just **“Save”** and go to ssh your Azure instance with selected ip address in **“Inbound rule”** Azure **NSG** configuration and you are able to access the **Azure-VM**.

Thank you.

Sandip Mukherjee.