VPC- Virtual Private Cloud

🚀 A Virtual Private Cloud is a logically isolated section of the AWS cloud where users can launch AWS resources is a Virtual Network That they define.

🚀 🚀 Key Features of VPC 🚀 🚀

* Subnets
* Internet Gateways
* Route Tables
* Security Groups

Let’s do the Practical:-

VPC -- Virtual Private Cloud • VPC

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Steps to Create and set up a OWN VPC in AWS environment:
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1. Create a own VPC.
2. Create a Public and Private subnet for different Available AZs(not in 1c) by assigning diferent CIDR blocks.
3. Create Internet Gateway & attach it to the your VPC.
4. Create Routing table [RT], One as Public & One as Private by associating the appropirate subnets to it.
5. Edit the Public route table's alone under Route map the IGW, not the Private route table's and leave it as it is.
   Ex:(Go to routing table select public route tables and edit routes in that Add route give Destination as
    0.0.0.0/0 and target as your IGW(select which you already created))
6. Create Two Security Groups - One for Public [Edit the Inbound rules with RDP,
   HTTP/HTTPS, SSH and map 0.0.0.0/0 in the source]
   & One for Private [Edit the inbound rules give protocol as All tcp and map the SG of Public in the source].
7. Create Two windows EC2s one in public and one in private subnets with proper Security Groups.
8. Login into Public ec2 and check the internet connection.
9. Create NAT gateway and map the public subnet and allocate new Elastic IP for the internet connection
   to Private subnet.
10.Map the NAT gateway into Private Route Table.
   Ex:(Go to routing table select private route tables and edit routes in that Add route give Destination as
    0.0.0.0/0 and target as your Nat gateway(select which you already created))
11. Now login into the Private EC2 and verify the connectivity and Internet facility.

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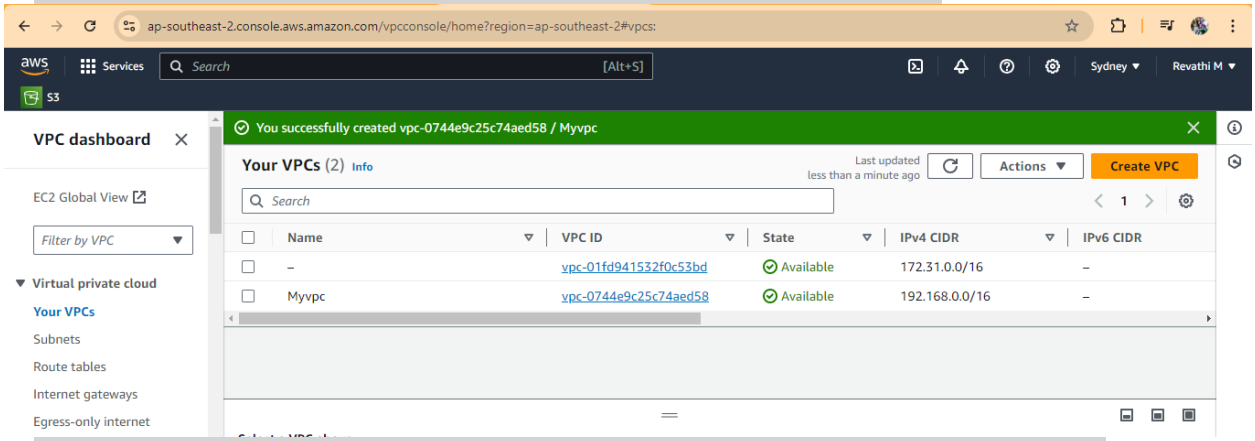
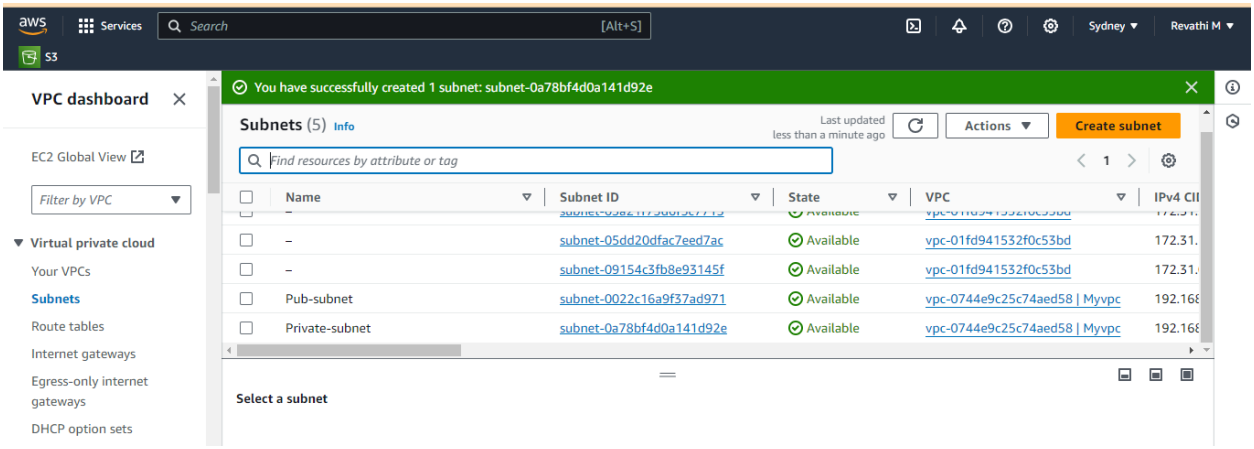
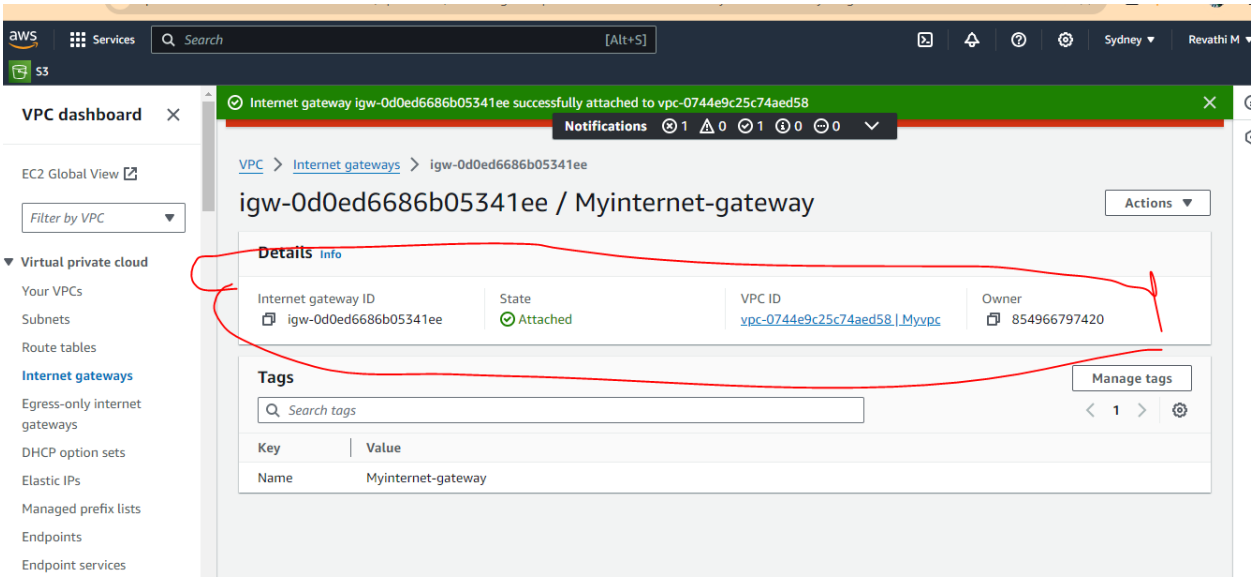
Step 1: Create VPC in AWS Console



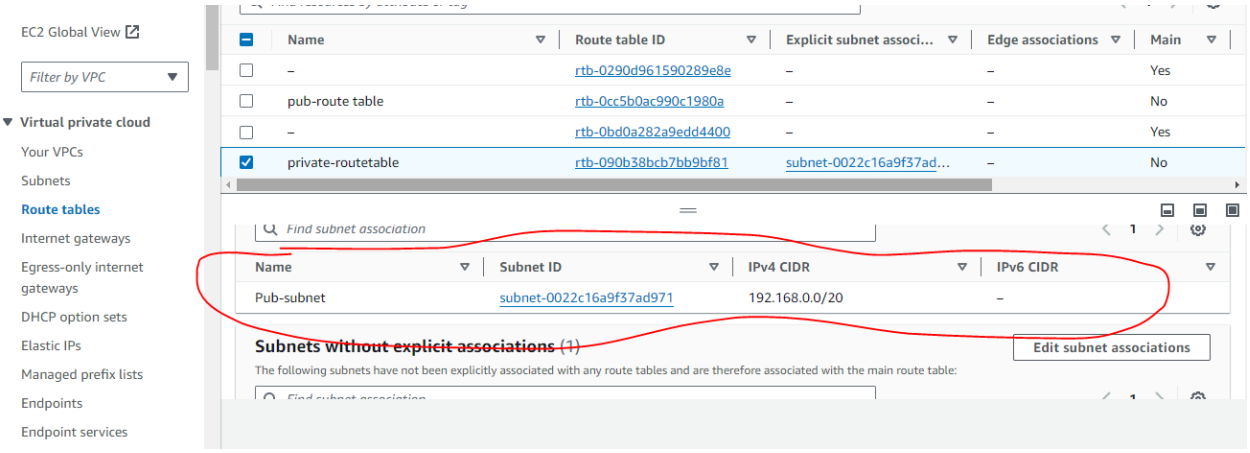
Step 2: Create Public and Private Subnets



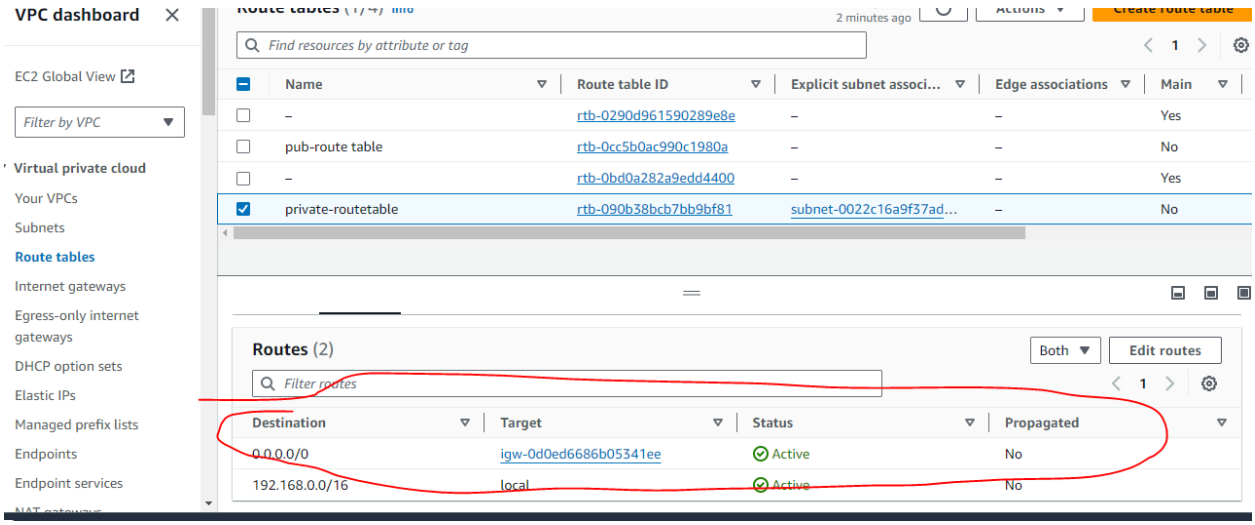
Step 3:Create Internet Gateway and attach to vpc



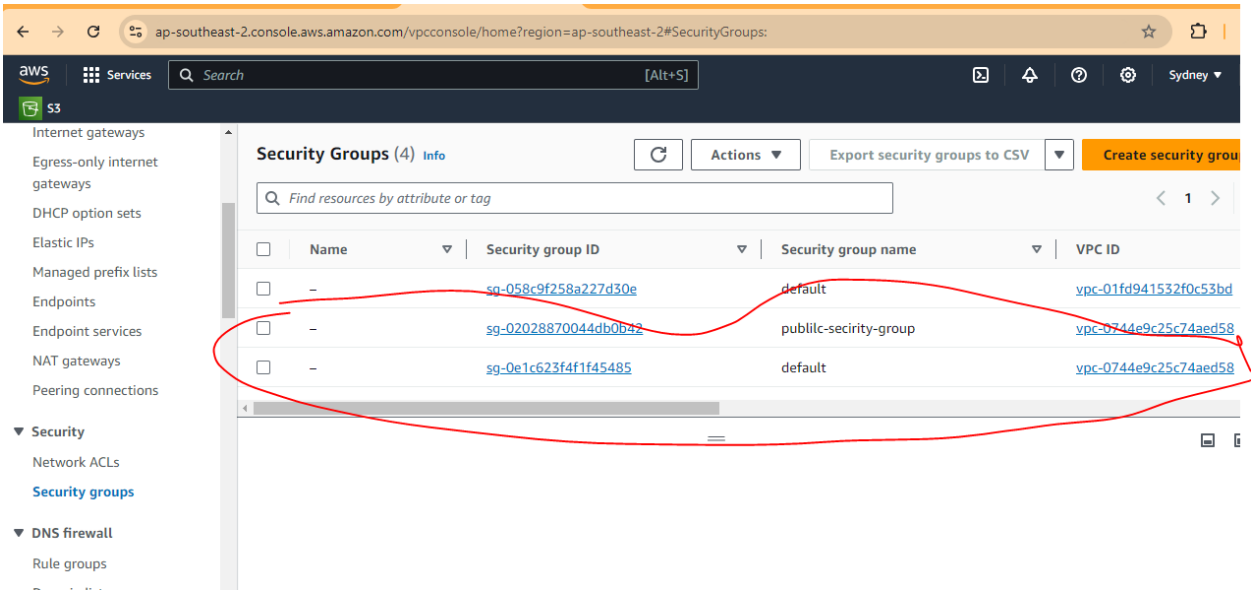
Step 4: Create a Route table and associate it with the subnet



Step 5: Add Internet Gateway to the Route tables



Step 6: Create security groups and open the appropriate port


ap-southeast-2.console.aws.amazon.com/vpcconsole/home?region=ap-southeast-2#SecurityGroups:
aws
Services
Search
[Alt+S]
Sydney
S3
Internet gateways
Egress-only internet gateways
DHCP option sets
Elastic IPs
Managed prefix lists
Endpoints
Endpoint services
NAT gateways
Peering connections
Security
Network ACLs
Security groups
DNS firewall
Rule groups
Security Groups (4) Info
Actions
Export security groups to CSV
Create security grou
Find resources by attribute or tag
1
Name
Security group ID
Security group name
VPC ID
–
sg-058c9f258a227d30e
default
vpc-01fd941532f0c53bd
–
sg-02028870044db0b42
publilc-secirity-group
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default
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