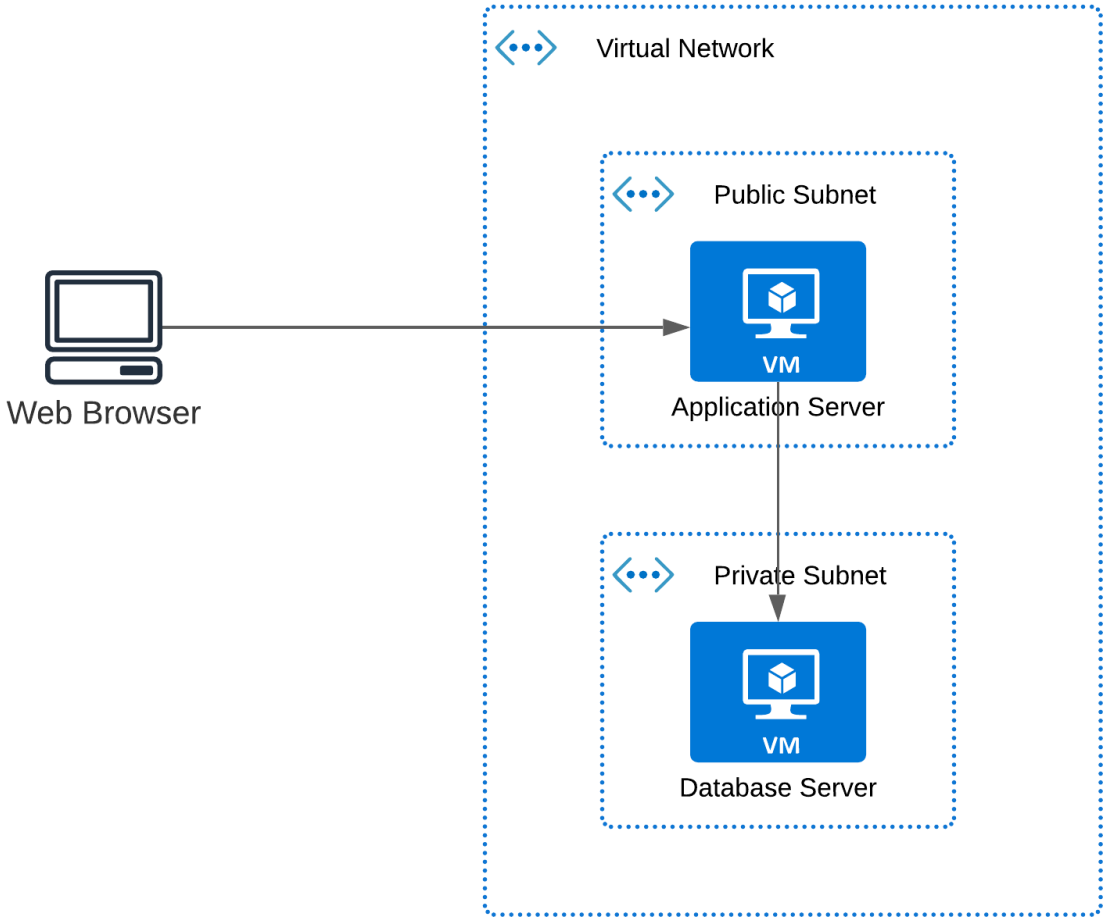
Scenario

Accordingtorecentresearch,40-75%ofemployeesareusingDropboxtosharefilesinsideandoutsideoftheir businesses. Half of those Dropbox users do this even though they know it's against the rules. Morethan40%ofbusinesseshaveexperiencedtheexposureofconfidentialinformationandtheestimated average cost of a data breach equaled $5.5 Million in 2011.

Thesefiles,containingsensitivecompanyandcustomerdata,arestoredinapubliccloudoutsideofthe businesses' control - possibly even outside of the country. The potential for data leakage and security breachesisenormousandcompaniesneedtostaycompliantwiththeirownpoliciesandproceduresforsecurityand governance

Architecturediagram:

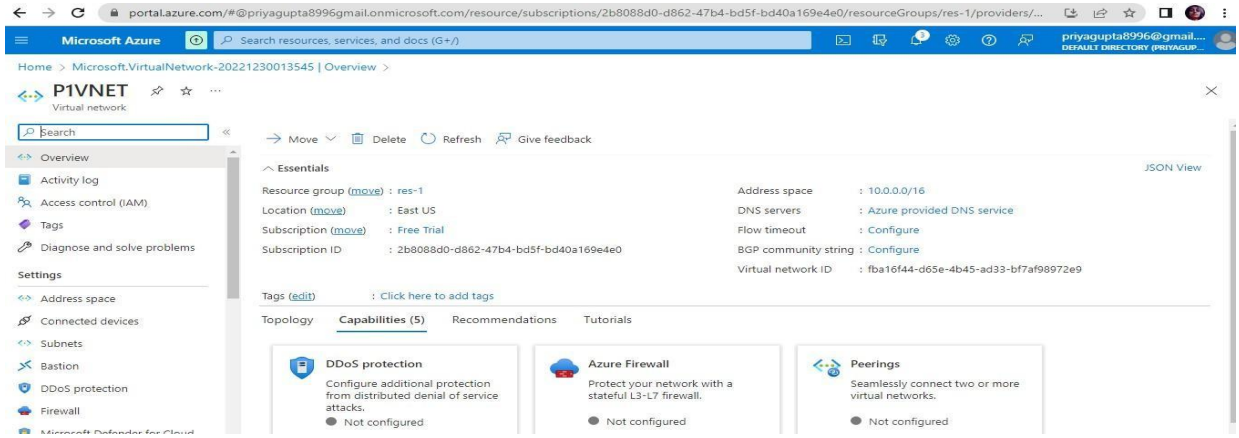


ArchitectureImplementation	
1	Implement2differentsubnets(onepublicandtheotherprivate)inavirtualnetwork
2	InstallandconfigureMySQLonanUbuntu18.04virtualmachineontheprivatesubnetusingtheinstructions provided. (Hint: Use a bastion host and a NAT gateway)
3	InstallandconfigureOwnCloudonanUbuntu18.04virtualmachineonthepublicsubnetusingtheprovided instructions.
4	Configurethenetworksecuritygroupstoallowtherequiredports
5	TesttheinstallationbyaccessingtheIPoftheapplicationserverinabrowser

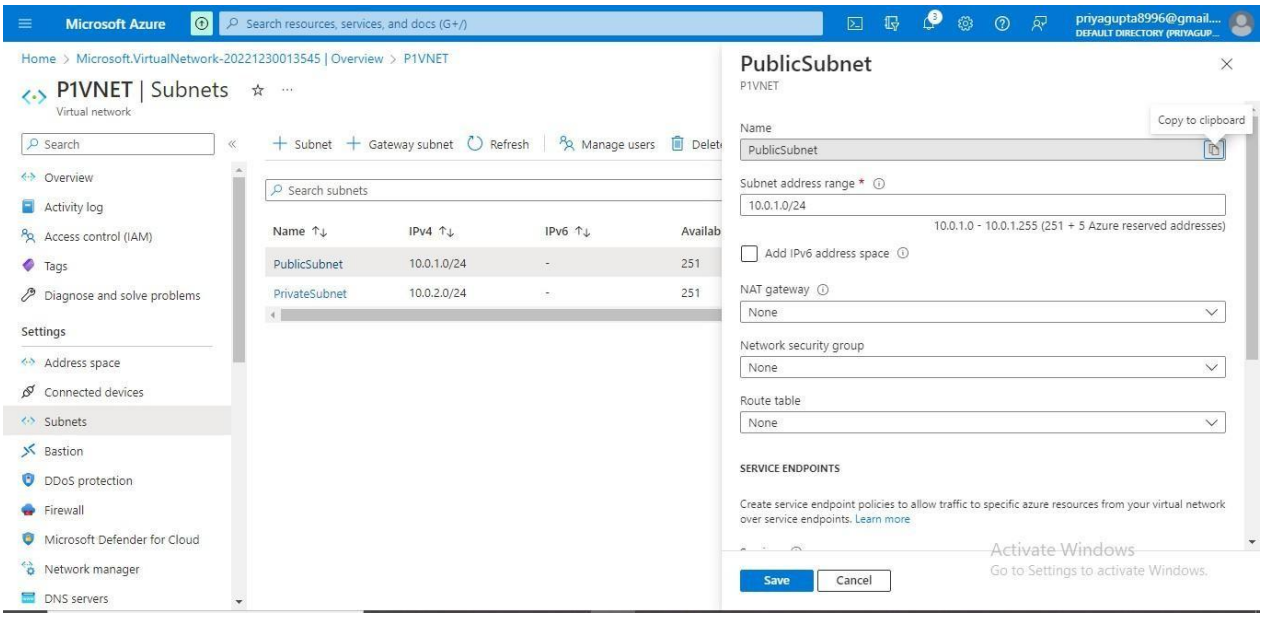
Step1:VPCandSubnetCreation

Stepnumber	a
Stepname	CreationofVirtualNetwork
Expected screenshots	1) Createdvirtualnetworkwithpropertiesvisible 2) Propertiesofpublicsubnet 3) Propertiesofprivatesubnet

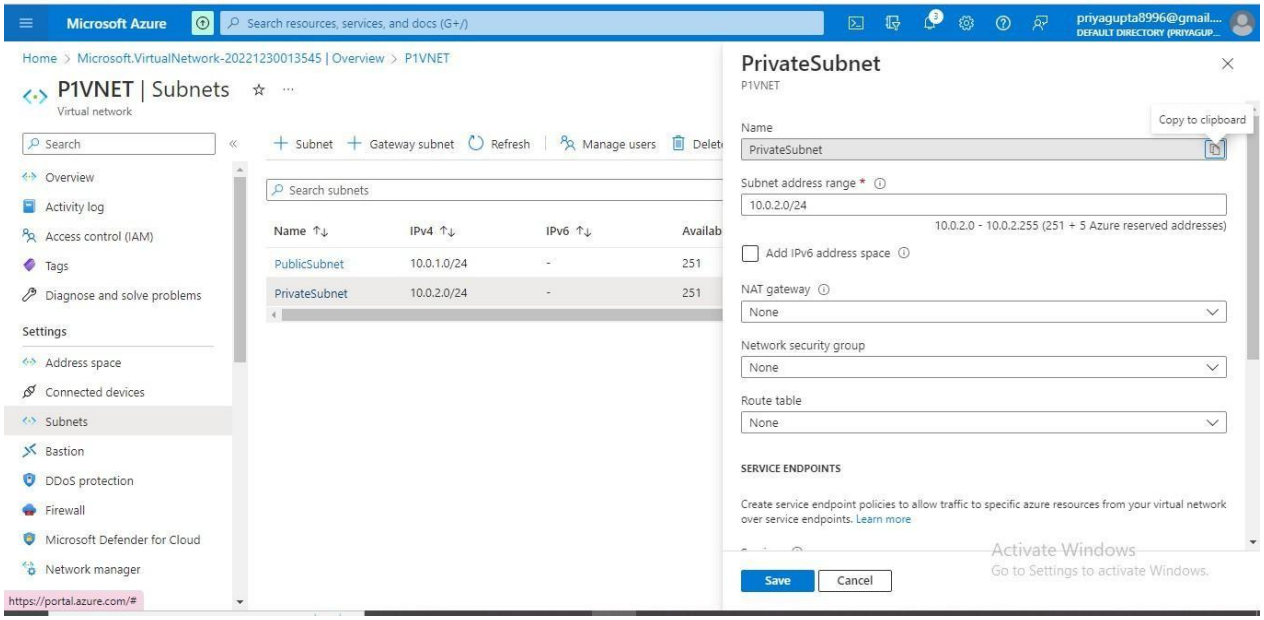
VirtualNetworksCreated:



PublicSubnet:

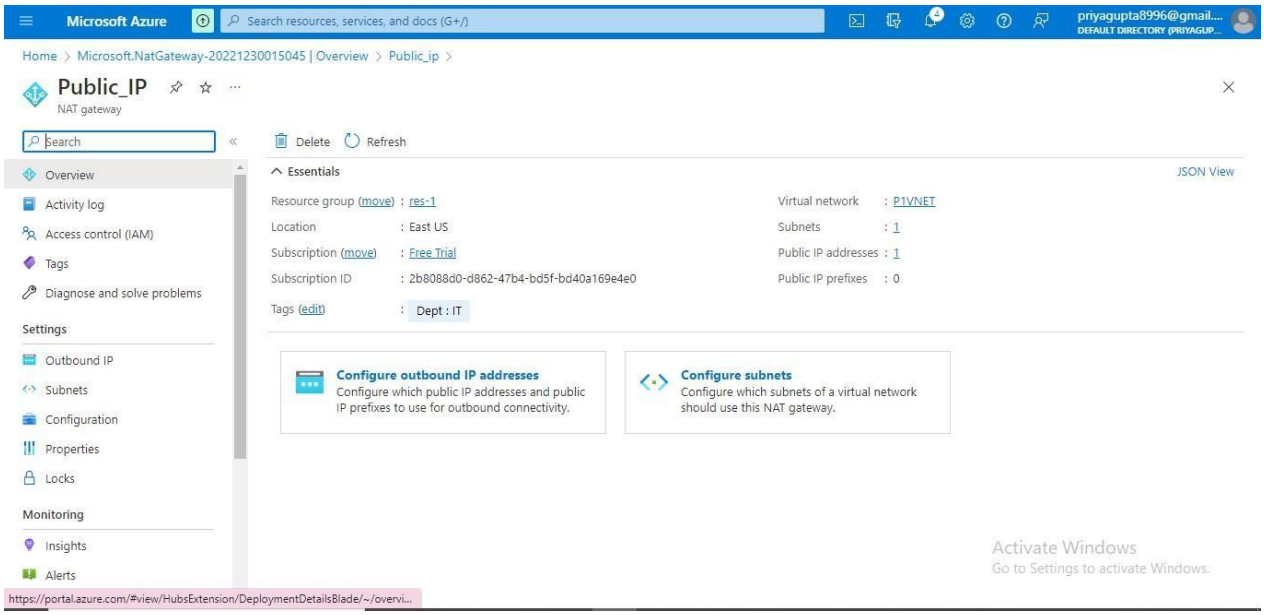


PrivateSubnet



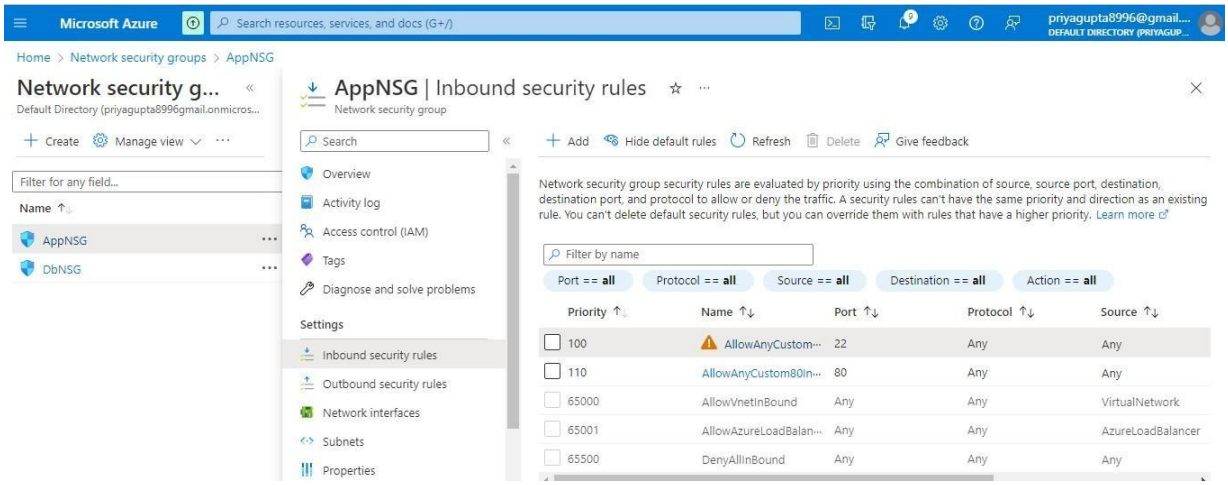
Stepnumber	b
Stepname	CreationofNATGateway
Expected screenshots	1)CreatedNATgateway

NATGateway:

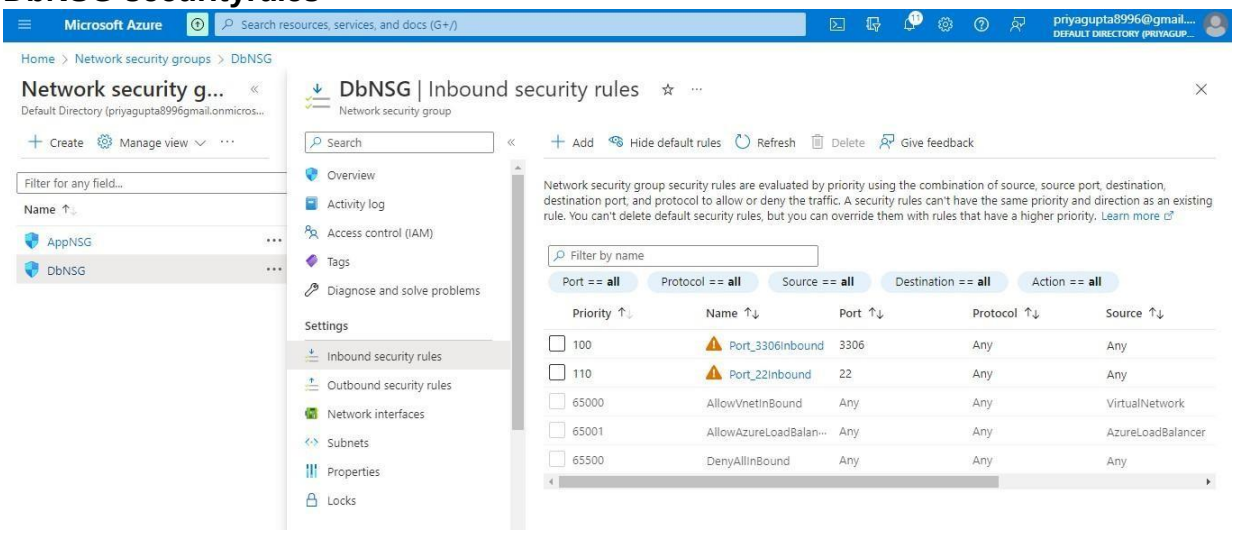


Stepnumber	C	
Stepname	CreationandconfigurationofNetworksecuritygroups	
Expectedscreens hots	1)AppNSGsecurityrules 2)DbNSGsecurityrules	

AppNSG securityrules:



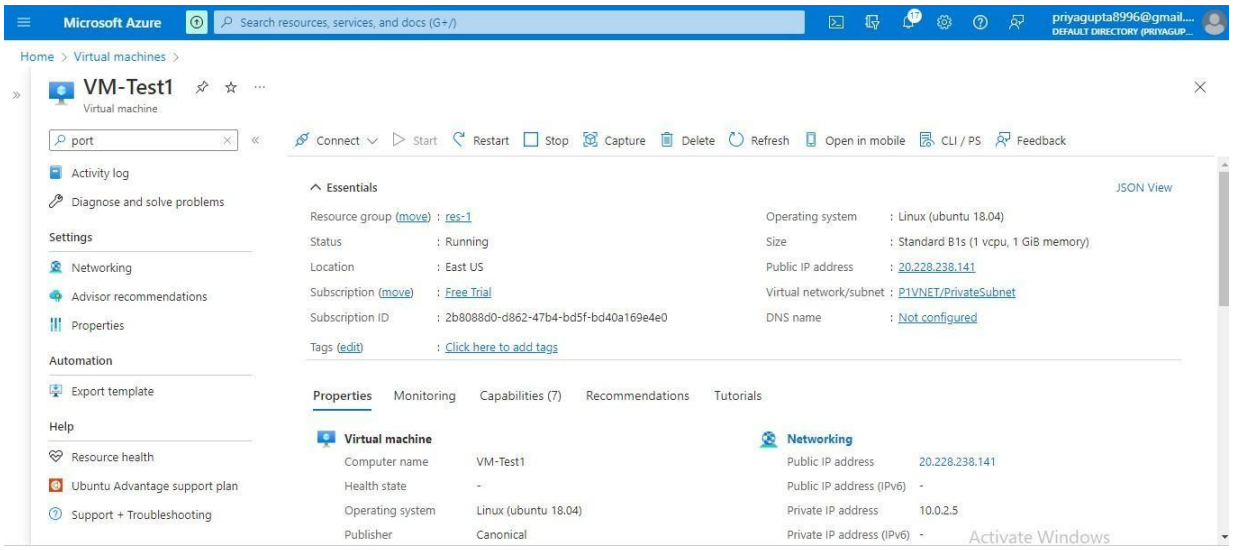
DbNSG securityrules



Step2:InstanceCreation

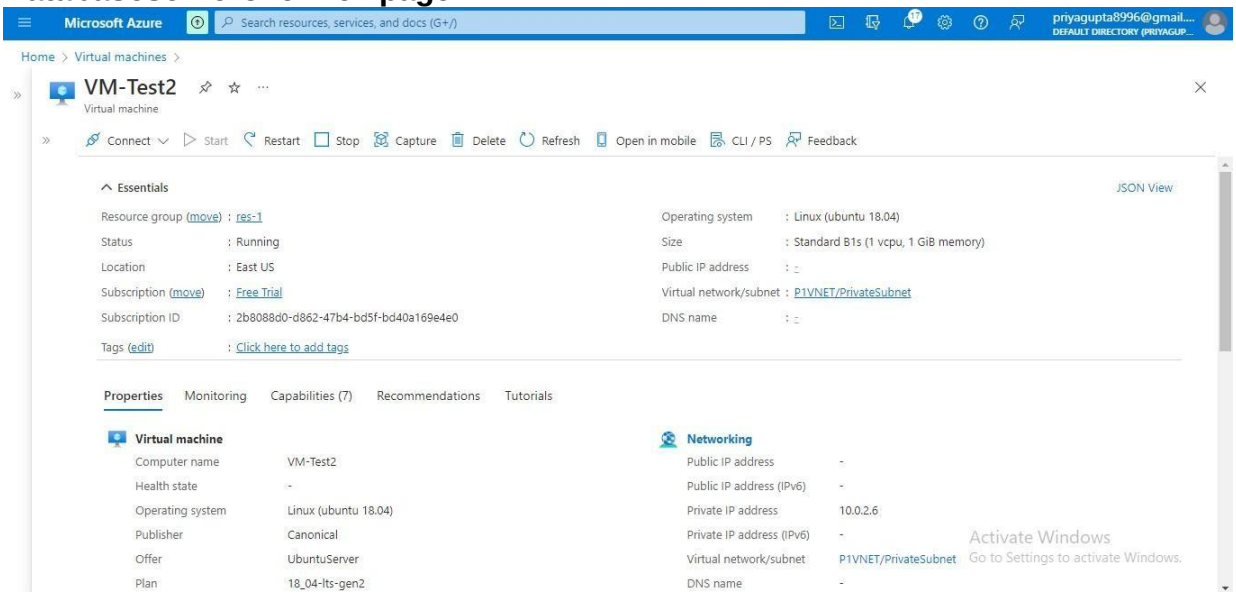
Stepnumber	a
Stepname	CreationofApplicationserver
Expected screenshots	1)CreatedApplicationserverOverviewpage

ApplicationserverOverviewpage



Stepnumber	b
Stepname	CreationofDatabaseserver
Expected screenshots	1)CreatedDatabaseserveroverviewpage

Databaseserveroverviewpage



Step4:ApplicationandDatabaseInstallationandTesting

Step number	a
Stepname	InstallationandconfigurationofMySQL
Expected screenshots	1) Downloadingoftheprovidedscript 2) Executingthescript