VIRTUAL PRIVATE CLOUD WITH LINUX:

Step1:create vpc

Step2:Create Subnet(public& private)

Step3:Create Internet Gateway And Attach Vpc

Step4:Create Public And Private Route Table

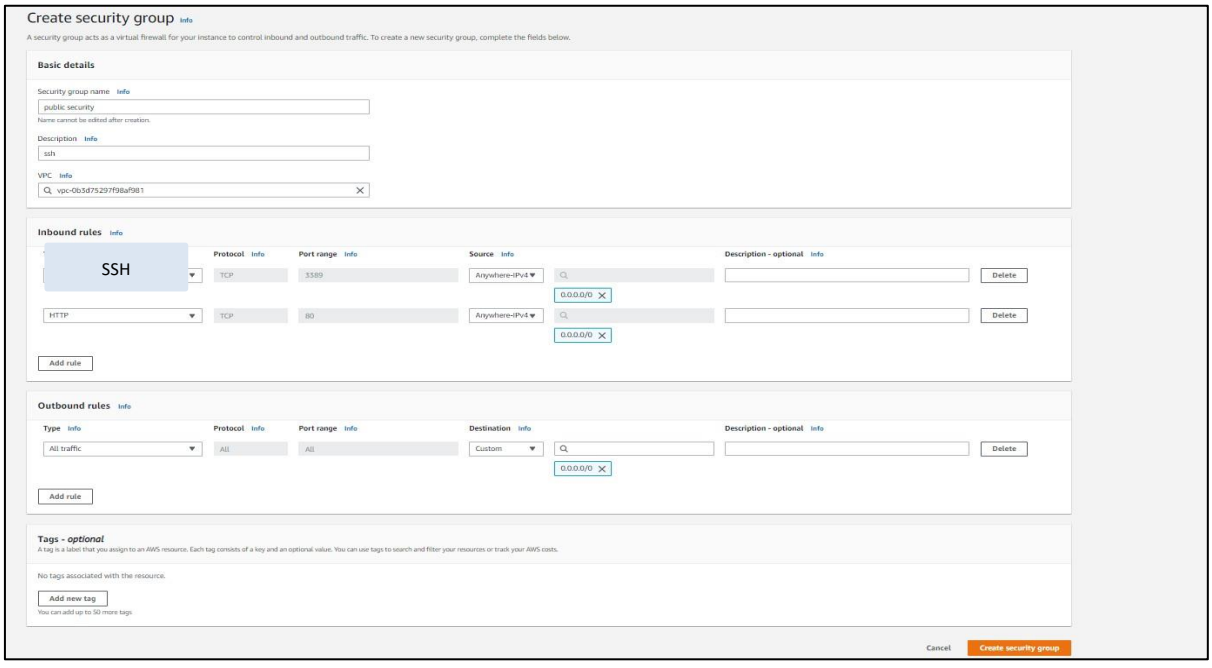
Step5: Subnet Association Add

Step6: Internet Gateway Add Success For Public and Private Route Table.

Step7: Nat Gateway For Only Public Route Table

Step8: Create Security Group For Public

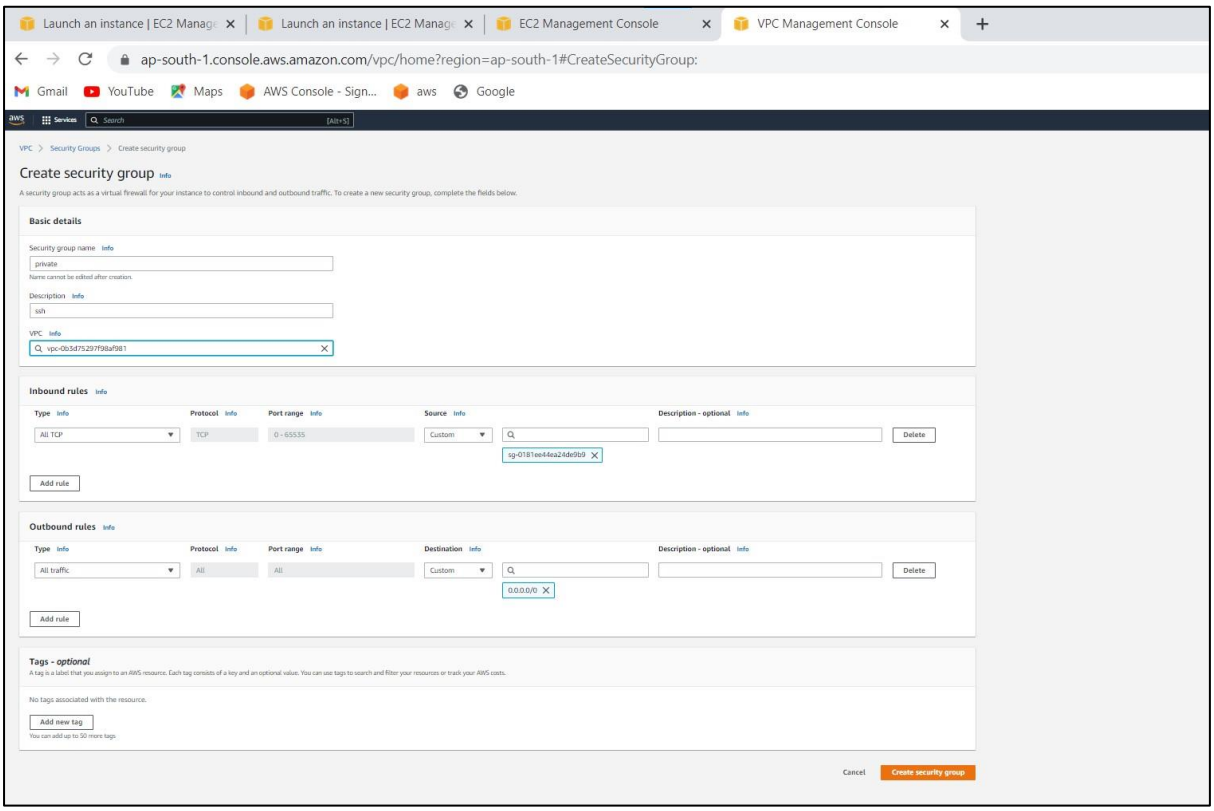
Create Security Group---->Security Group Name(Public Security)---->Vpc(Select Created Vpc)---->Inbound Rules--->1.SSH---->Source(Anywhere)---->2.HTTP----> Source(Anywhere)-----> Create Security Group..



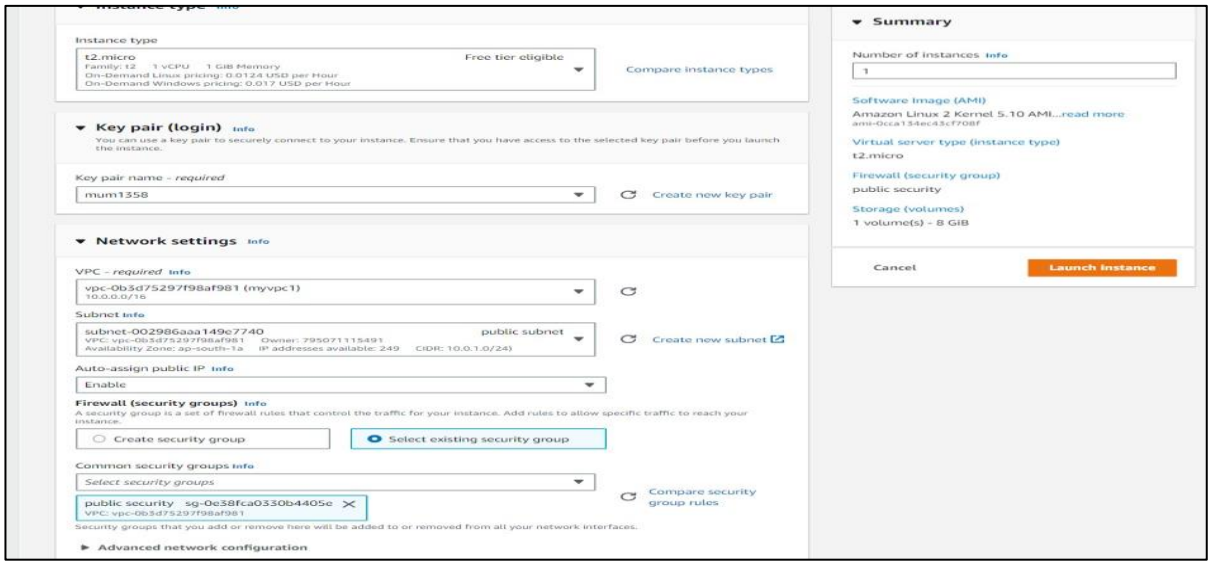
Public Security Group Created…

Step9: Create Security Group For Private

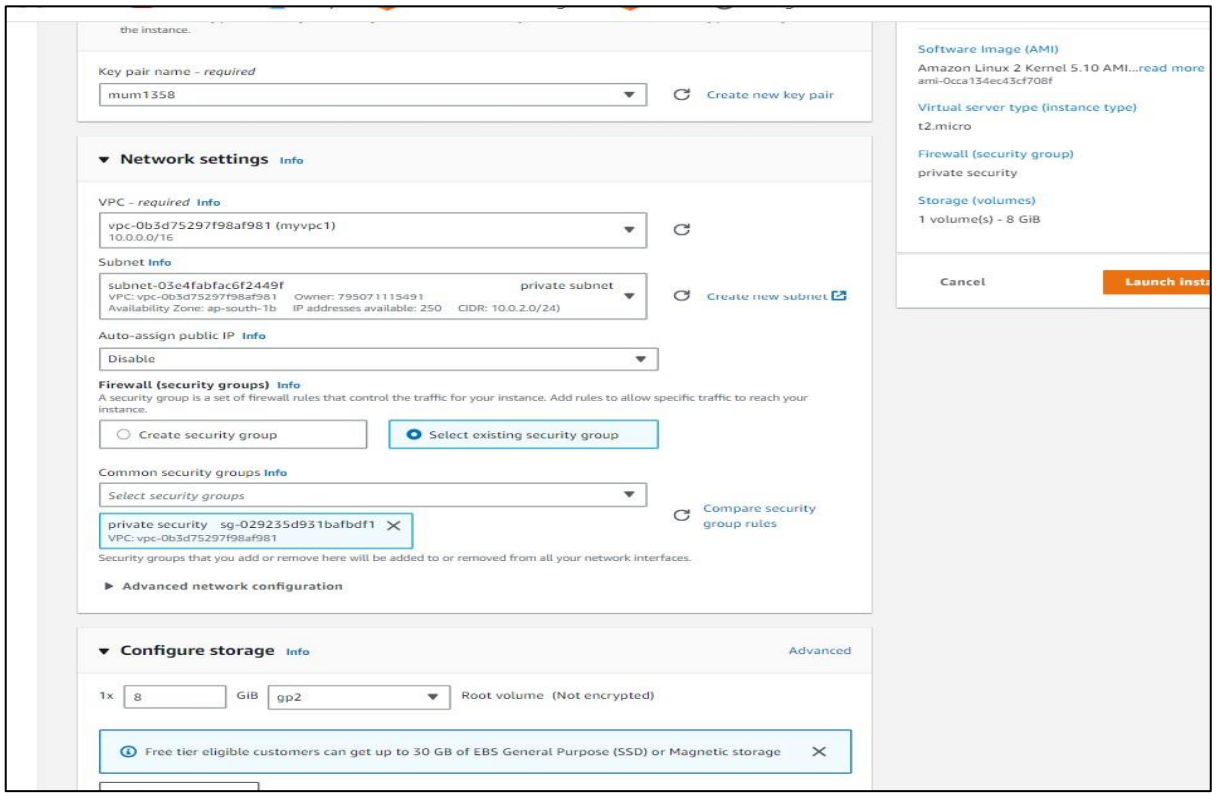
Create Security Group---->Security Group Name(Privatesecurity)----
>Vpc(Select Created Vpc)---->Inbound Rules--->All Tcp---->Source(Custom)-----
>Select Public Security Id(Public Security)---->create security group



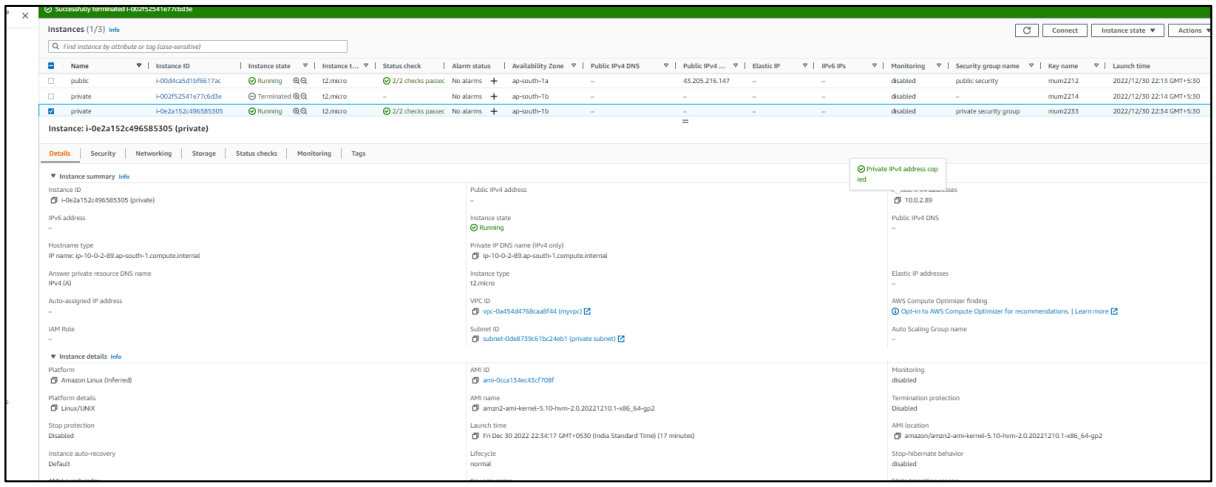
Step10: Public Ec2 LINUX Instance Create:



Step11: Private Ec2 LINUX Instance Create:



Step12:instance created



Step12: Putty Open--->put pubkic instance puic ip---->Login ec2-user--->change root user(sudo –i)

Step13: Login Private Instance

⇒ Ssh ec2-user@10.0.2.10(private ip)

⇒ Vi demo1.pem------>(upload key file)

```
-----BEGIN RSA PRIVATE KEY-----
MIIEogIBAAKCAQEAmHV7oI/q4xoM3VyXSb9/o6gs9Jf5nLpw+yc1FJIXpTN/Wv86
yYnypq8RlcnFqWGpiyf0x1PlVNtlTLNRNy9g3UWaL4h4g2nd3Z0cFMvckylDfLDg
EBHDDFCrrKA5DqPo/kU6kzLNlaB/RAZ4JRjtFwlEBZg2q+nsJvqE1FF8AMlR8EVC
fU3GyRddqN+boQ84rZ1ognhEm+uqRj4/DFb6GgkS8gdUDYMCiVmlCjtE9ybQM5Fw
yCci0lRDBO6d6WMdHSimysG3h4naZr1D4EUCA4U9ByUMc4esZ2oOGFa9wWPnV4gD
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ygJjpqB1TRK6SZsfAjTy+IwG1yzJy69DWtDq/ZsCgYAGsMnDbPu4updd CyY1cx4l
e0FMPdmAdV7YQt3hlJmxrCUVIQyO3lRyNJk7EtzKF+MZIWD8+3v8f66kDsYVgwcz
AmXEOa/e3Udz/lmhZWu6tnOkGVIwsQFlztd1us020IG9DmrnCKNEhmOywdUr+nto
K8tuQSsH2vGiYbrck9qcYQKBgFC5NDRph/3aO+IfaU2hyashFqYZmgosPQv9Fd0S
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j64cmSHI2QZ5GM8QodOvtrhW0QblO5HxxJSNneVY3IMWc1QpUZg0oA+0H2OW2kp0
i1/5AoGAR/2NmuvaUBAnGaJ5M1C+YuBxC+/QMAqOOqaEEnyawG88lXxpNxTsYQRL
aa/7SRR73EsNefka1bLHTMJG+CeKglKUooOpBYH+KDhFU9DQr+Va4qsaG2lMQrdE
K4VUJCacyf0glBVTIo9HdZOMbIYAvg5roDAtC1Cyw0gWx699FdE=
-----END RSA PRIVATE KEY-----
```

⇒ chmod 400 demo1.pem (permission change)

⇒ Ssh -i demo1.pem ec2-user@10.0.2.10(private ip)---->login

```
ec2-user@ip-10-0-2-10:~
[root@ip-10-0-1-184 ~]# pinggoogle.com
-bash: pinggoogle.com: command not found
[root@ip-10-0-1-184 ~]# ping google.com
PING google.com (142.251.42.78) 56(84) bytes of data.
64 bytes from bom12s21-in-f14.1e100.net (142.251.42.78): icmp_seq=1 ttl=110 time
=1.33 ms
64 bytes from bom12s21-in-f14.1e100.net (142.251.42.78): icmp_seq=2 ttl=110 time
=1.39 ms
64 bytes from bom12s21-in-f14.1e100.net (142.251.42.78): icmp_seq=3 ttl=110 time
=1.37 ms
64 bytes from bom12s21-in-f14.1e100.net (142.251.42.78): icmp_seq=4 ttl=110 time
=1.41 ms
^C
--- google.com ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3004ms
rtt min/avg/max/mdev = 1.339/1.379/1.412/0.046 ms
[root@ip-10-0-1-184 ~]# ssh ec2-user@10.0.2.10
The authenticity of host '10.0.2.10 (10.0.2.10)' can't be established.
ECDSA key fingerprint is SHA256:vwOaQ2mDosOmEFj8ac7SktZdAN3RDjJtlZpwih7CVwg.
ECDSA key fingerprint is MD5:02:cb:46:13:38:e7:4a:18:37:7b:87:96:b0:65:a0:37.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '10.0.2.10' (ECDSA) to the list of known hosts.
Permission denied (publickey,gssapi-keyex,gssapi-with-mic).
[root@ip-10-0-1-184 ~]# vi demo1.pem
[root@ip-10-0-1-184 ~]# chmod 400 demo1.pem
[root@ip-10-0-1-184 ~]# ssh -i demo1.pem ec2-user@10.0.2.10

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https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-10-0-2-10 ~]$
```

Private instance login suucefully..