

Create a ***Lab VPC (10.0.0.0/16)*** ; goto action edit DNS hostname >> enable>> save (to assign friendly DNS to EC2)

**Create Public Subnet (10.0.0.0/24);** Action>>modify auto-assign IP settings >>auto assign IPv4>>enable

**Create Private Subnet (10.0.2.0/23)**

Create Internet Gateway : **Lab IGW** and attach it to **Lab VPC**

Configure Route Table:

Rename the default/global route table as **Private Route Table**

Create **Public Route Table** in Lab VPC

Edit route >>Add route >>Destination: 0.0.0.0/0 >>target : Lab IGW>>subnet association : public subnet.

Create SG : **App SG;** inbound rule; type : http; source : anywhere

Create an IAM role : App inventory role

{

 "Version": "2012-10-17",

 "Statement": [

 {

 "Action": "ssm:\*",

 "Resource": "arn:aws:ssm:\*:\*:parameter/inventory-app/\*",

 "Effect": "Allow"

 }

 ]

}

Create EC2 with app-inventory role ;user data and app-sg

#!/bin/bash

# Install Apache Web Server and PHP

yum install -y httpd mysql

amazon-linux-extras install -y php7.2

# Download Lab files

wget [https://hugonet.s3-us-west-2.amazonaws.com/Deploying+a+Web+Application+on+AWS/inventory-app.zip](https://hugonet.s3-us-west-2.amazonaws.com/Deploying%2Ba%2BWeb%2BApplication%2Bon%2BAWS/inventory-app.zip)

unzip inventory-app.zip -d /var/www/html/

# Download and install the AWS SDK for PHP

wget [https://hugonet.s3-us-west-2.amazonaws.com/Deploying+a+Web+Application+on+AWS/aws.zip](https://hugonet.s3-us-west-2.amazonaws.com/Deploying%2Ba%2BWeb%2BApplication%2Bon%2BAWS/aws.zip)

unzip aws -d /var/www/html

# Turn on web server

chkconfig httpd on

service httpd start



**Create Shared VPC (10.5.0.0/16)**

**Private Subnet 1 (10.5.0.0/23) in AZ-1** & **Private Subnet 2 (10.5.2.0/23) in AZ-2**

**Create DB-SG in shared vpc ; Type : MySql Aurora ; source : VPC 10.0.0.0/24**

**Create a MySql DB (free tier) in Private subnet 1**

DB instance identifier : inventory-db

Master username : master

Master password : lab-password

Confirm password : lab-password

Instance size : t2.micro

Burstable class : db.t2.micro

Connectivity : Shared-VPC

Additional connectivity configuration : existing vpc security group : DB-SG

Additional configuration : initial DB name : inventory ; go with all the default values

Create DB

**Create peering**

Create peering connection

Name tag : Lab-Peer

VPC requestor : Lab-VPC

VPC Acceptor : Shared-VPC

Create VPC

Select Lab-peer >>Action>>accept request

**Configure route table :**



**Public route table (lab vpc) >>add route >>destination : 10.5.0.0/16 target : peer-lab**

**Shared VPC route table >>add route >>destination : 10.0.0.0/16 ; target : peer lab**

* **Endpoint: Paste the Endpoint from db**
* **Database: **
* **Username: **
* **Password: **