### Lab Assignment 09

#### Create a VPC with AWS Cloud Formation

Reference article link: https://medium.com/@rahulmuthu80/provision-highly-available-vpc-architecture-using-cloudformation-fit-devops-3cd62ba54a91

### Task-1: Provisioning VPC using CloudFormation template

We are going to implement the following architecture.

We will create the following Resources.

VPC with CIDR: 10.0.0.0/16

2 Public Subnets in Each AZ.

PublicSubnet1: 10.0.10.0/24

PublicSubnet2: 10.0.11.0/24

2 Private Subnets in Each AZ.

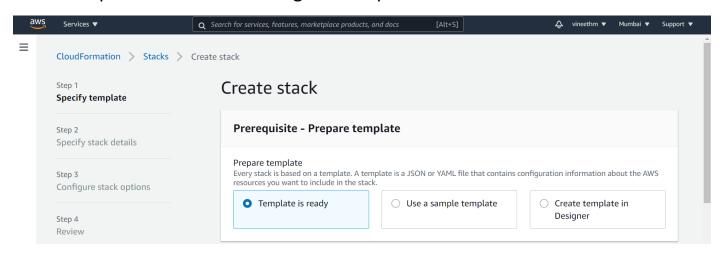
PrivateSubnet1: 10.0.20.0/24

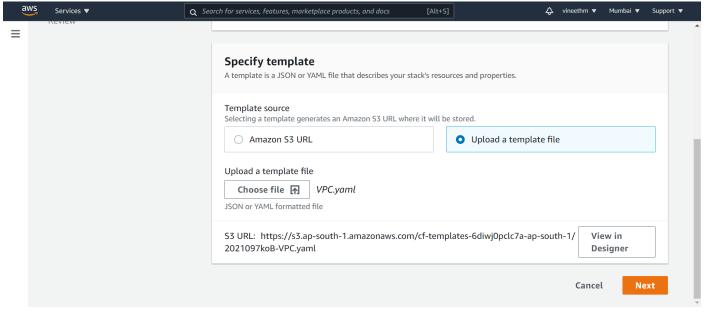
PrivateSubnet2: 10.0.21.0/24

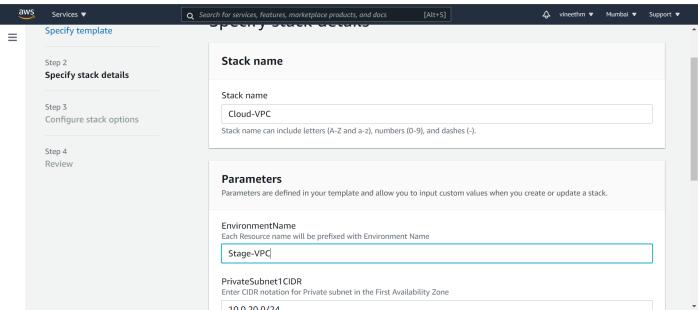
- 1 Route Table for Public Subnets
- 2 Route Tables , One for each Private Subnet
- Internet Gateway Will be attached with Public Route Table
- 2 NAT Gateway in each AZ and will be attached with each private Route Tables.

Let us create a template file named VPC.yaml

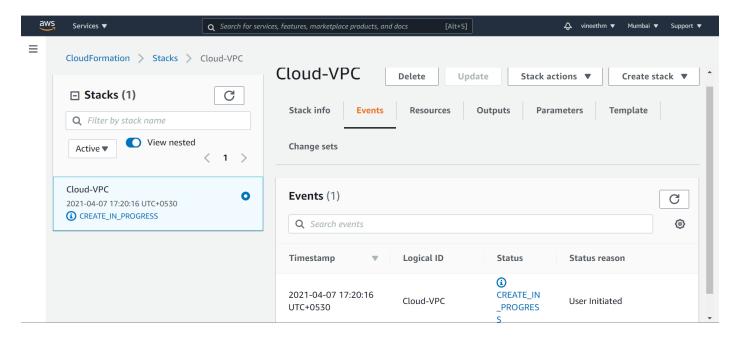
## Now let's provision the VPC using the template we built.



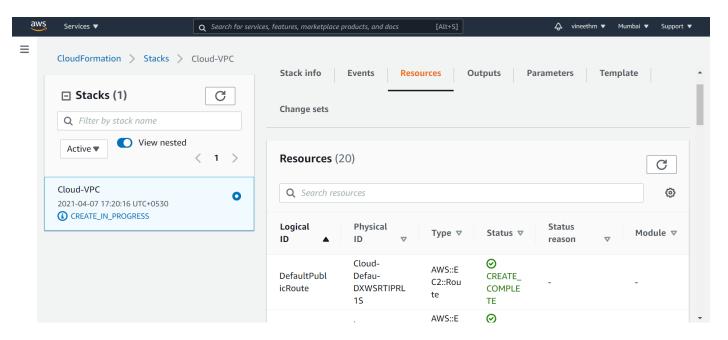




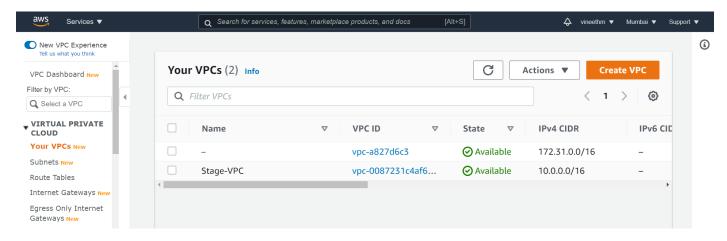
#### Create the stack



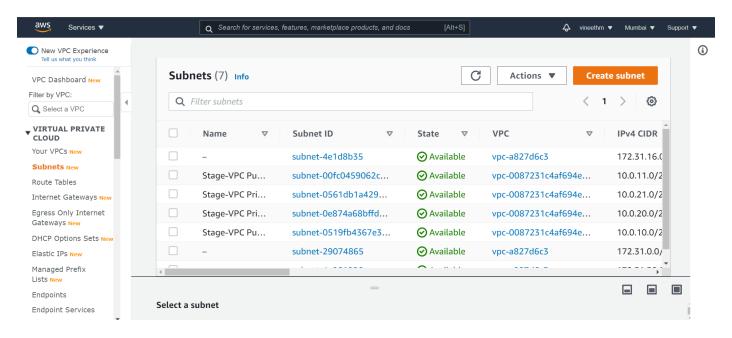
### Task-2: Check the resources created in the Resources Tab.



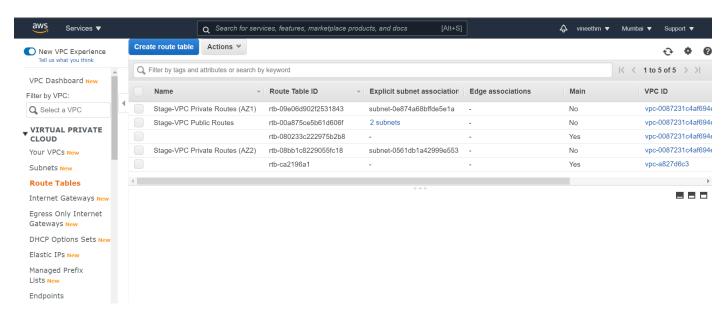
# Task-3: Go to VPC and find the newly created VPC from the template.



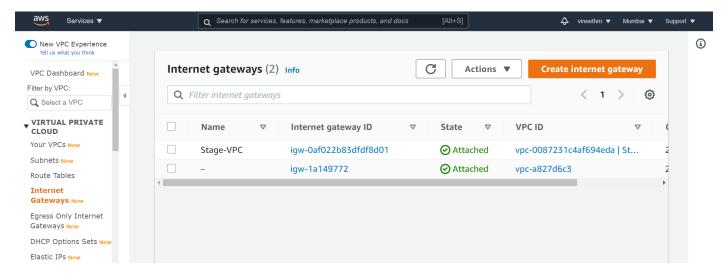
### Task-4: Check the subnets.



Task-5: Check the route tables.



## Task-6: Check the Internet Gateway.



# Task-7: Check the NAT Gateway.

