

Connectivity



Virtual Private Cloud (VPC) [Info](#)

VPC that defines the virtual networking environment for this DB instance.

Default VPC (vpc-d8715da2) ▼

Only VPCs with a corresponding DB subnet group are listed.

i After a database is created, you can't change the VPC selection.

▼ Additional connectivity configuration

Subnet group [Info](#)

DB subnet group that defines which subnets and IP ranges the DB instance can use in the VPC you selected.

default ▼

Publicly accessible [Info](#)

☒ Yes

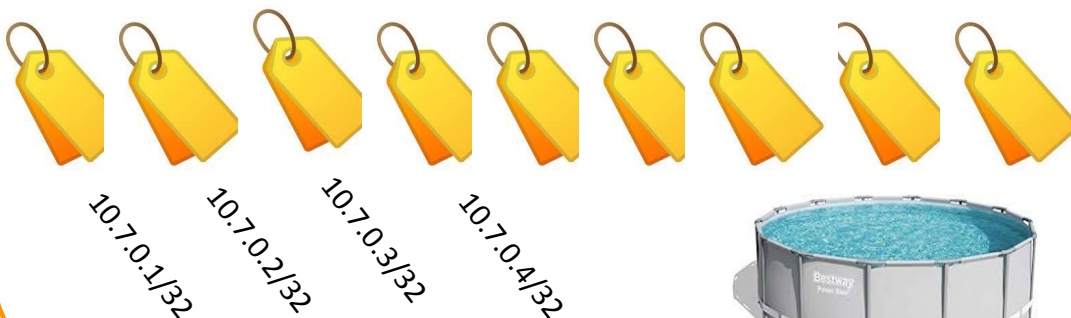
Amazon EC2 instances and devices outside the VPC can connect to your database. Choose one or more VPC security groups that specify which EC2 instances and devices inside the VPC can connect to the database.

☐ No

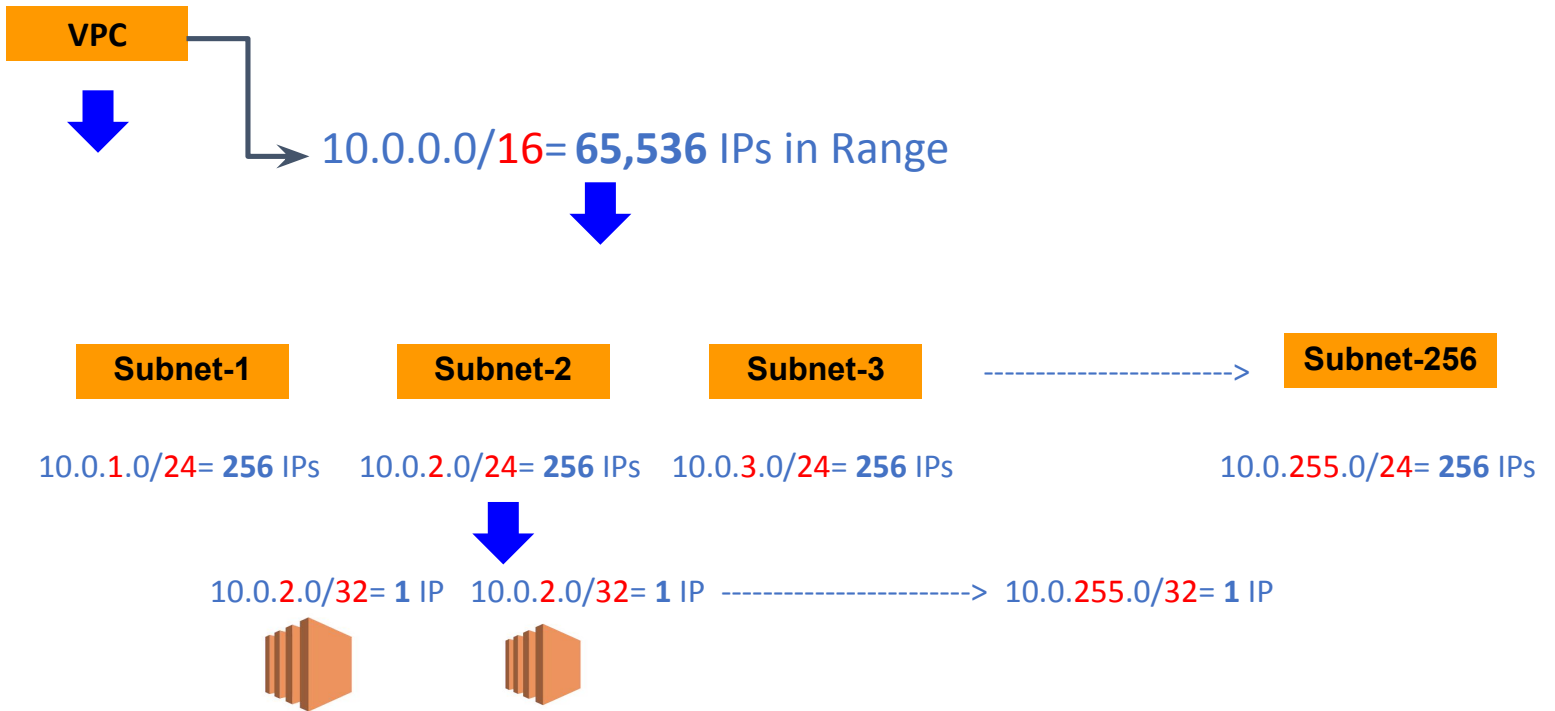
RDS will not assign a public IP address to the database. Only Amazon EC2 instances and devices inside the VPC can connect to your database.



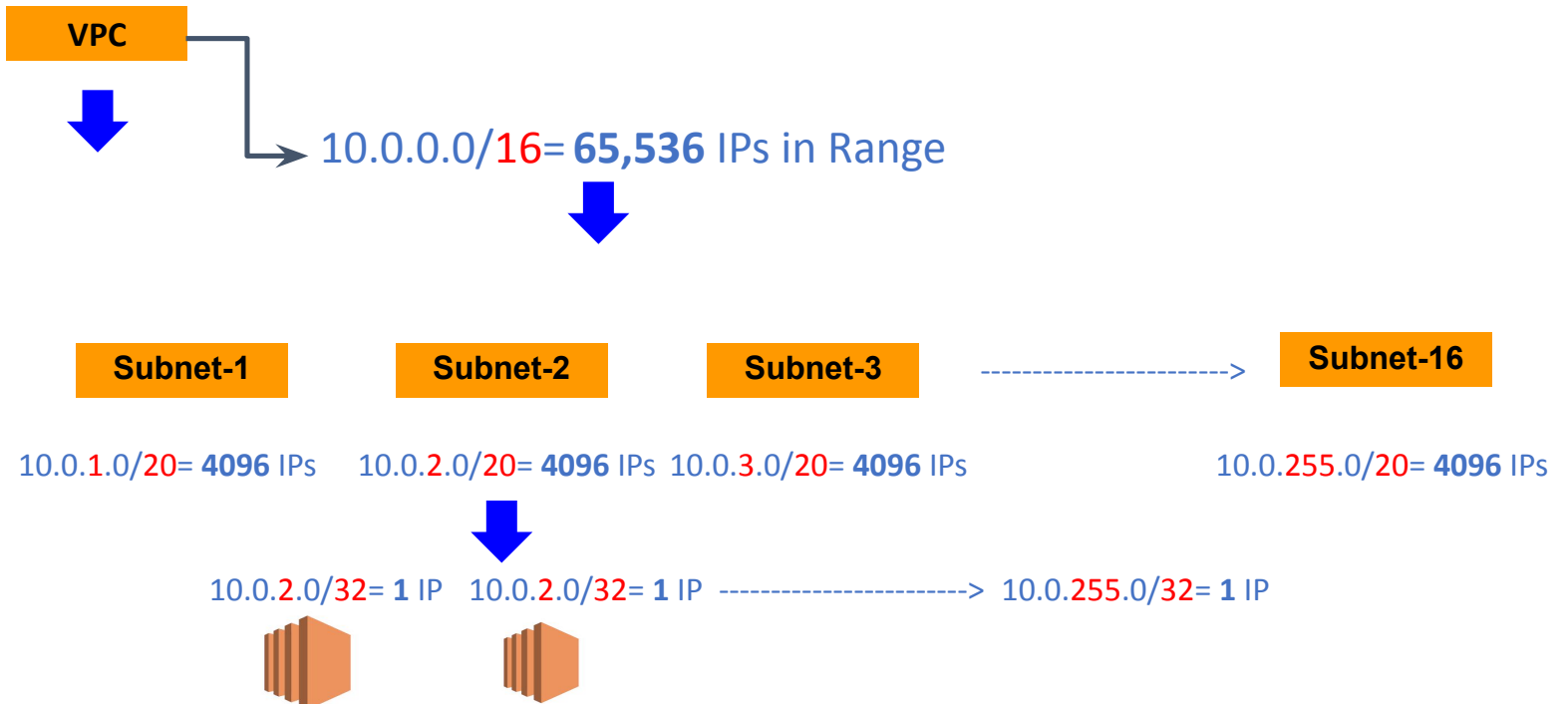
10.7.0.0/16 = 65000 IP

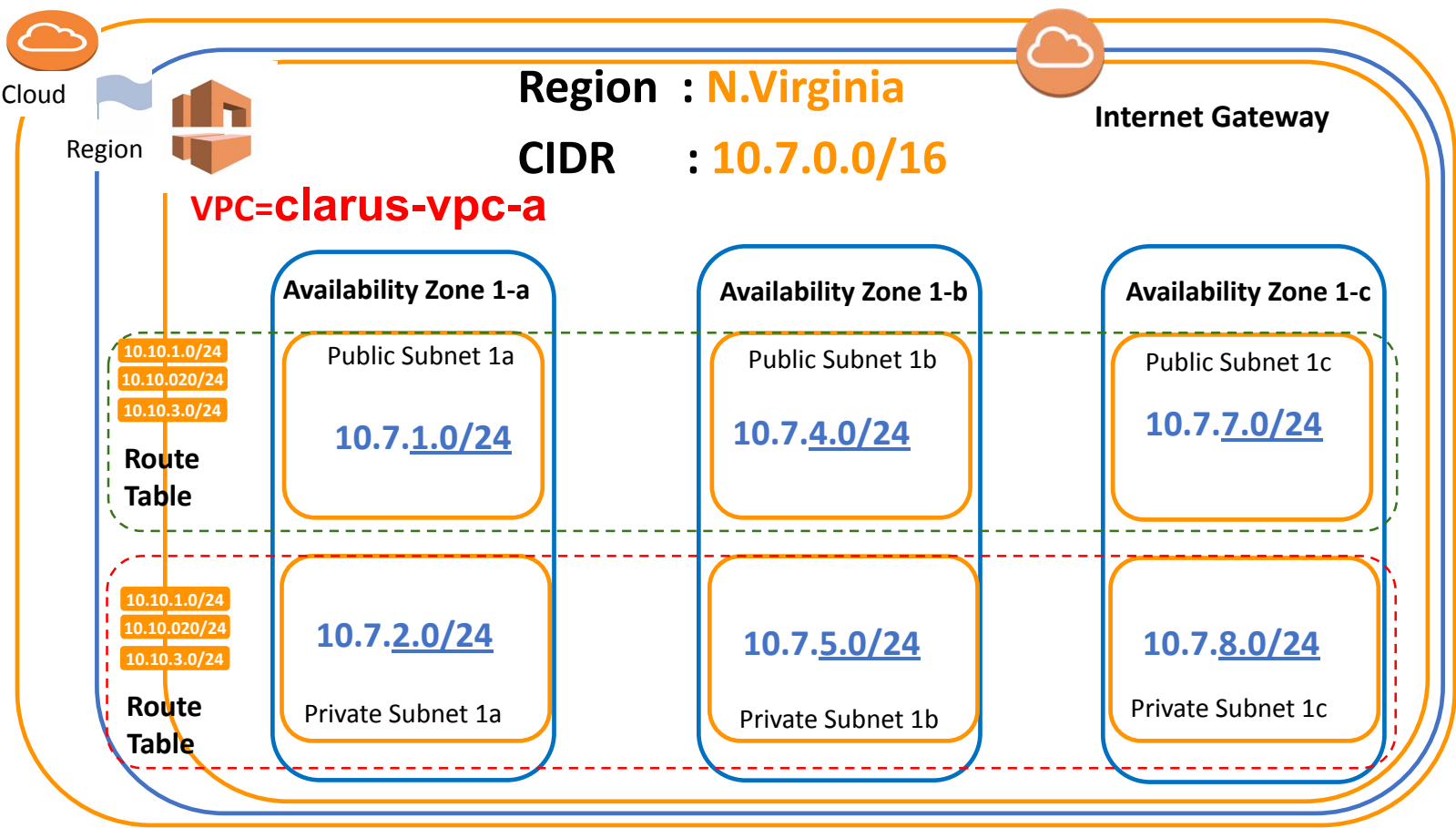


$65,536/256 = 256$ SUBNETS

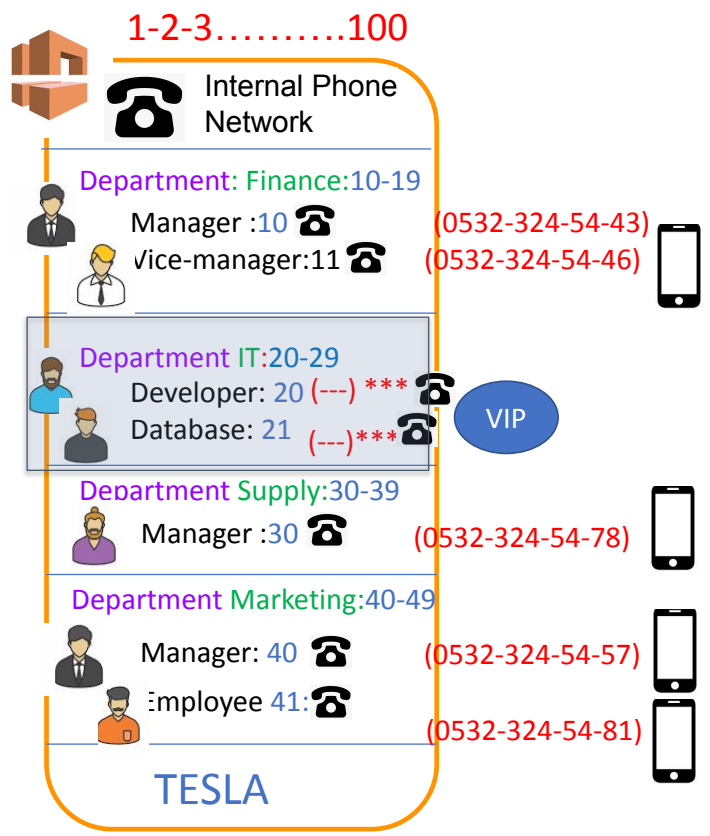


$65,536/4096 = 16$ SUBNETS

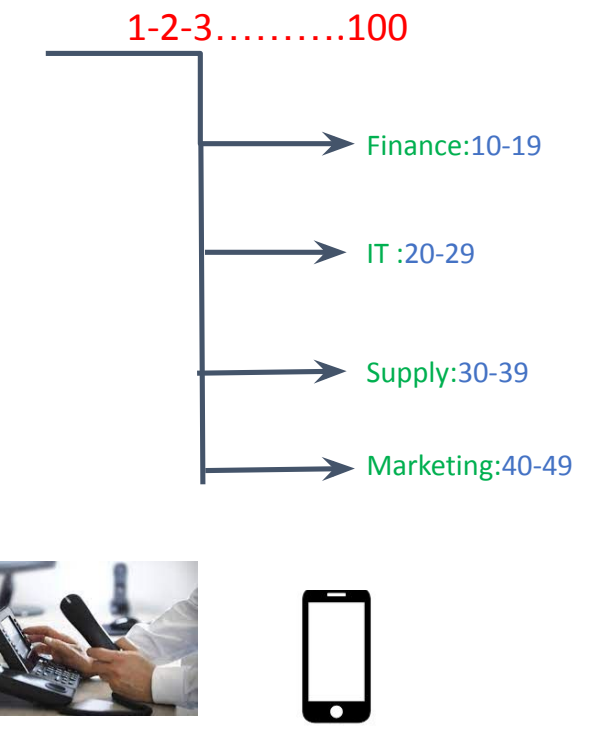


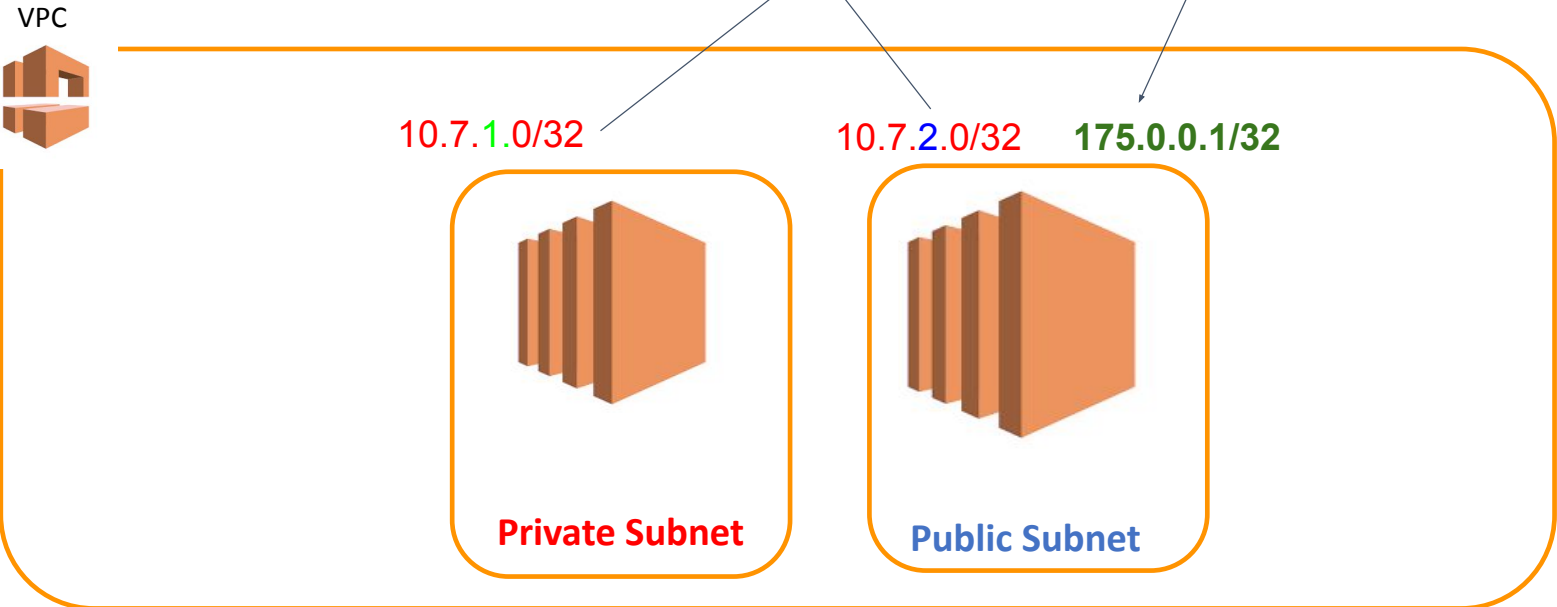
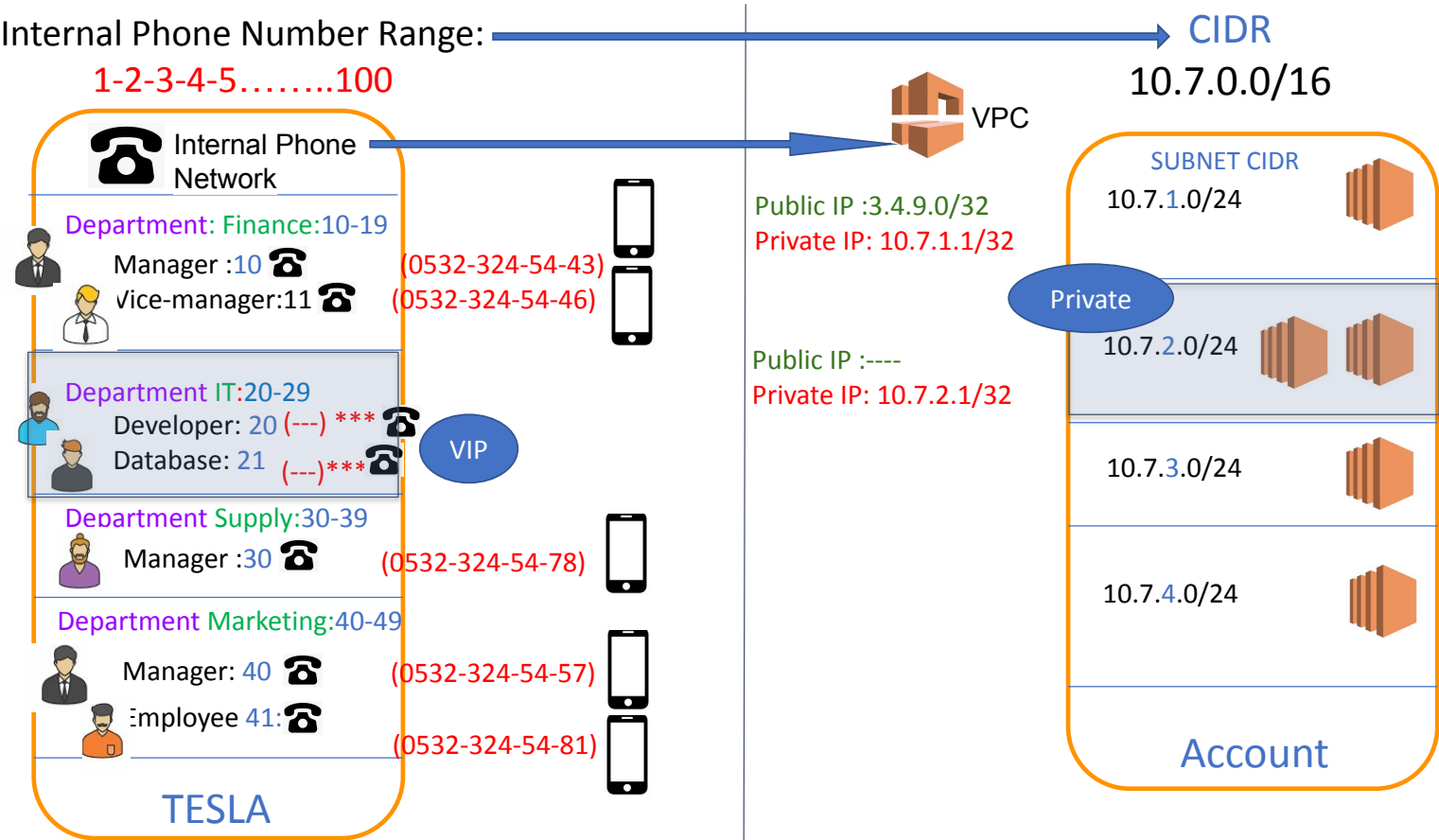


Internal Phone Number Range:



Internal Phone Number Range:





How is it possible to use the same CIDR block for all of us?

SSN:01-A-2345-4563



SSN:02-C-98756H64

VPC 1=House 1



VPC 2=House 2



Create **VPC**

Create **IGW**

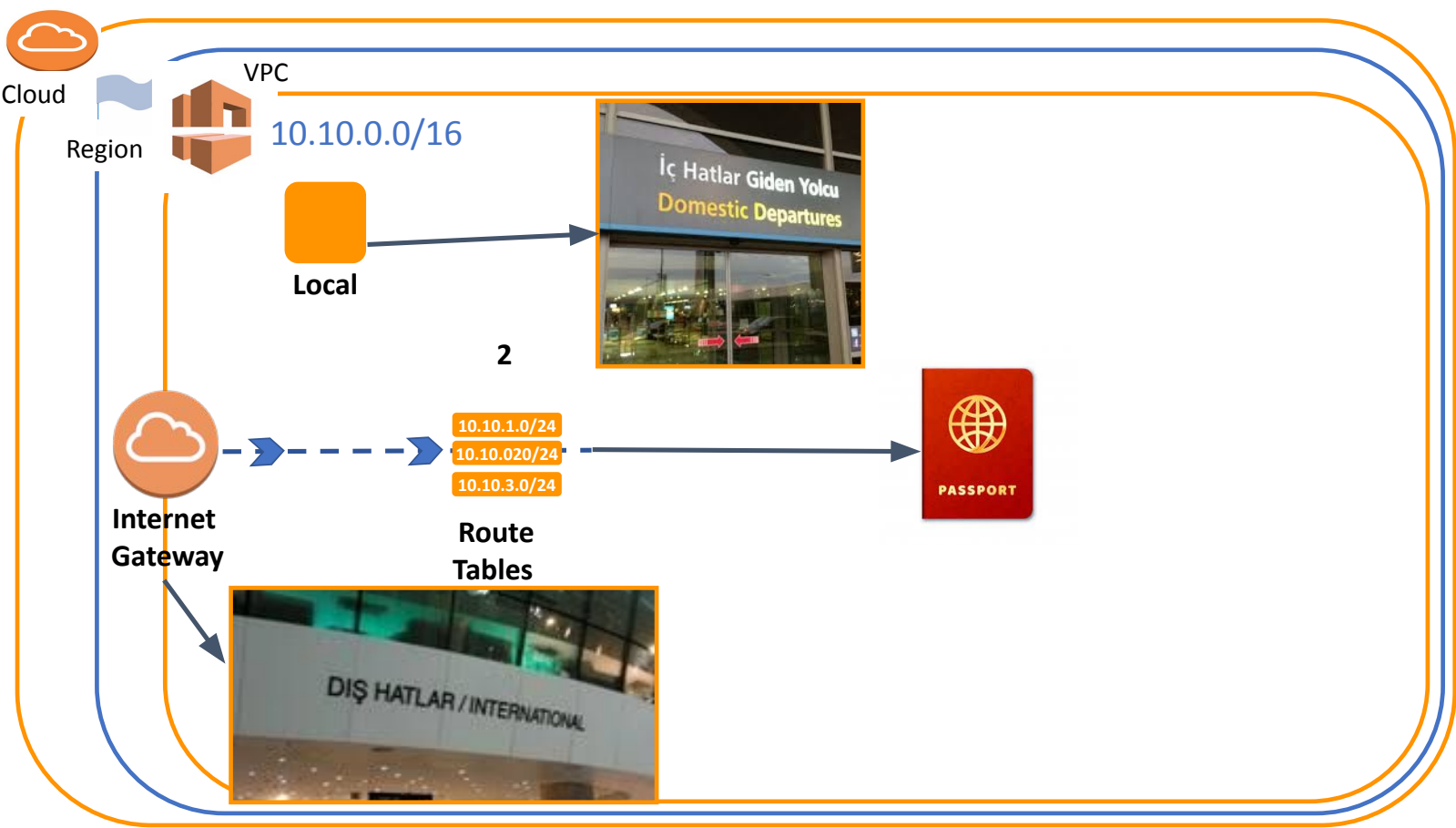
IGW Action Menu:
Attach IGW to VPC

Set the VPC Route Table:
00000:/0 > IGW

VPC Action Menu:
Edit DNS Hostname

Name Default Route Table: **default-labvpc**

- Name tag: **clarus-vpc-a**
- IPv4 CIDR block: **10.7.0.0/16**



- Name tag: **clarus-vpc-a**
- IPv4 CIDR block: **10.7.0.0/16**

us-east-1a

- **public**
- clarus-az1a-public-subnet
- us-east-1a

10.7.1.0/24

- **private**
- clarus-az1a-private-subnet
- us-east-1a

10.7.2.0/24

Spare...

us-east-1a
10.7.3.0/24

us-east-1b

- **public**
- clarus-az1b-public-subnet
- us-east-1b

10.7.4.0/24

- **private**
- clarus-az1b-private-subnet
- us-east-1b

10.7.5.0/24

Spare...

us-east-1b
10.7.6.0/24

us-east-1c

- **public**
- clarus-az1c-public-subnet
- us-east-1c

10.7.7.0/24

- **private**
- clarus-az1c-private-subnet
- us-east-1c

10.7.8.0/24

Spare...

us-east-1c
10.7.9.0/24

1- All Subnets are associated with Default Route Table **Implicitly**

2- By default all subnets are PUBLIC !!!!!!!
a. Local
b. 0.0.0.0/0 >>>> IGW

Conclusion

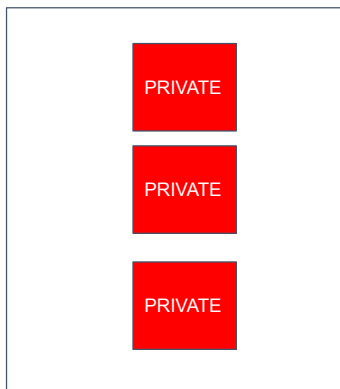
Current= 6 Public
Desired= 3 Public 3 Private

Option-1

DEFAULT RT



PRIVATE RT



Option-2

DEFAULT RT



PUBLIC RT



PRIVATE RT



Public Route Table Steps

Create a new Route Table
for Public Subnets

Associate 3 Public Subnets
with Public Route Table

Set Routes: a.Local
b.0000/0 >>>>IGW

Modify Auto-Assign IP
Settings-Subnet Action Menu

Default Route Table of VPC
3 Public Subnets
Internet Connectivity



Create 3 Public and
3 Private Subnets



Private Route Table Steps

Create a new Route Table
for Private Subnets

Associate 3 Private Subnets
with Private Route Table

Route Table of Private
3 Private Subnets
Internet Connectivity



a.Local

Launching an Instance



Create in Public Subnet

Create in Private Subnet



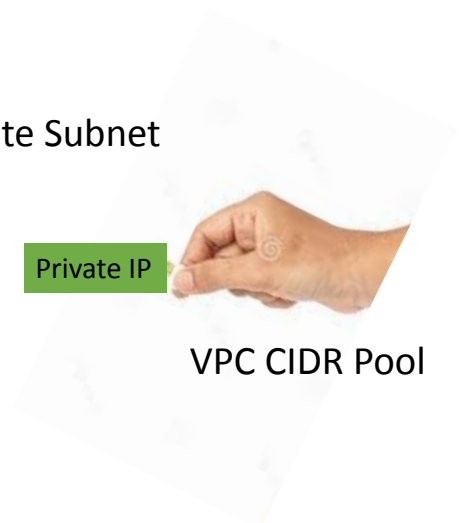
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VPC CIDR Pool

Public IP

(Auto Assign IP)

AWS IP POOL



VPC CIDR Pool



Route Tables



Private Subnets
Internet Connectivity

Public Subnets
Internet Connectivity

