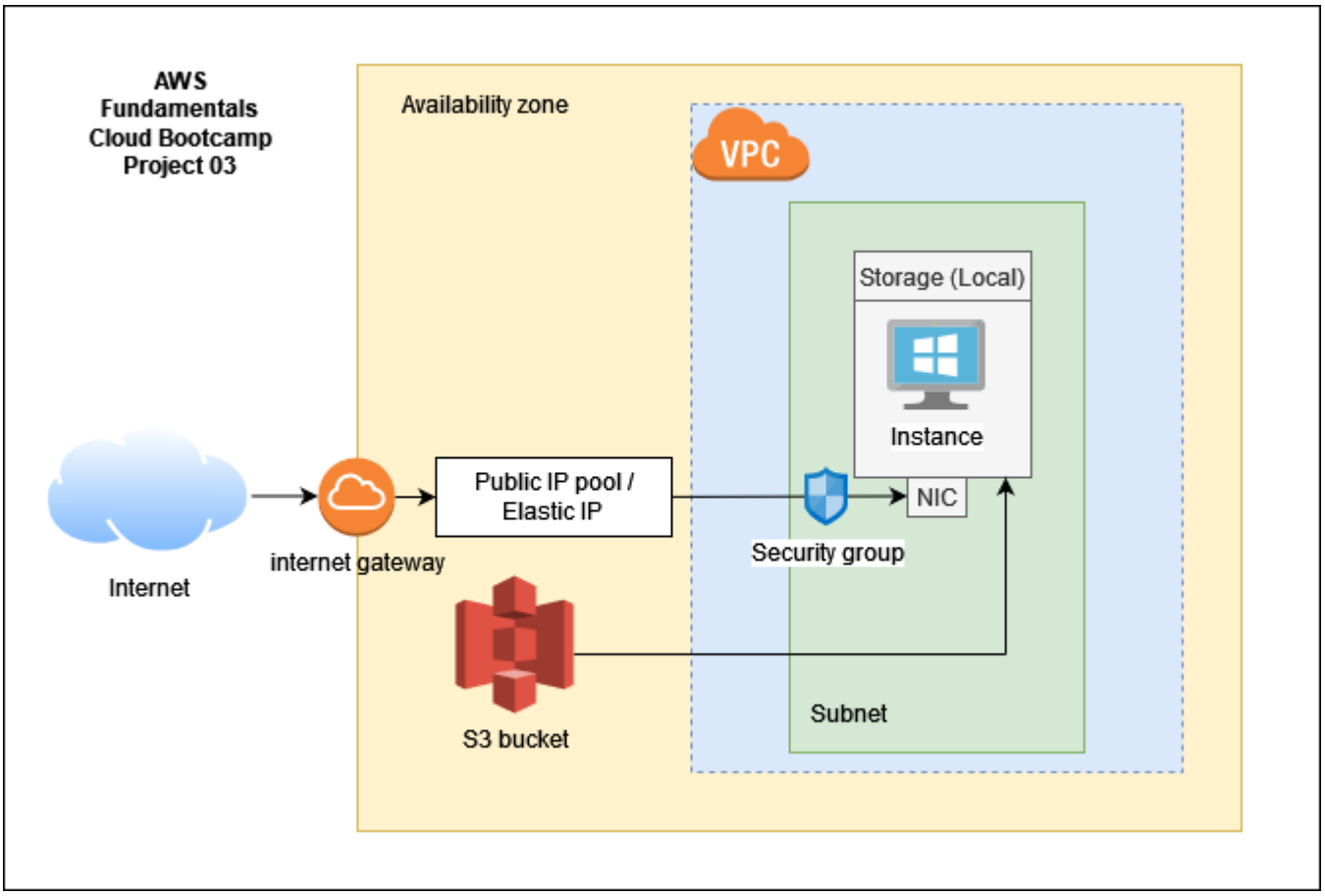
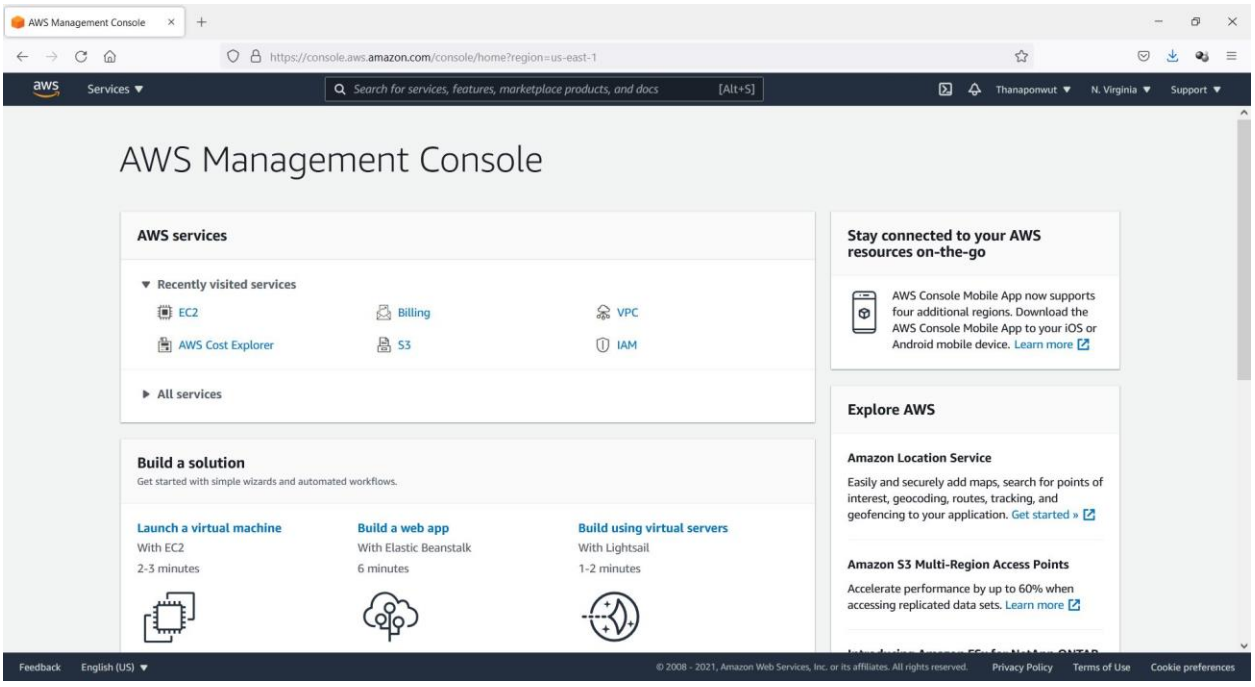
AWS Course Cloud Bootcamp Project 03

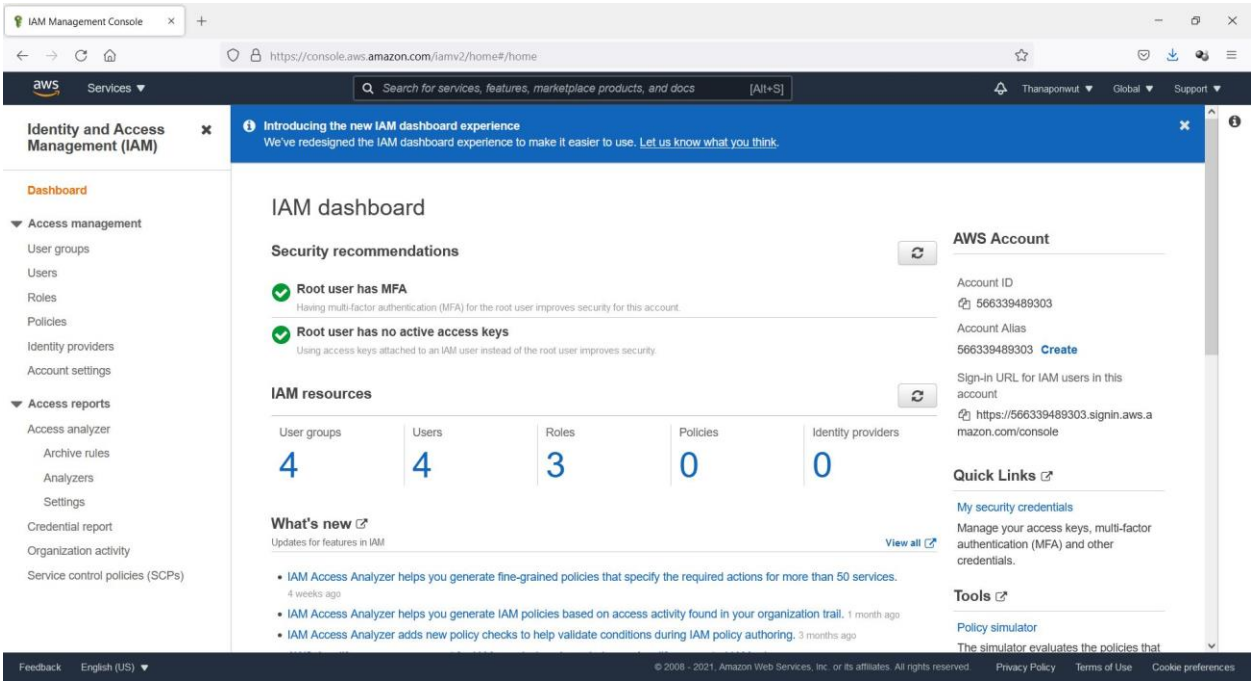
- High-level diagram



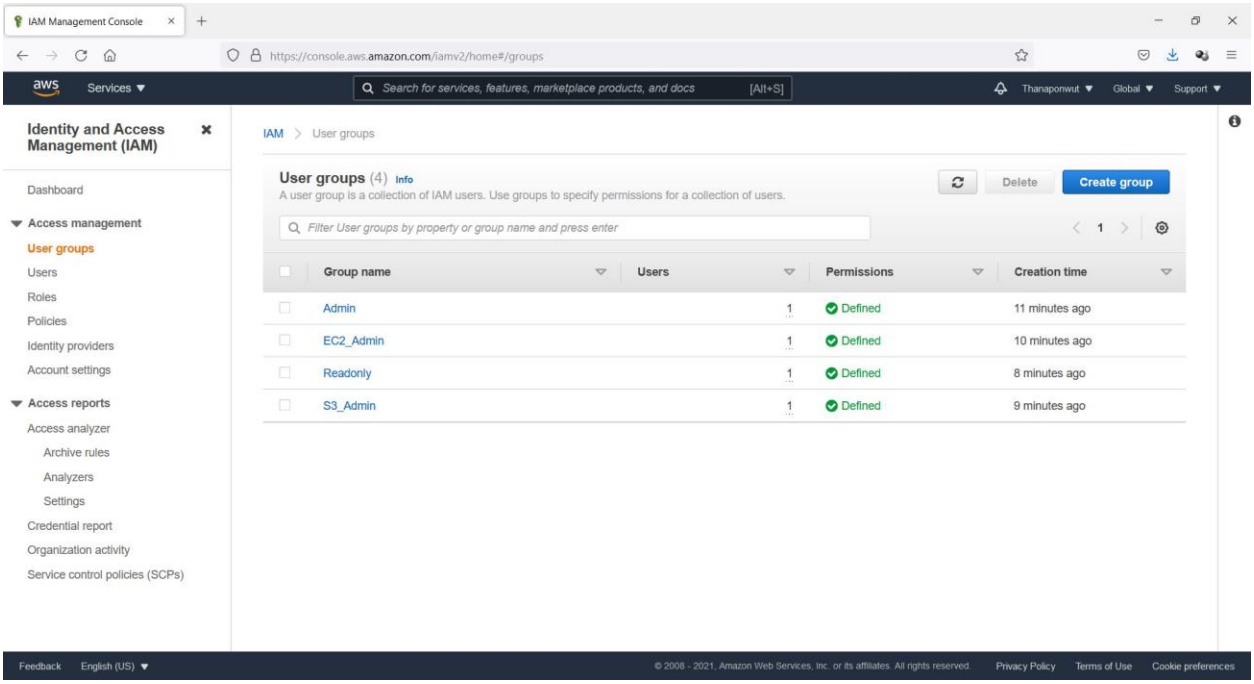
- AWS Console



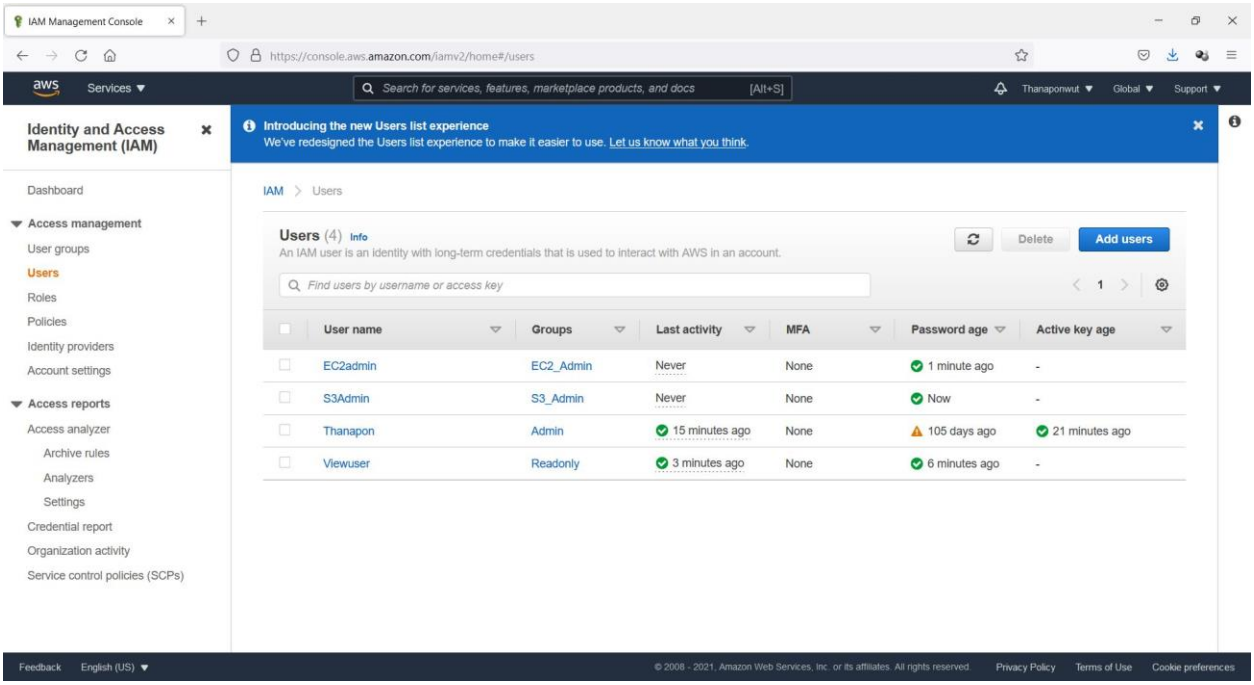
- IAM Dashboard



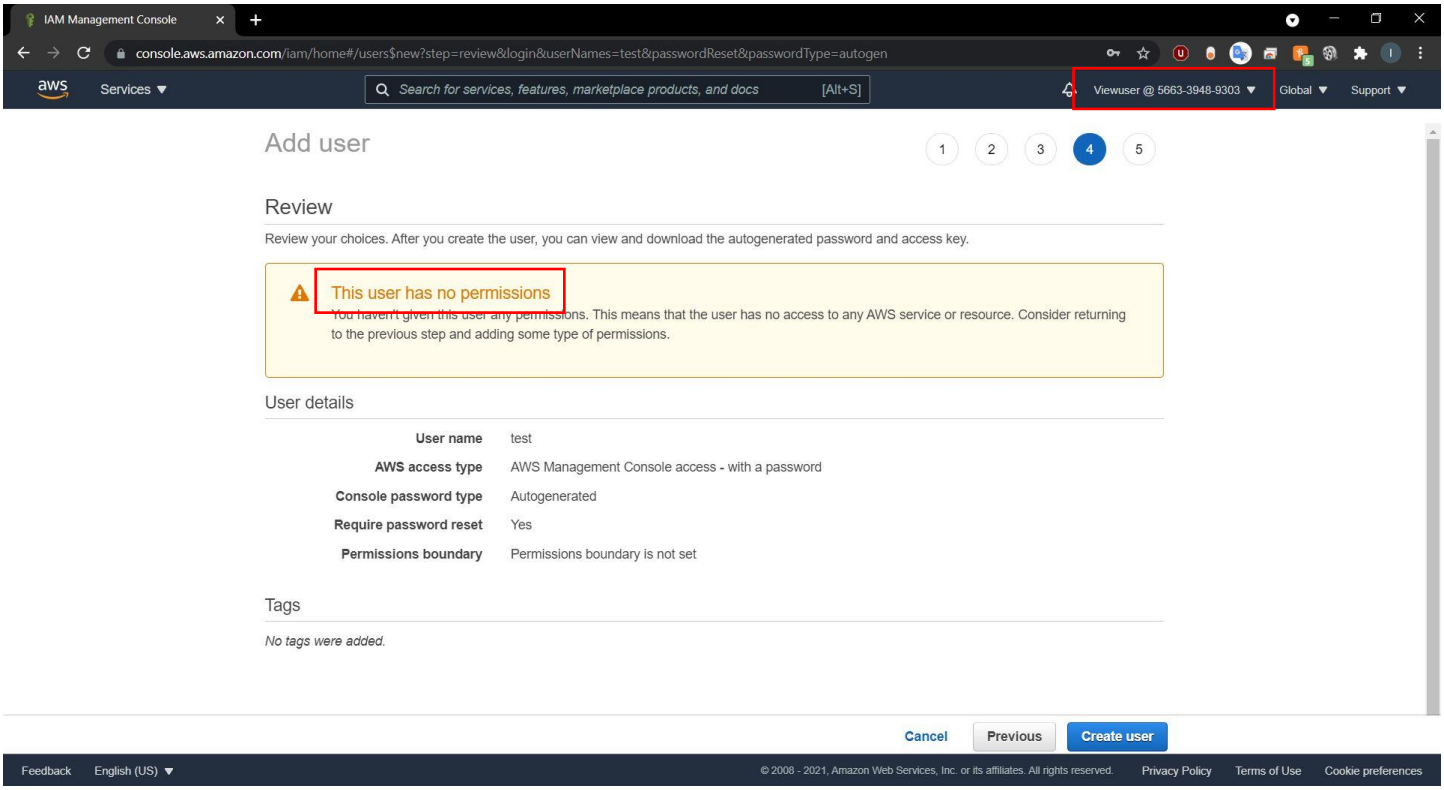
- User groups
  - Admin – Provides full access to AWS services and resources.
  - EC2_Admin – Provides full access to Amazon EC2 via the AWS Management Console.
  - Readonly - Provides read-only access to AWS services and resources.
  - S3_Admin - Provides full access to all buckets via the AWS Management Console.



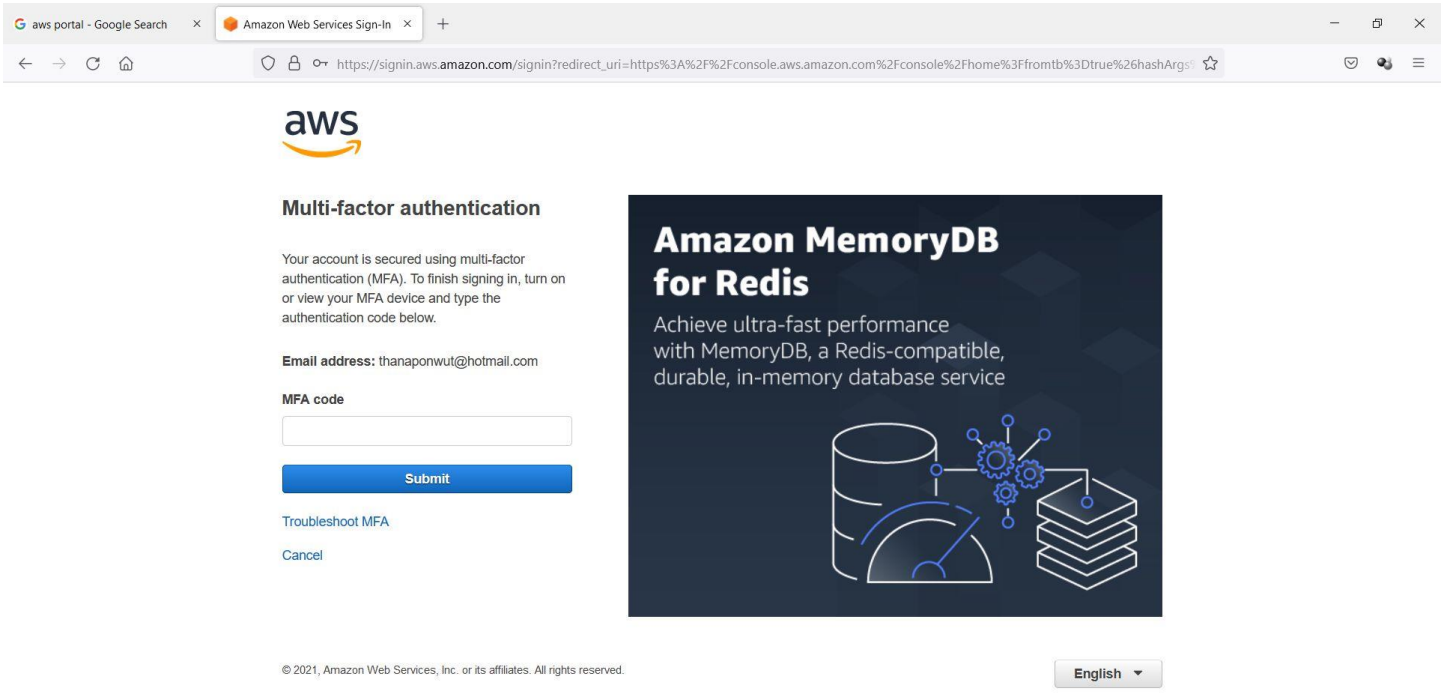
- Users

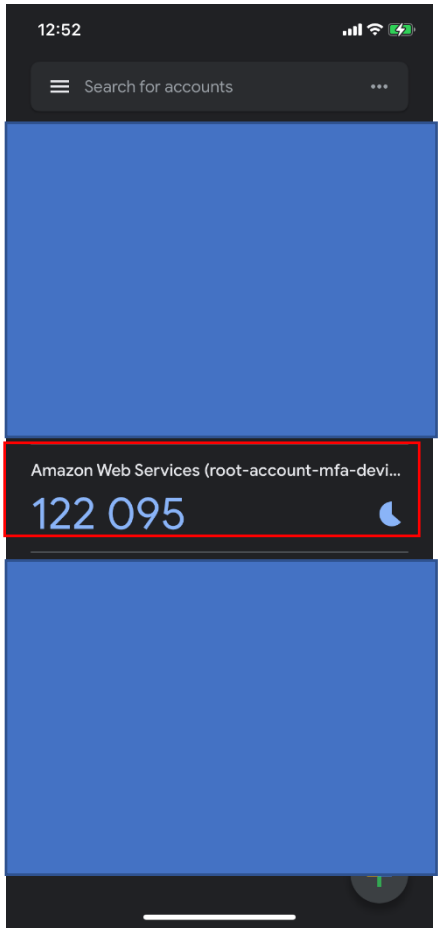


- Test log in to Viewuser (View only user) and try to create new user

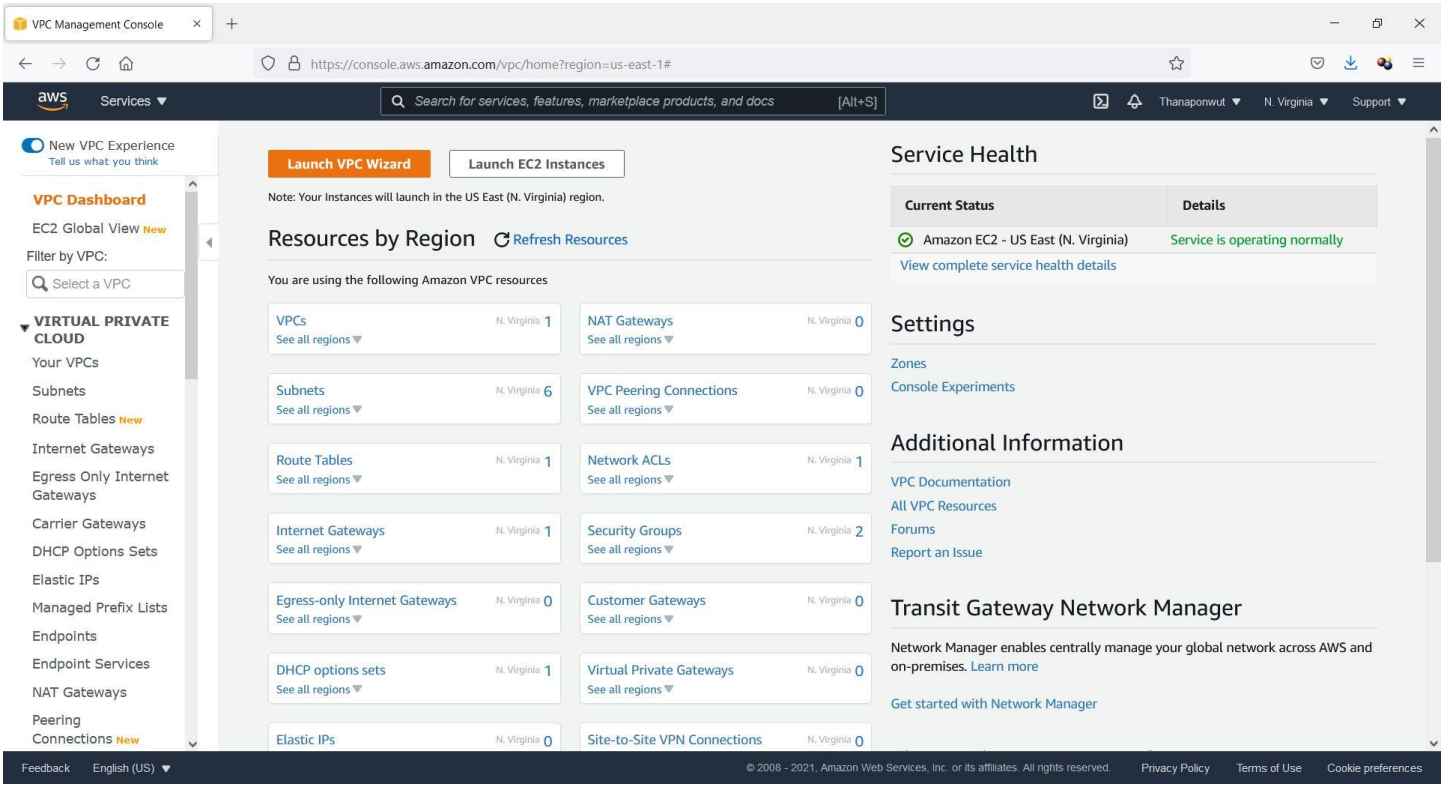


- Configure MFA for enhanced security

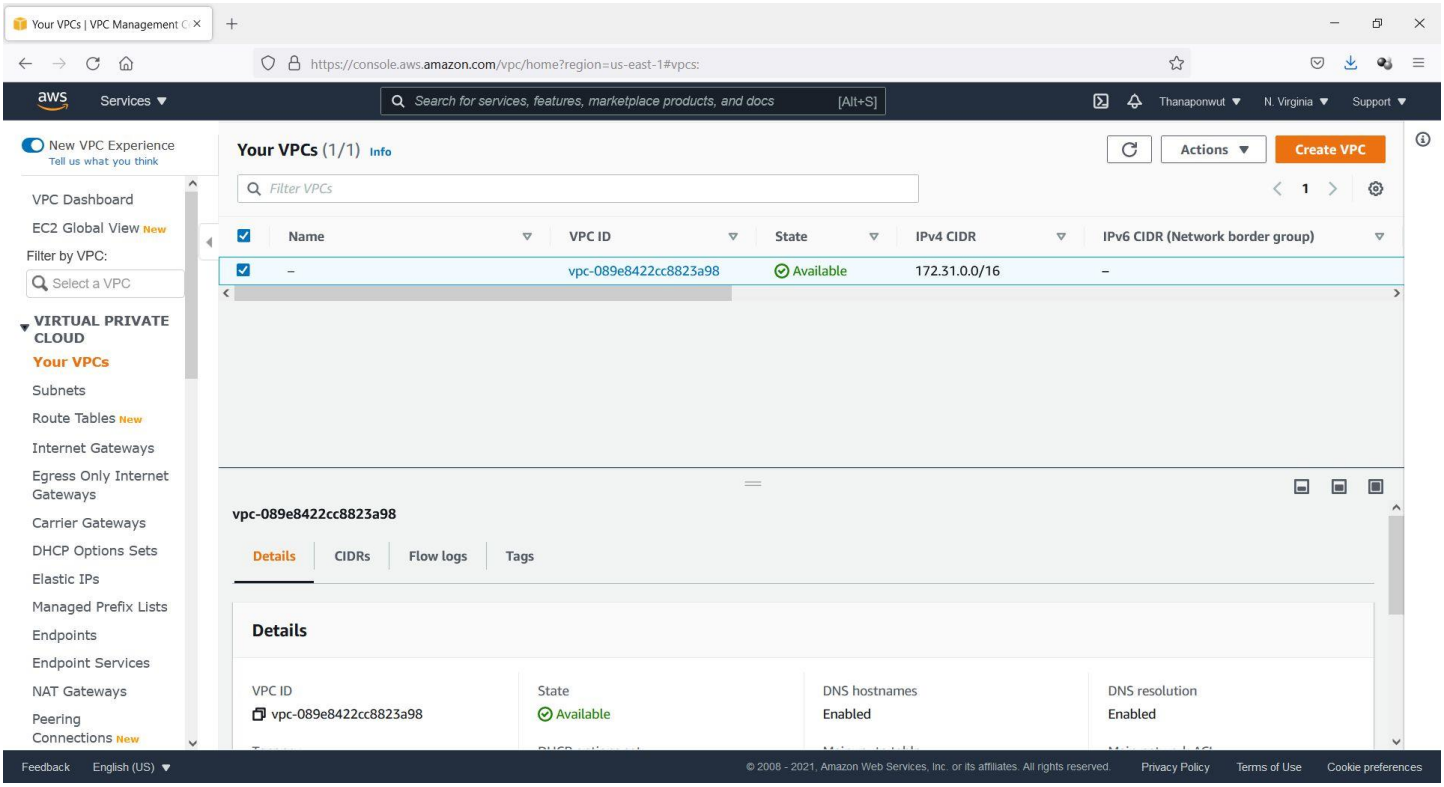




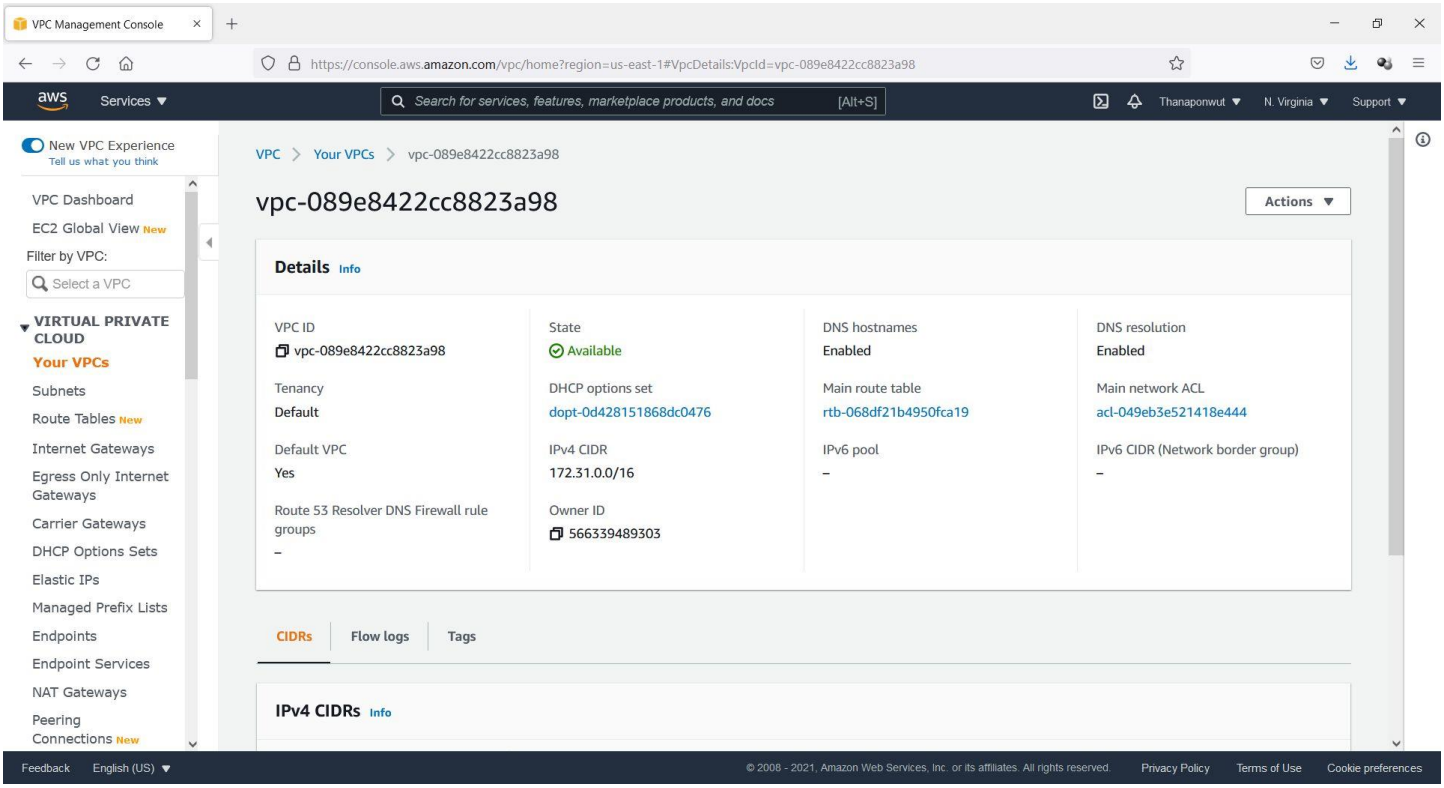
- VPC Dashboard



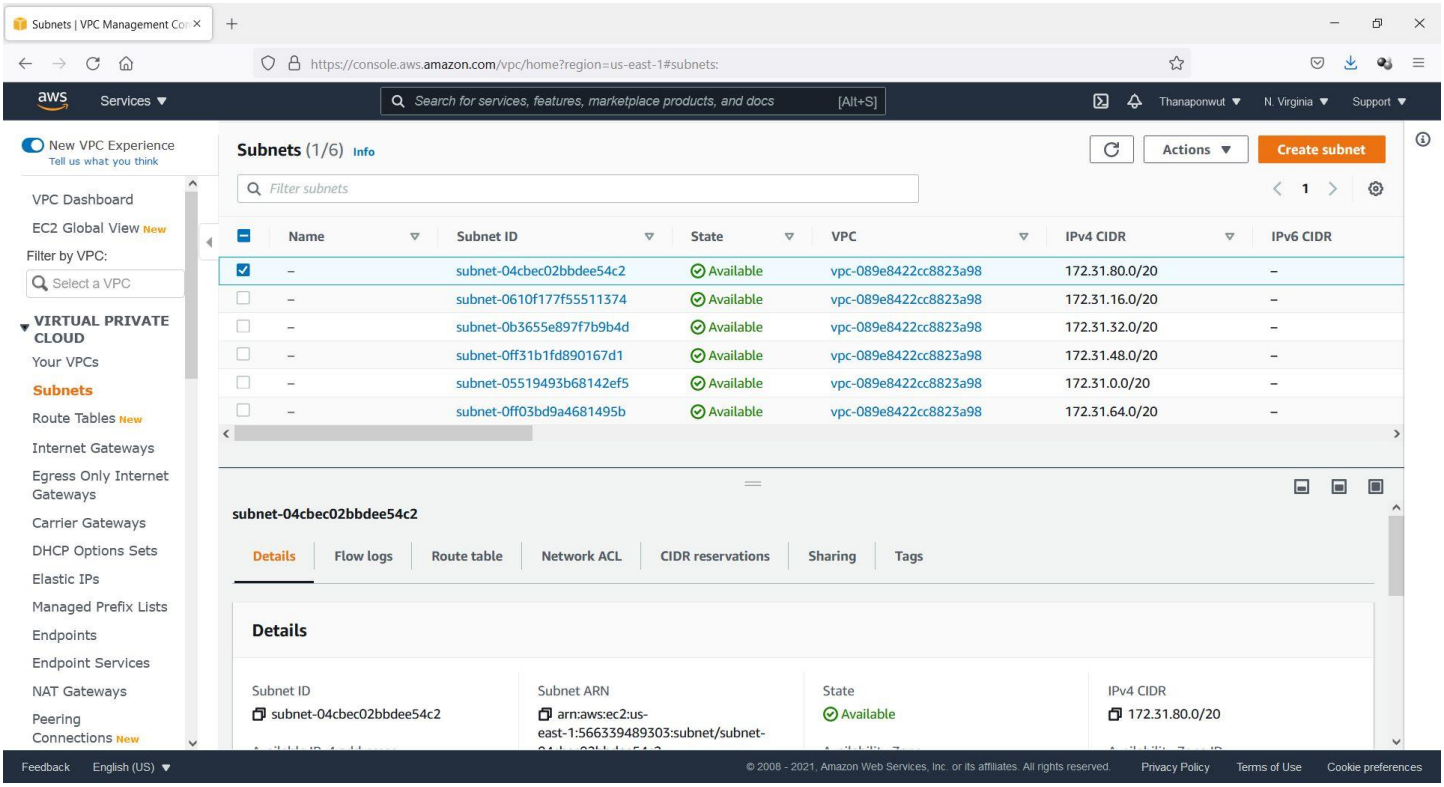
- Your VPCs



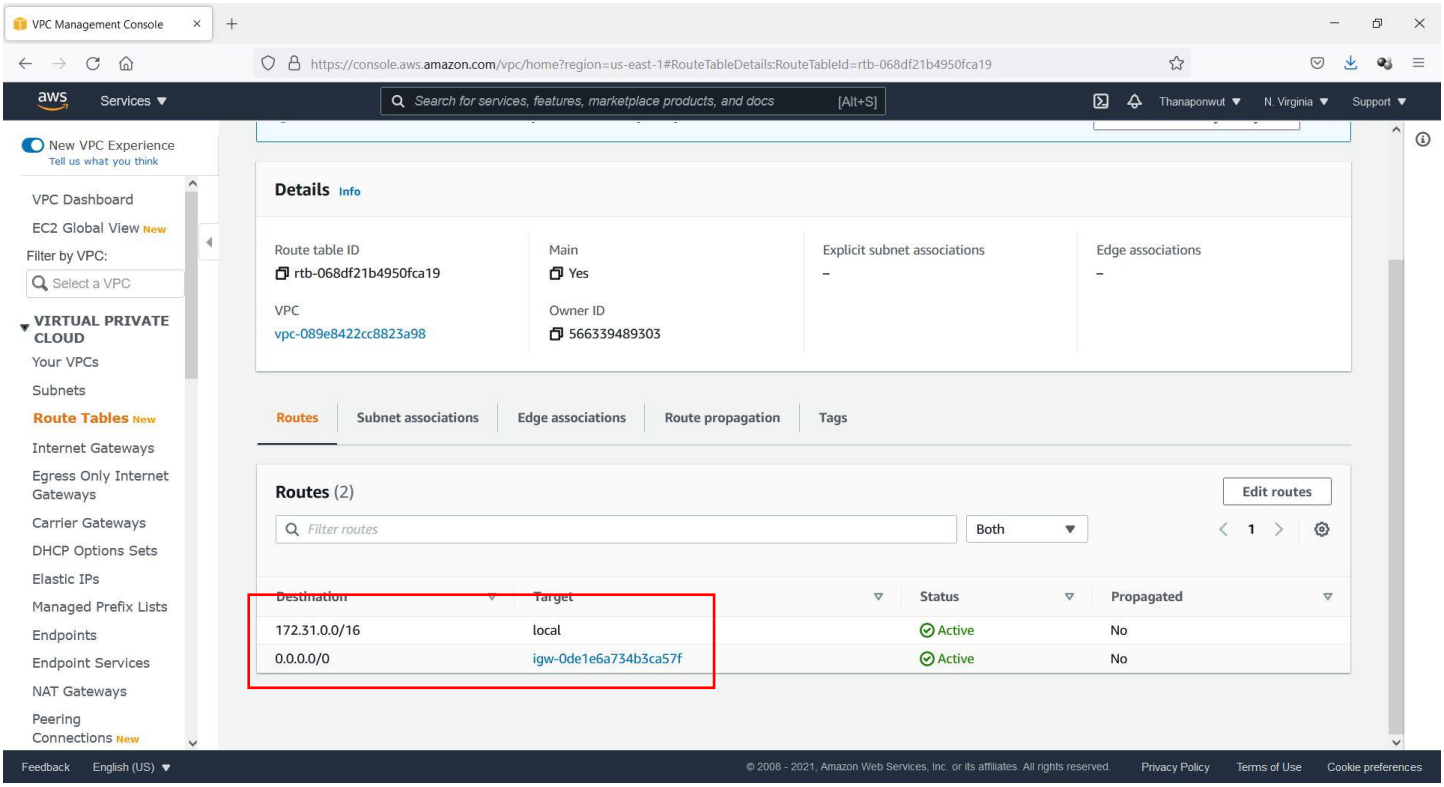
- VPC details



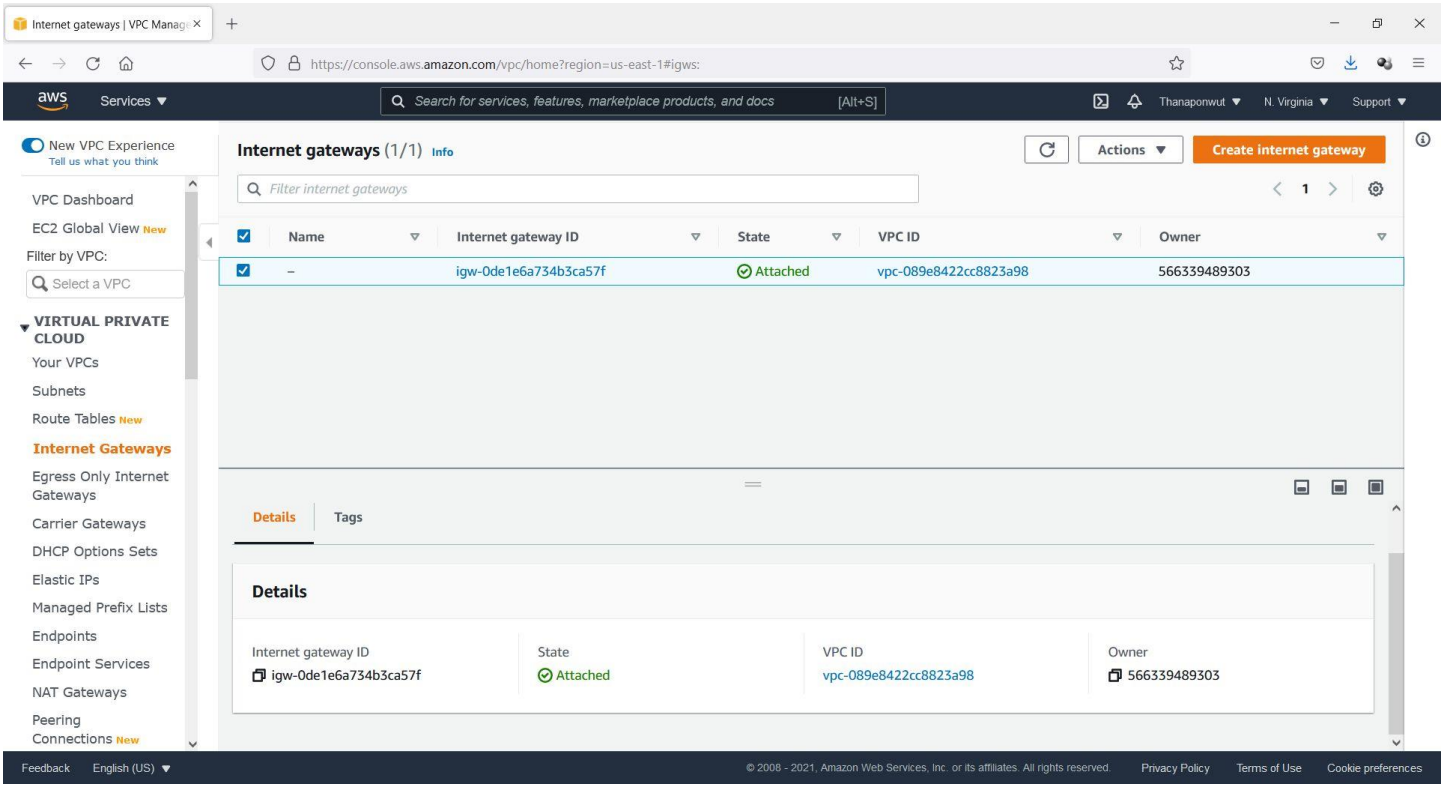
- VPC subnets



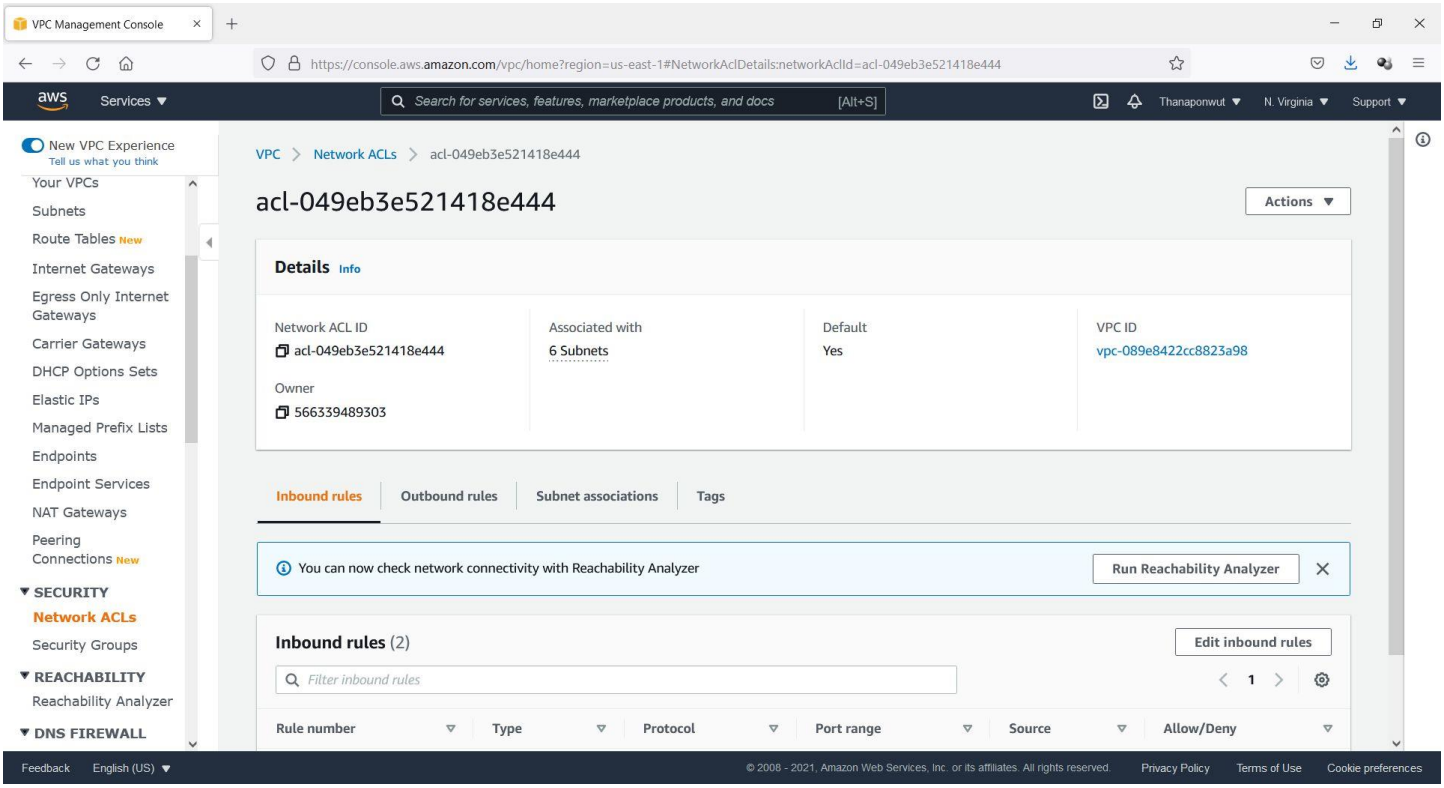
- Routing table
    - IP in 172.31.0.0/16 is local IP.
    - All other IP are routed to internet gateway.



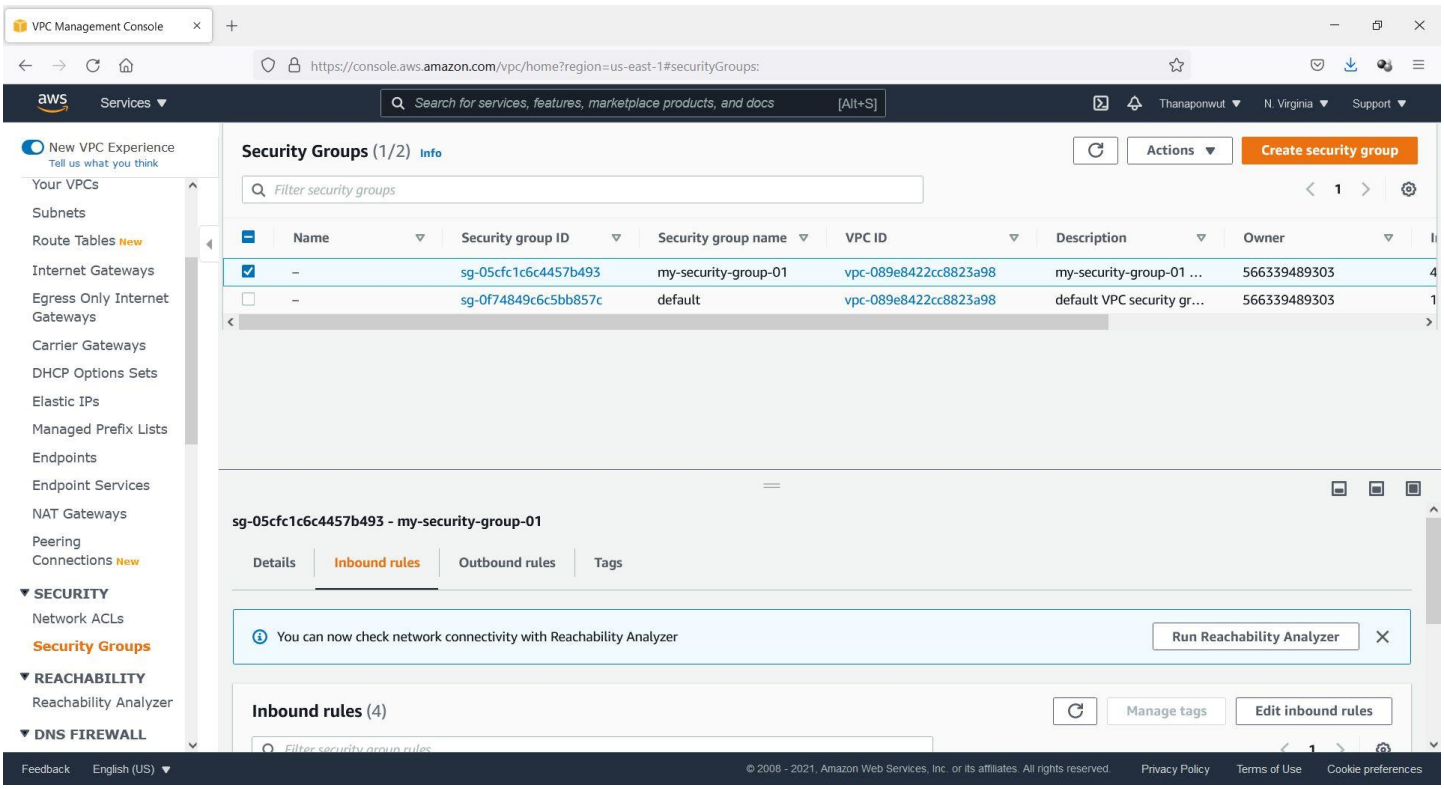
- Internet gateways: virtual router that connect VPC to the internet.



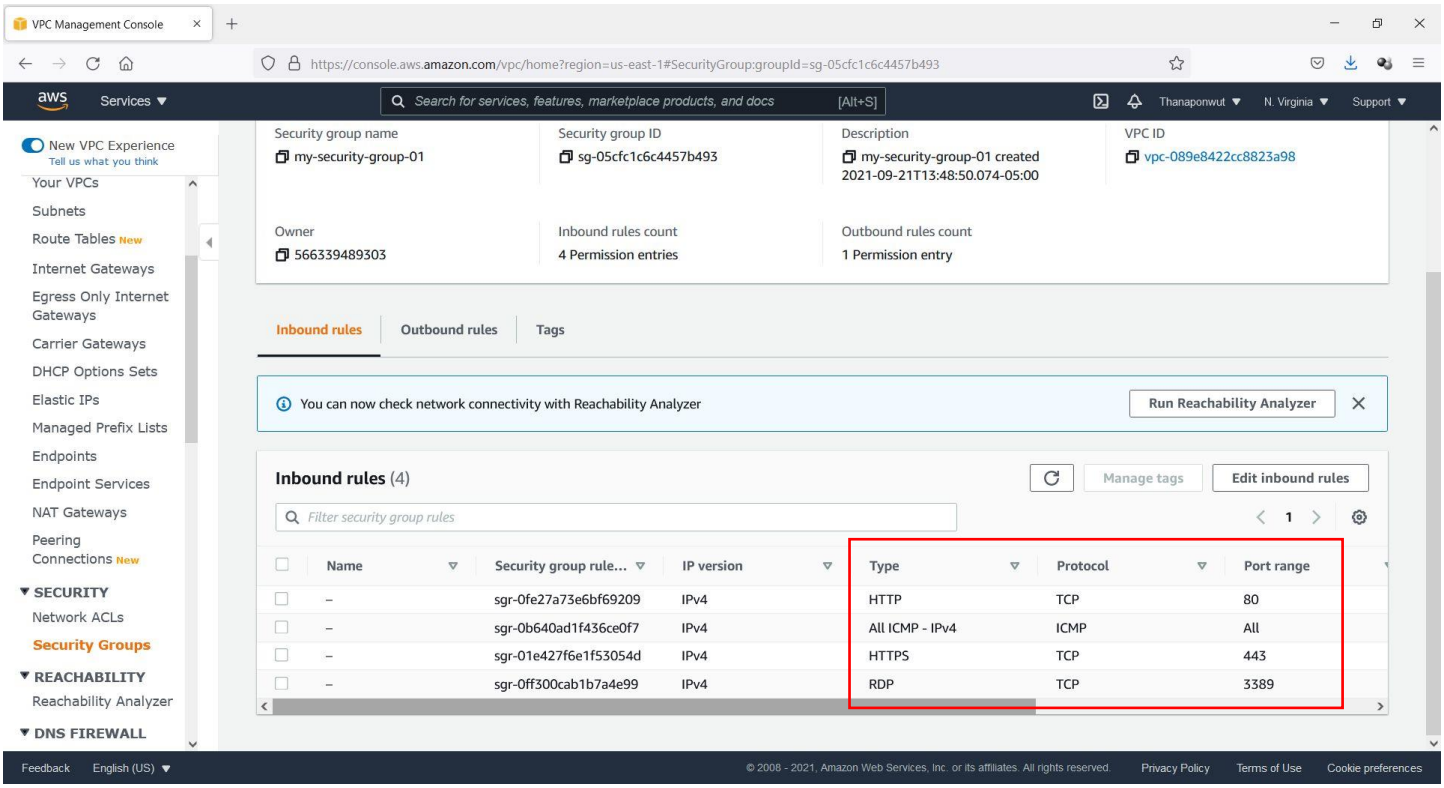
- Network ACLs: Inbound and Outbound rules for all subnets in a VPC (default value is allow all).



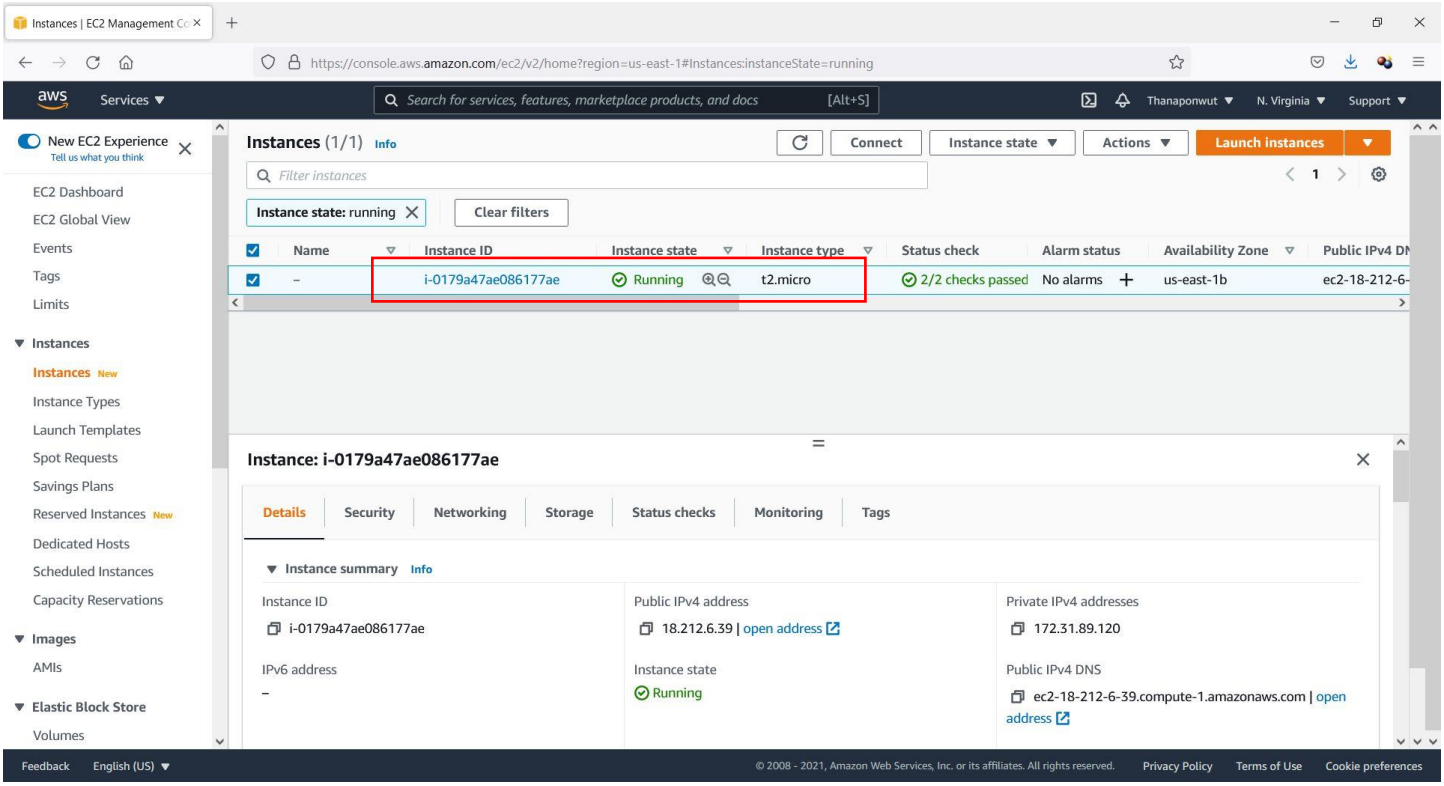
- Security groups: Inbound and Outbound rules for instances in VPC.



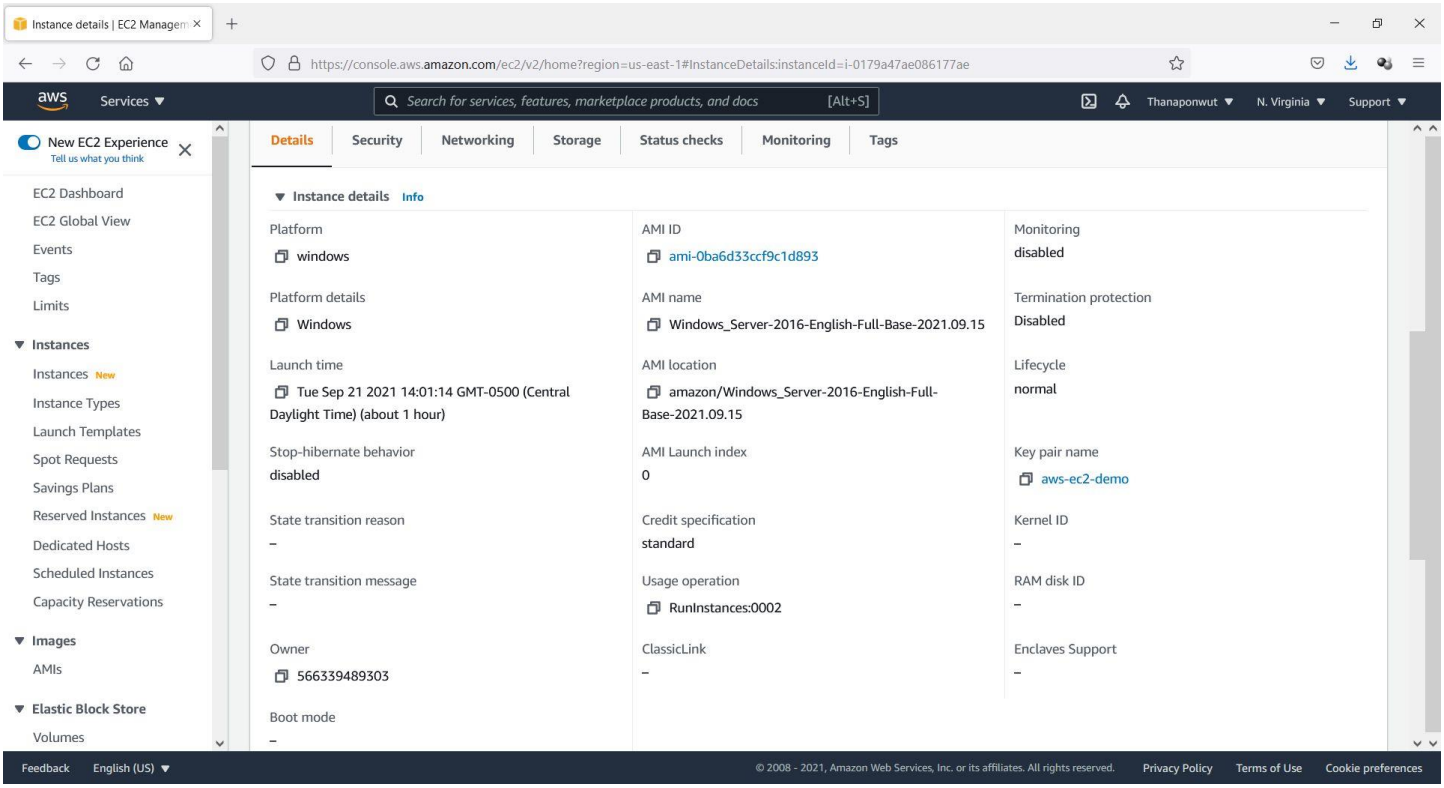
- Configure inbound rules for new instance.
    - HTTP and HTTPs for web services access.
    - ICMP for PING command.
    - RDP for remote desktop access from my IP only.



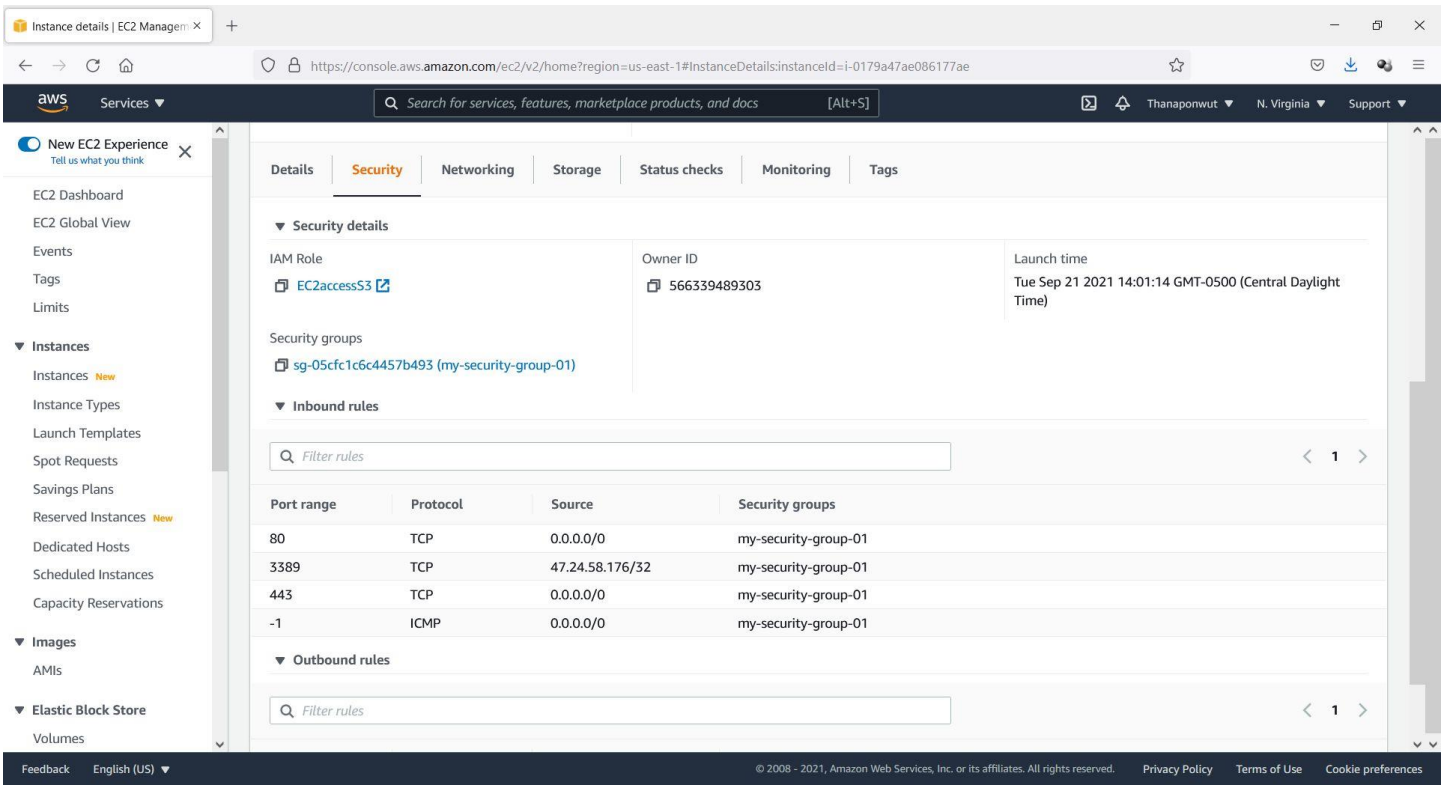
- Create and run a new instance.



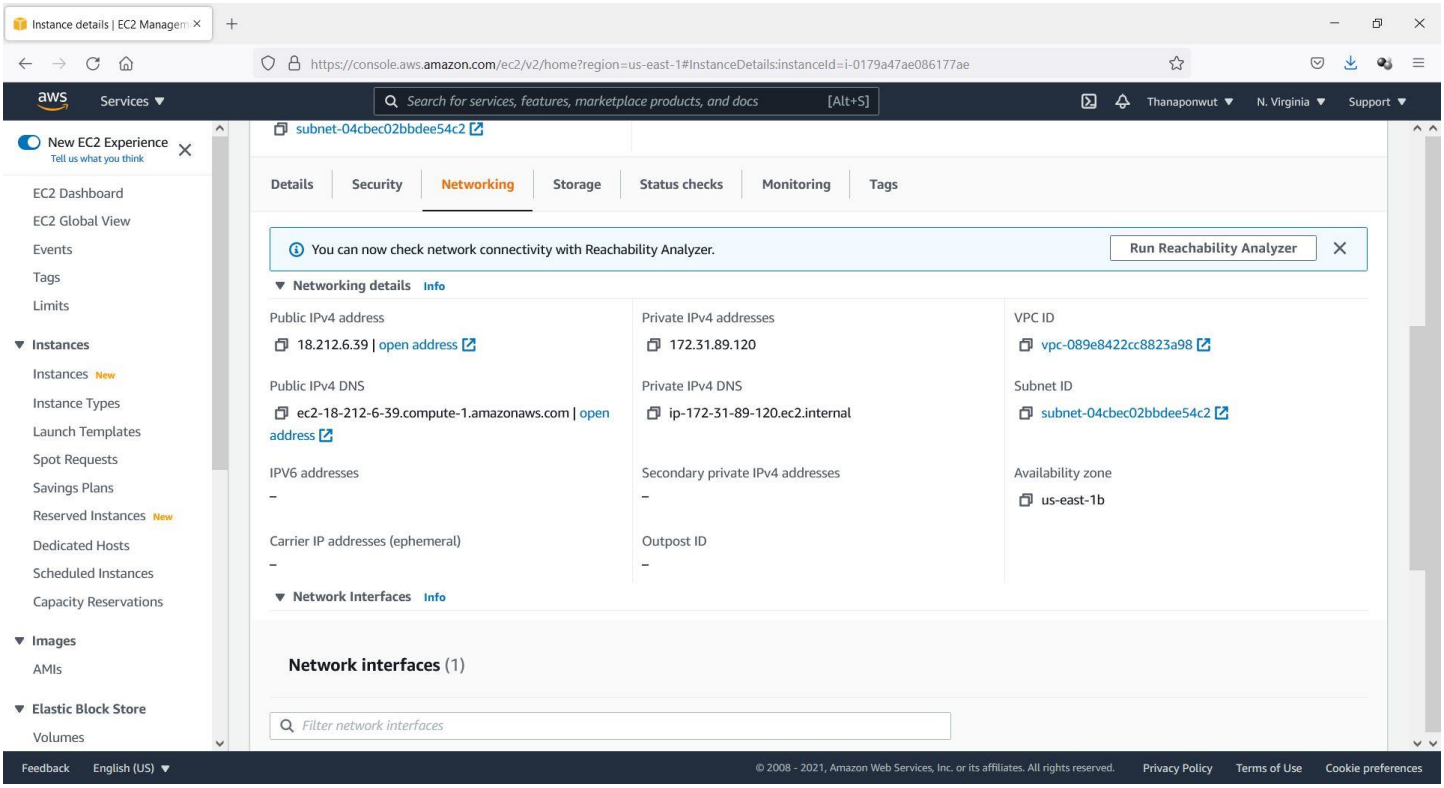
- Instance details



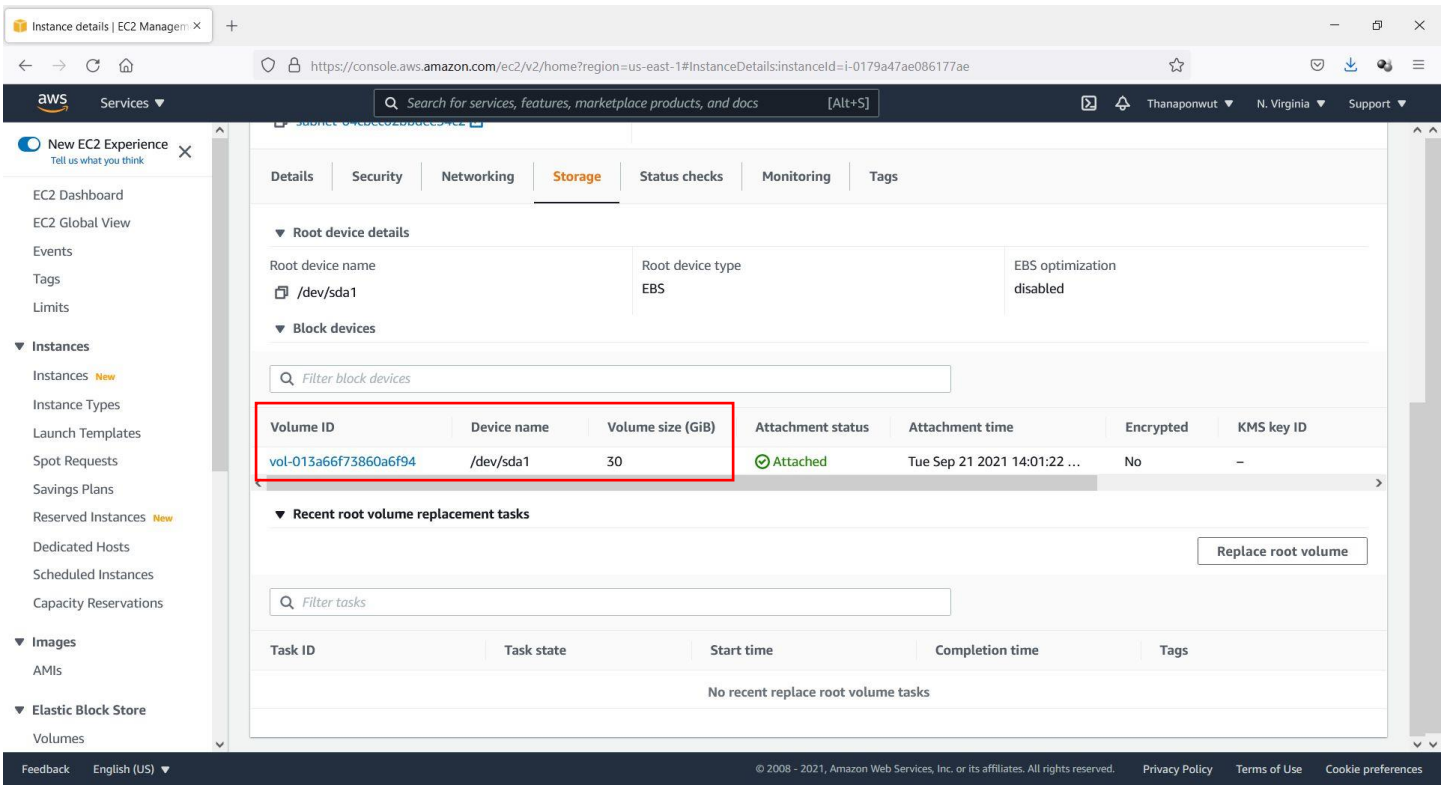
- Instance security tab



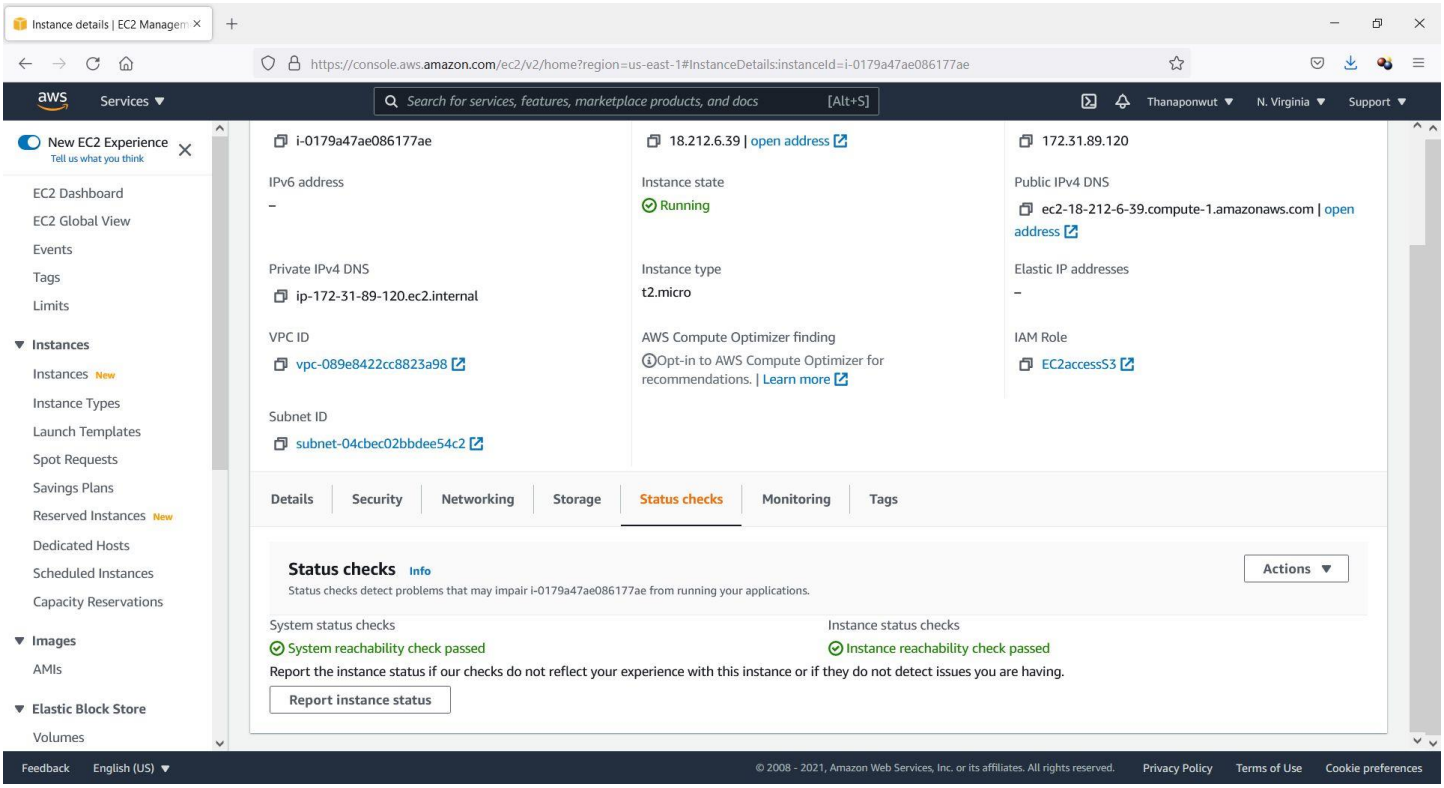
- Instance networking tab



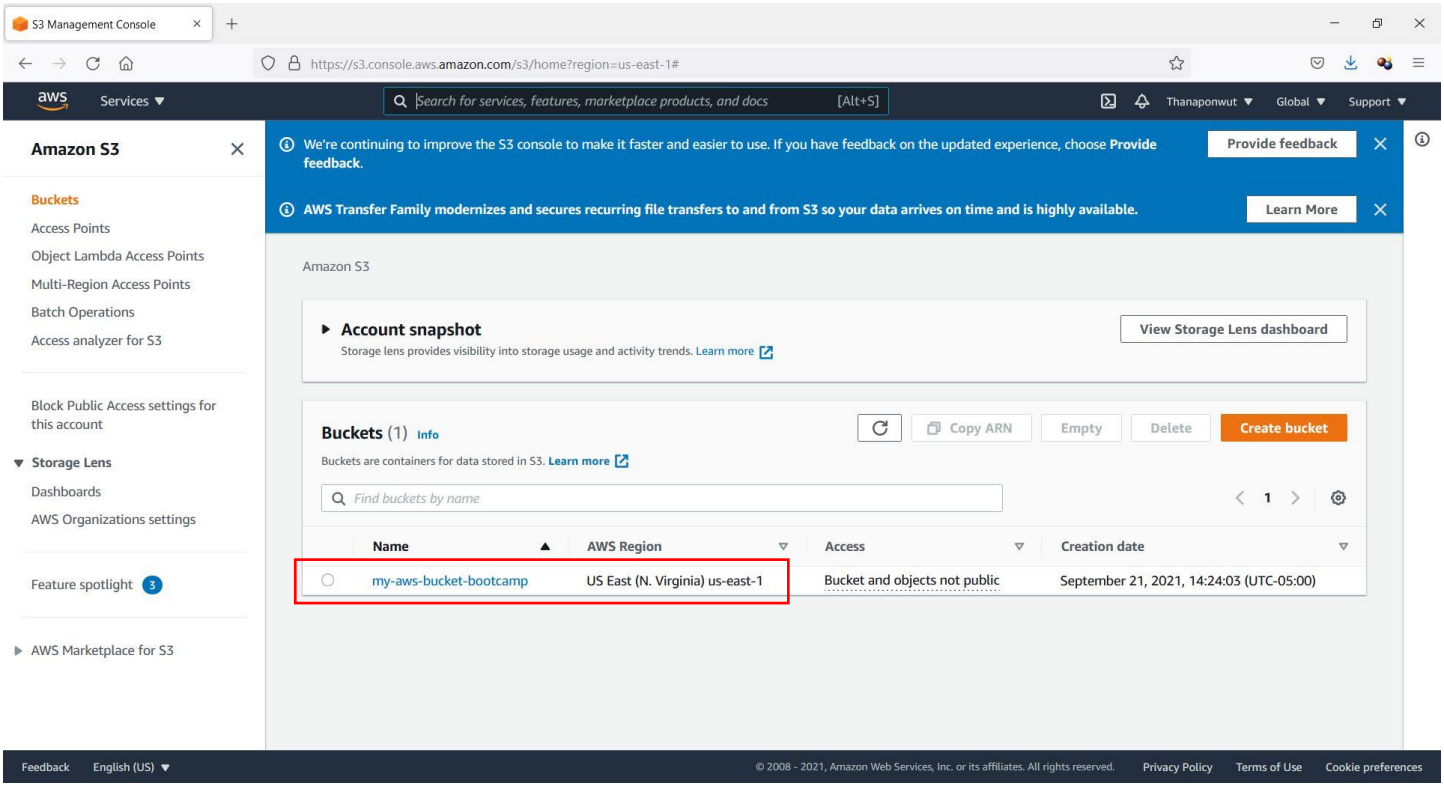
- Instance storage tab (VM local disk)



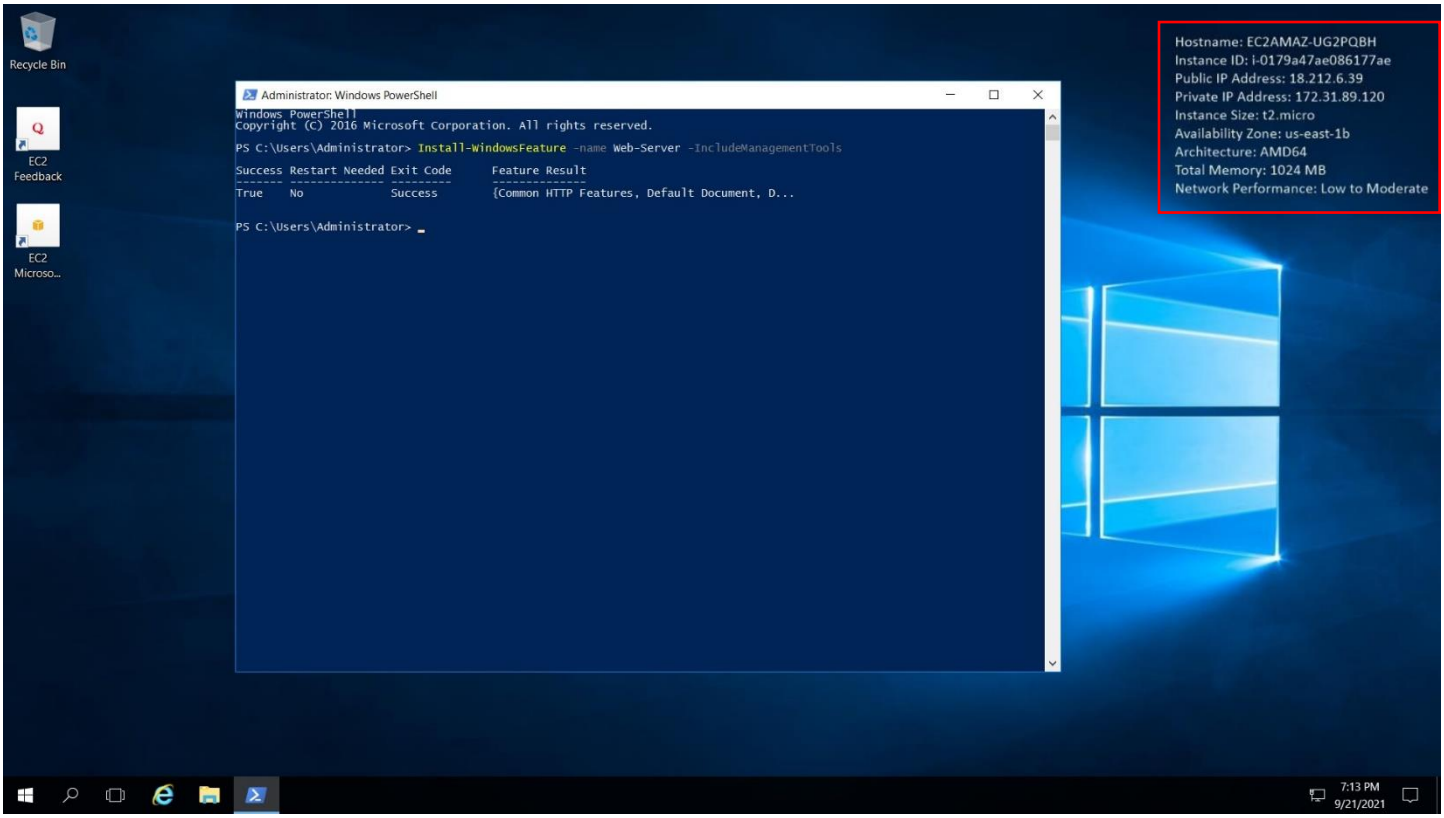
- Instance status checks tab



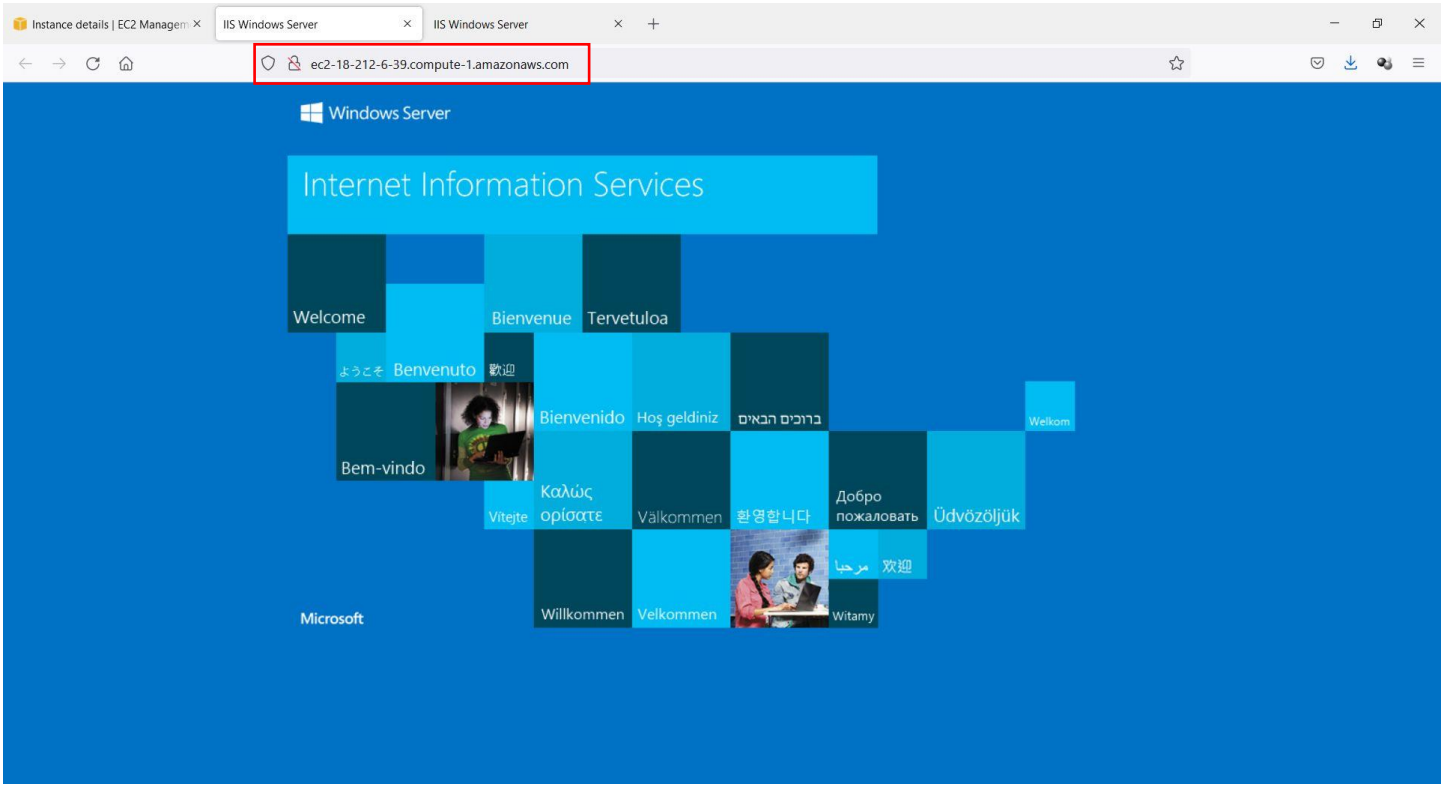
- Create S3 bucket



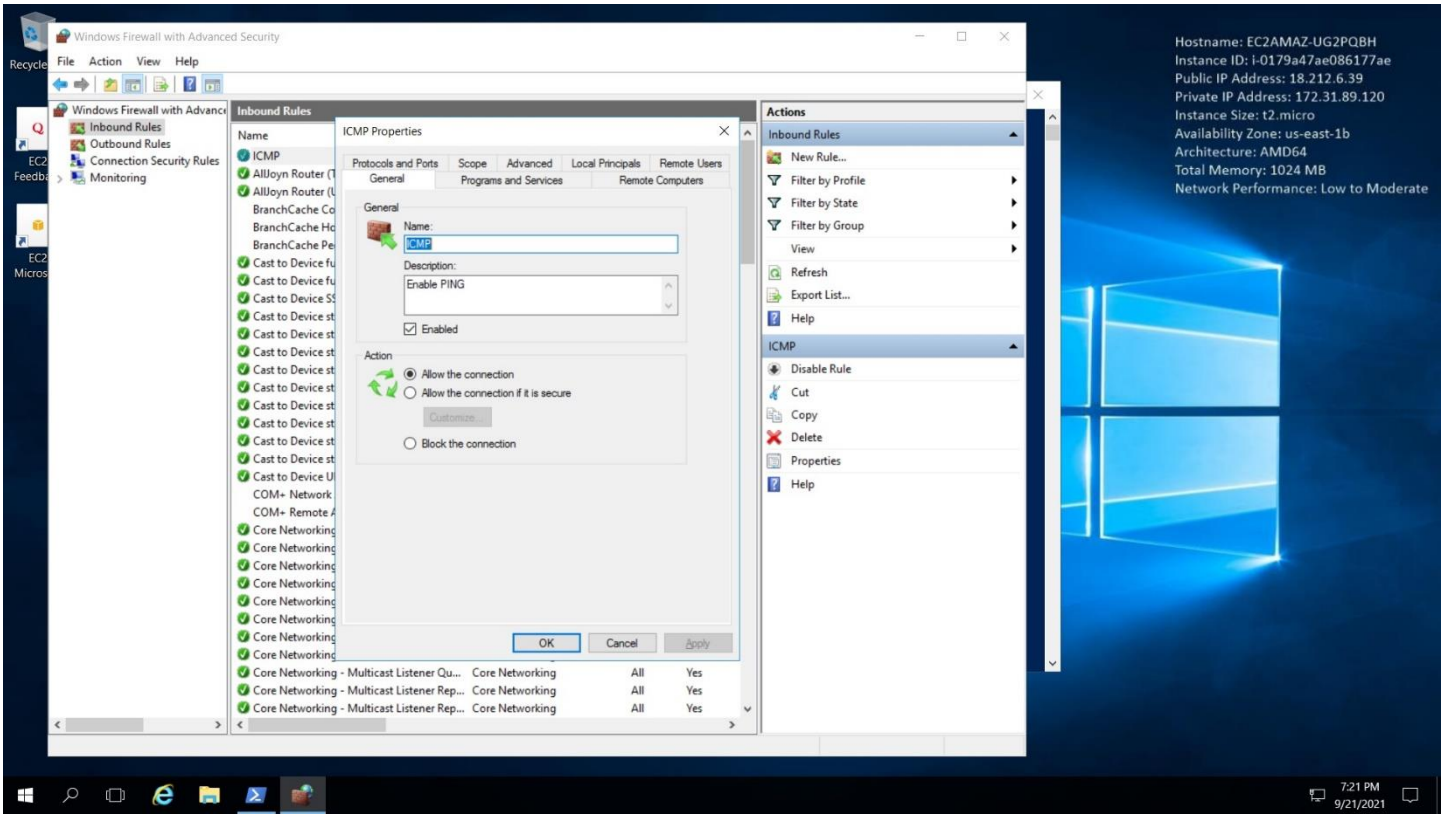
- Log in to instance console via remote desktop and install IIS web service.



- Test access web site over internet.



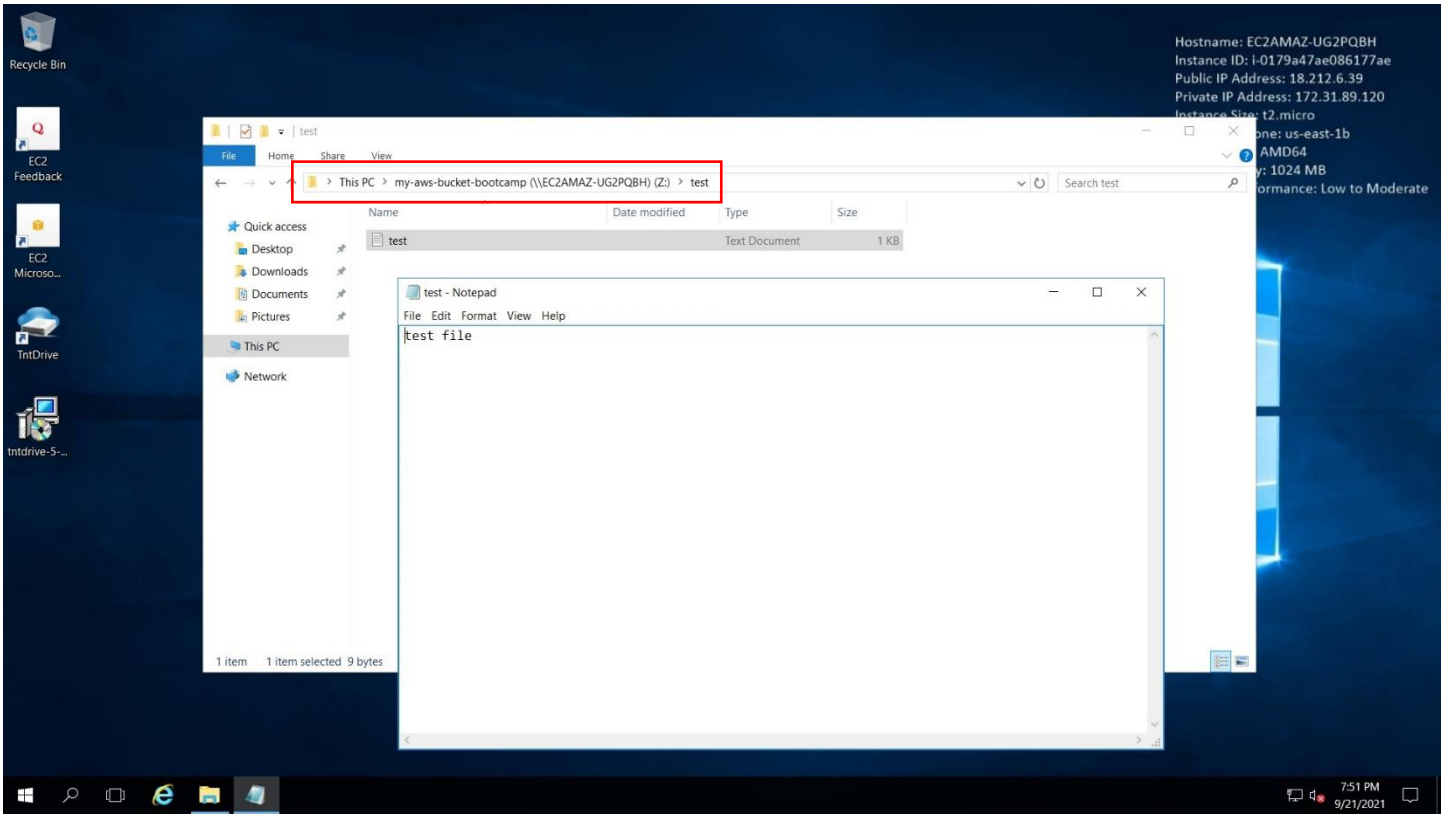
- Configure firewall rule to allow ICMP packets



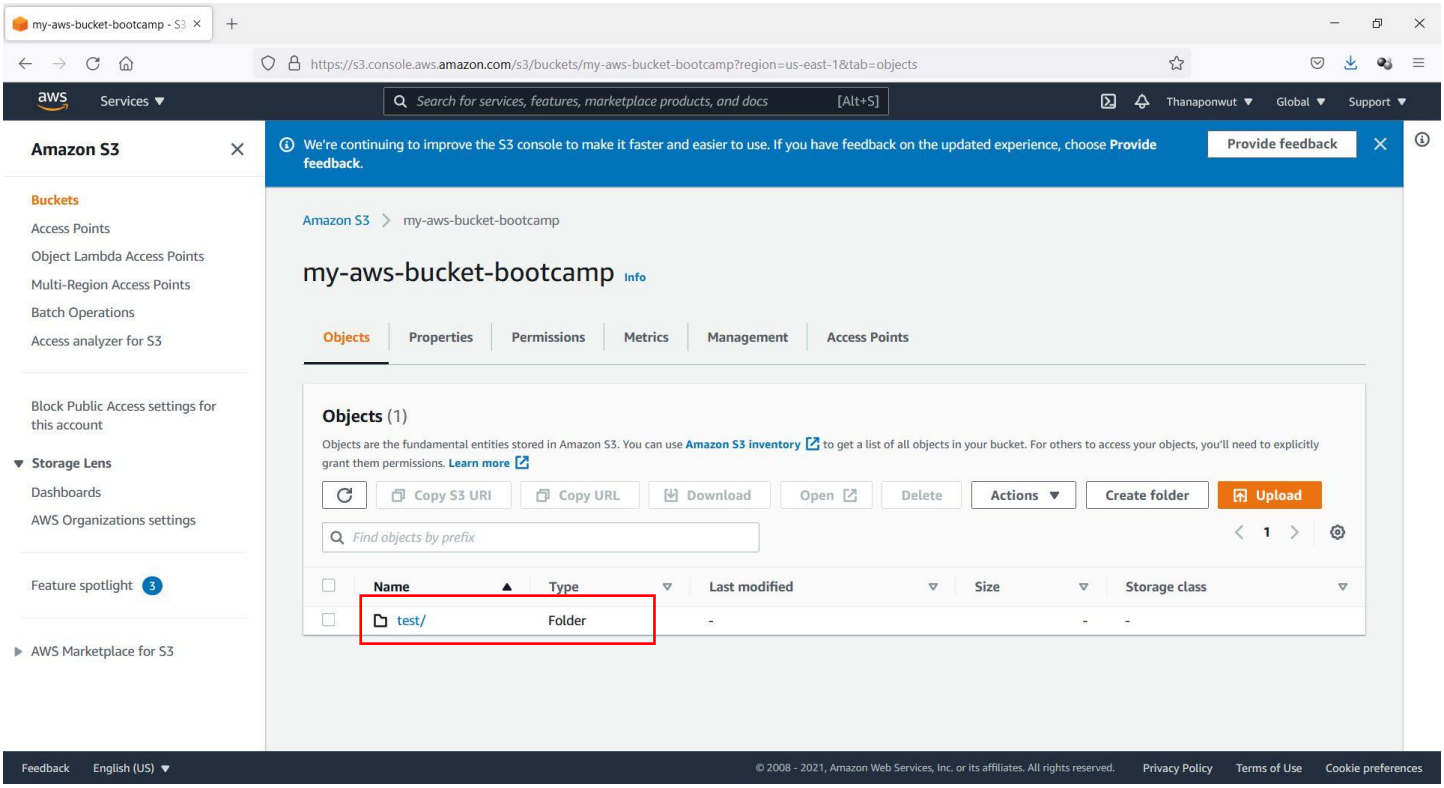
- Test ping an instance

```
Command Prompt
Ping statistics for 18.212.6.39:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\Users\wuthi>ping 18.212.6.39

Pinging 18.212.6.39 with 32 bytes of data:
Reply from 18.212.6.39: bytes=32 time=45ms TTL=109
Reply from 18.212.6.39: bytes=32 time=41ms TTL=109
Reply from 18.212.6.39: bytes=32 time=57ms TTL=109
Reply from 18.212.6.39: bytes=32 time=43ms TTL=109

Ping statistics for 18.212.6.39:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 41ms, Maximum = 57ms, Average = 46ms

C:\Users\wuthi>ping ec2-18-212-6-39.compute-1.amazonaws.com

Pinging ec2-18-212-6-39.compute-1.amazonaws.com [18.212.6.39] with 32 bytes of data:
Reply from 18.212.6.39: bytes=32 time=48ms TTL=109
Reply from 18.212.6.39: bytes=32 time=46ms TTL=109
Reply from 18.212.6.39: bytes=32 time=42ms TTL=109
Reply from 18.212.6.39: bytes=32 time=42ms TTL=109

Ping statistics for 18.212.6.39:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 42ms, Maximum = 48ms, Average = 44ms

C:\Users\wuthi>
```

- Map S3 bucket to an instance and test create folder and file.



- Check data in S3 console



- Install AWS cli and test access S3 bucket