

Azure VNet Peering

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CEQ-525

Introduction:

Azure Virtual Network is used for the **Virtual Network Peering**, empowers users to flawlessly communicate with virtual networks in Azure. VNet Peering in Azure allows the traffic of one virtual network to communicate to another virtual network. This is basically used for database failover, disaster recovery, or cross-region data replication. VPN gateways are used in an encrypted connection in the region but VNet Peering provides connection sharing in different regions.

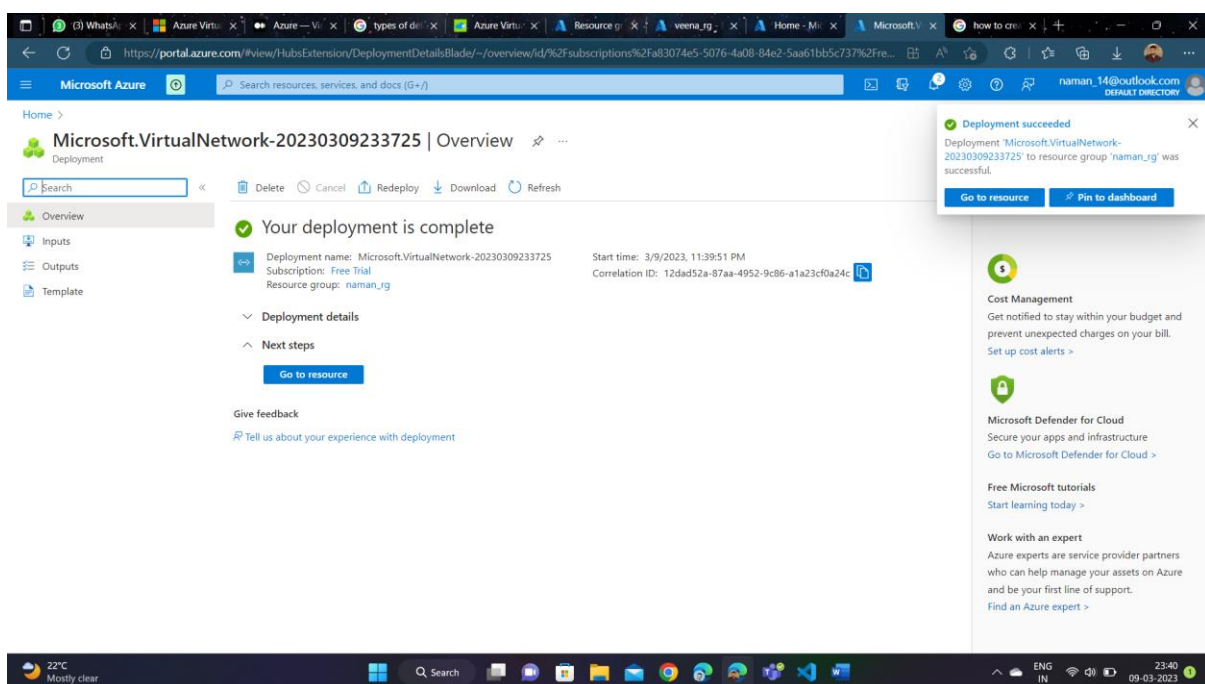
Types Of VNet Peering:

Default VNet Peering: It empowers the connectivity between various VNets within the same Azure region.

Global VNet Peering: It allows Virtual networks to connect across different Azure regions. It provides private peering with low latency and high bandwidth in Azure backbone infrastructure.

Steps to do VNet Peering:

1. First, we will create a 2 VNets.



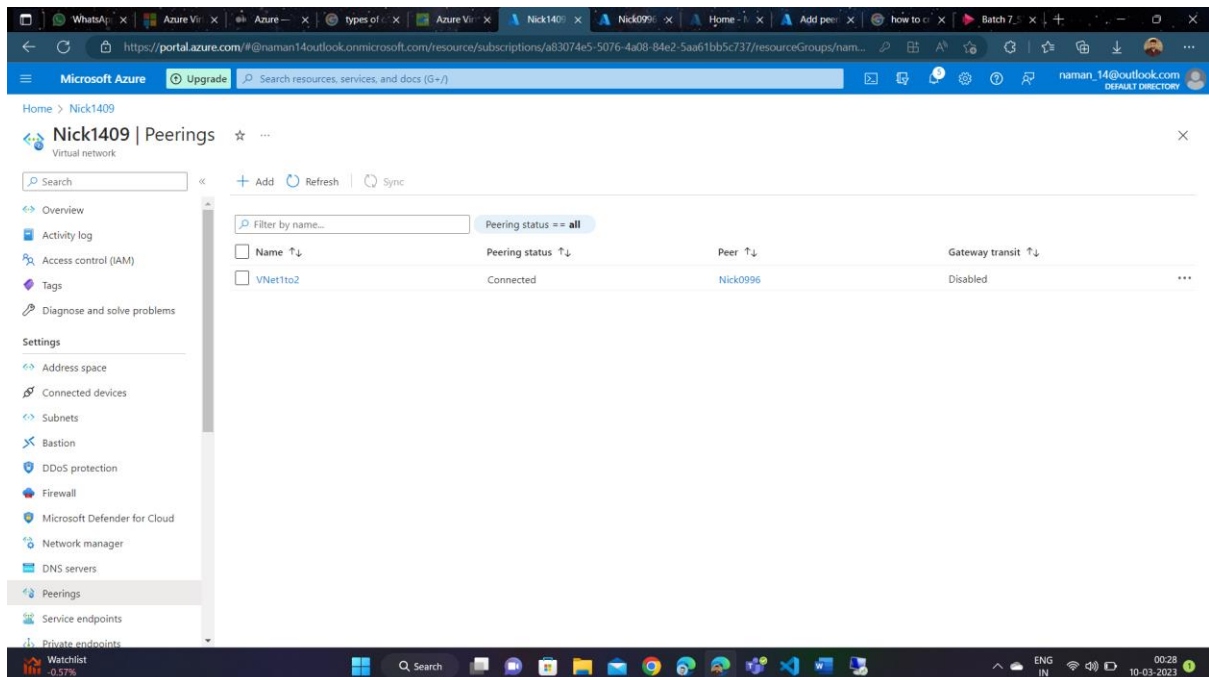
2. Then, we will create a VM each in both Vnets. After the successful creation of VMs, connect them to RDP.

The screenshot shows the Microsoft Azure portal interface. The main heading is "CreateVm-MicrosoftWindowsDesktop.Windows-10-win10-20230309235105 | Overview". The deployment status is "Your deployment is complete". The deployment details show the name "CreateVm-MicrosoftWindowsDesktop.Windows-10-win10-20230309235105", subscription "Free Trial", and resource group "naman_rg". The deployment started on 3/9/2023 at 11:53:47 PM. The next steps include "Setup auto-shutdown", "Monitor VM health, performance and network dependencies", and "Run a script inside the virtual machine". A "Deployment succeeded" notification is visible in the top right corner. The sidebar on the right contains links for "Cost Management", "Microsoft Defender for Cloud", "Free Microsoft tutorials", and "Work with an expert".

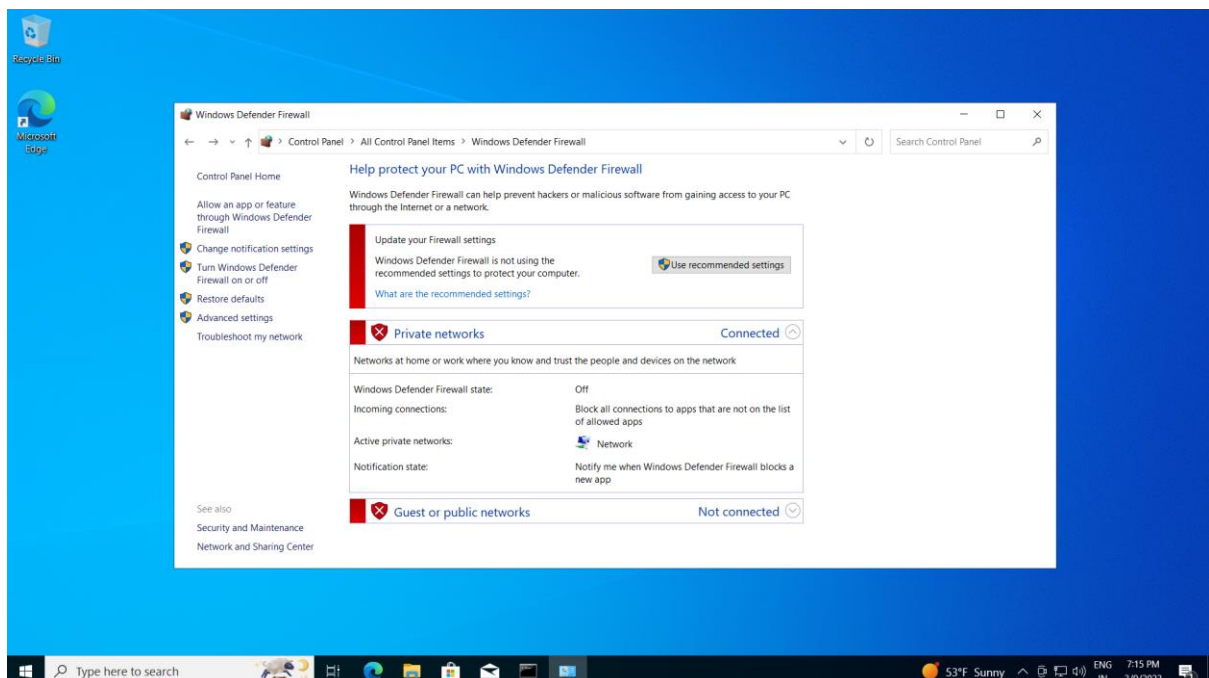
3. Now, open any one VNet. Go to the Peerings section. Add Peering.

The screenshot shows the "Add peering" configuration page in the Microsoft Azure portal. The page title is "Add peering" and the breadcrumb is "Home > Nick1409 | Peerings". The page contains a warning message: "For peering to work, two peering links must be created. By selecting remote virtual network, Azure will create both peering links." The configuration options include: "This virtual network" (Peering link name: VNet1to2), "Traffic to remote virtual network" (Allow (default)), "Traffic forwarded from remote virtual network" (Allow (default)), and "Virtual network gateway or Route Server" (None (default)). The "Remote virtual network" section is partially visible at the bottom.

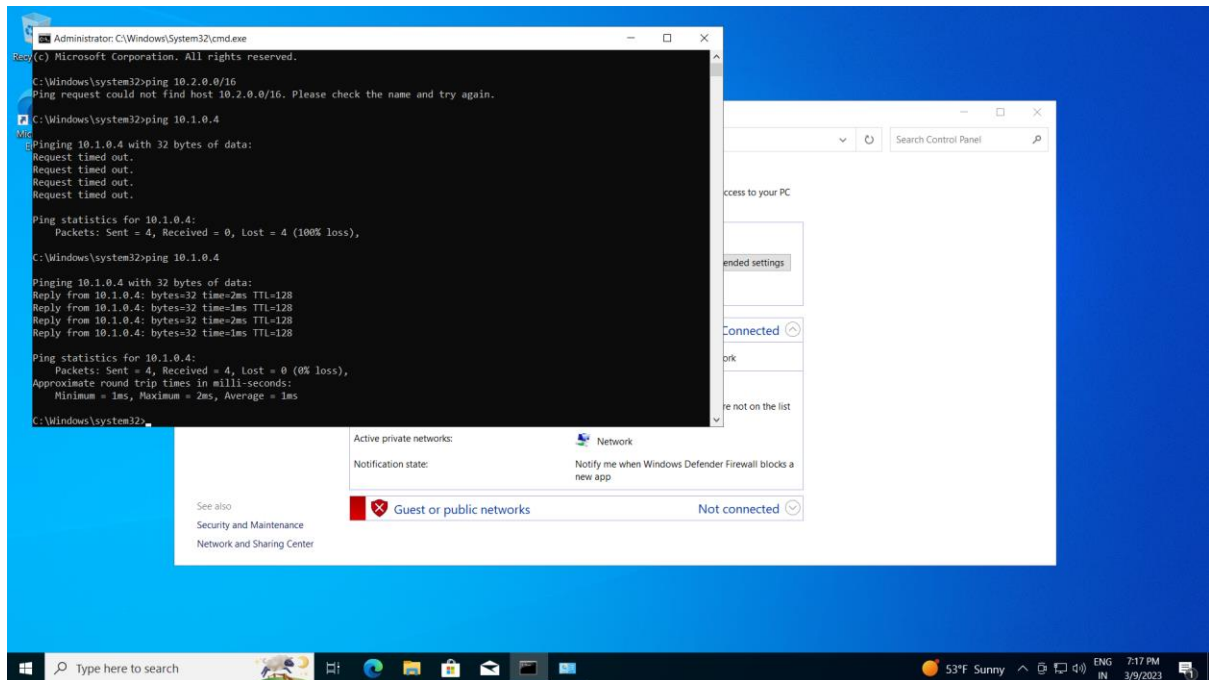
4. Both the VNets are peered.



5. Now, go to both VMs and disable their respective firewalls just to ensure that it doesn't throw a 'Request Time Out Error' in CMD.



6. Now, go to 2nd VM, open CMD, type a command ping {Private IP of 1st VM}. Press Enter. Similarly, go to 1st VM, open CMD, type a command ping {Private IP of 2nd VM}.



7. This is how VNet Peering is done.