**VPC CREATION THROUGH CLI**

If you don’t have the CLI configured download and configure it :

http://docs.aws.amazon.com/cli/latest/userguide/installing.html

I have emphasized tagging everything you create because it will save a lot of frustration later

when trying to figure out which resource is which.

Here are the steps:

Create VPC:

```console

aws ec2 create-vpc --cidr-block 10.0.0.0/16

```

Tag That VPC:

```console

aws ec2 create-tags --resources vpc-d363afab --tags Key=Name,Value=CLI-VPC

```

Create a public Subnet:

```console

aws ec2 create-subnet --vpc-id vpc-d363afab --cidr-block 10.0.1.0/24

```

Tag:

```console

aws ec2 create-tags --resources subnet-7314ad17 --tags Key=Name,Value=CLI-Public-Subnet

```

Create a private Subnet:

```console

aws ec2 create-subnet --vpc-id vpc-d363afab --cidr-block 10.0.2.0/24

```

Tag:

```console

aws ec2 create-tags --resources subnet-4109b025 --tags Key=Name,Value=CLI-Private-Subnet

```

Create an Internet Gateway:

```console

aws ec2 create-internet-gateway

```

Tag:

```console

aws ec2 create-tags --resources igw-afdd01d6 --tags Key=Name,Value=CLI-Internet-Gateway

```

Attach Internet Gateway:

```console

aws ec2 attach-internet-gateway --internet-gateway-id igw-5d685a38 --vpc-id vpc-d363afab

```

Allocate Elastic IP:

```console

aws ec2 allocate-address --domain vpc

```

Create a Nat-gateway and place it in the public Subnet:

```console

aws ec2 create-nat-gateway --subnet-id subnet-1a2b3c4d --allocation-id eipalloc-37fc1a52

```

Tag:

```console

aws ec2 create-tags --resources nat-0e4d97e539eadf232 --tags Key=Name,Value=CLI-Nat-Gateway

```

Create Route Table 1 for public Subnet:

```console

aws ec2 create-route-table --vpc-id vpc-d363afab

# Tag

aws ec2 create-tags --resources rtb-14c3736e --tags Key=Name,Value=CLI-PUBLIC\_RT

```

Create Route Table 2 for private Subnet:

```console

aws ec2 create-route-table --vpc-id vpc-d363afab

#Tag:

aws ec2 create-tags --resources rtb-cbc070b1 --tags Key=Name,Value=CLI-PRIVATE\_RT

```

Create a route to the internet in Route Table 1:

```console

aws ec2 create-route --route-table-id rtb-14c3736e --destination-cidr-block 0.0.0.0/0 --gateway-id igw-afdd01d6

```

Create a route to the internet in Route Table 2 via Nat:

```console

aws ec2 create-route --route-table-id rtb-cbc070b1 --destination-cidr-block 0.0.0.0/0 -- gateway-id nat-0e4d97e539eadf232

```

Associate Route Table 1 to PublicSubnet :

```console

aws ec2 associate-route-table --route-table-id rtb-14c3736e --subnet-id subnet-7314ad17

```

Associate Route Table 2 to PrivateSubnet:

```console

aws ec2 associate-route-table --route-table-id rtb-1245623e --subnet-id subnet-234567as

```

Create a Security Group for Web Access and SSH:

```console

Aws ec2 create-security-group --group-name CLI-WEB-SecurityGroup -description "My security group" --vpc-id vpc-d363afab

```

Tag:

```console

aws ec2 create-tags --resources sg-03ca1371 --tags Key=Name,Value=CLI\_SECURITY\_GROUP

Add Ingress Port 22 and 80:

```

Create Key Pair and copy the key part and write it to a file MyKeyPairCLI.pem :

```console

aws ec2 create-key-pair --key-name MyKeyPairCLI > MyKeyPairCLI.pem

```

Change the permissions on that file to restrict access:

```console

chmod 400 MyKeyPairCLI.pem

```

Launch EC2 Instance In public subnet with Amazon AMI ami-8c1be5f6 :

```console

aws ec2 run-instances --image-id ami-8c1be5f6 --count 1 --instance-type t2.micro --key- name MyKeyPairCLI --security-group-ids sg-c3ed34b1 --subnet-id subnet-7314ad17 -- associate-public-ip-address

```

TAG EC2:

```console

aws ec2 create-tags --resources i-05c8b15394d0905b8 --tags Key=Name,Value=CLI\_EC2

```

Describe Instance to get the IP or check the console:

```console

aws ec2 describe-instances

```

SSH into your web browser:

```console

ssh ec2-user@34.34.234.4 -i MyKeyPairCLI.pem

```

And you’re now logged in! Have fun with your setup.