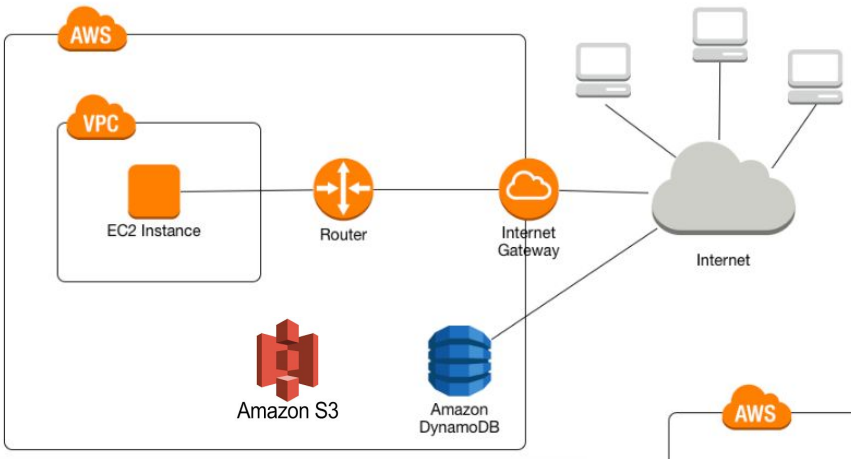
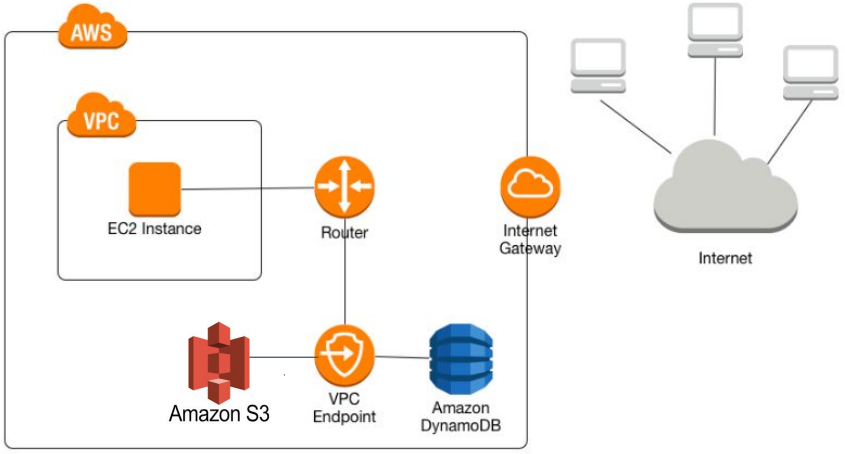


services using HTTP protocol



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.

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

▼ **Additional connectivity configuration**

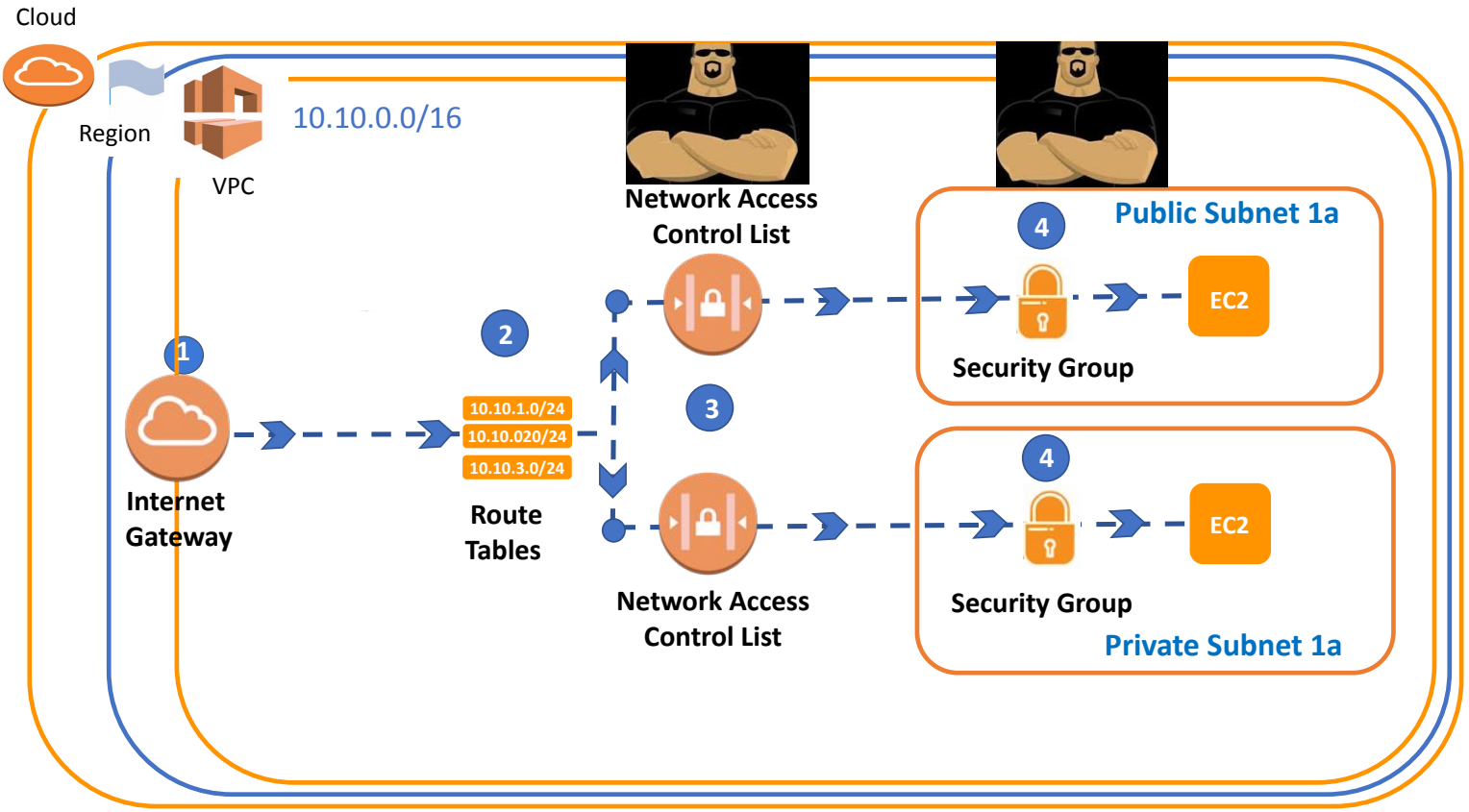
Subnet group Info

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.



PC IP:

Connection Request	
No	Type-Port
1	SSH-22
2	HTTP-80
3	All ICMP-IPv4 -All
4	HTTPS-443
5	Msql/Auro. 3306

Security Group inbound

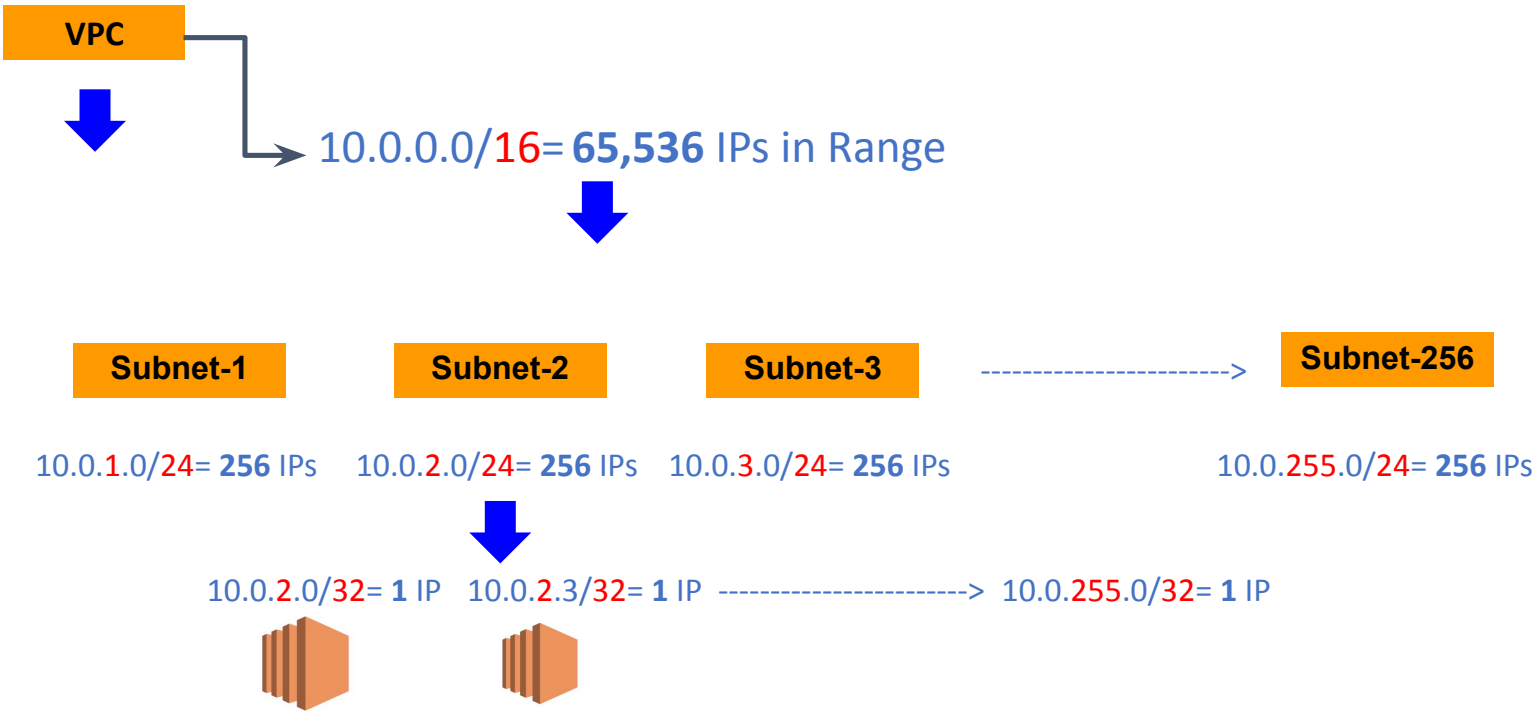
Type	Protocol	Port Range	Source
HTTP	TCP(6)	80	1.2.3.4/32
SSH-22	TCP(6)	22	0.0.0.0/0
All ICMP-IPv4	ICMP(1)	ALL	0.0.0.0/0
HTTPS	TCP(6)	443	7.8.9.10/32

Subnet

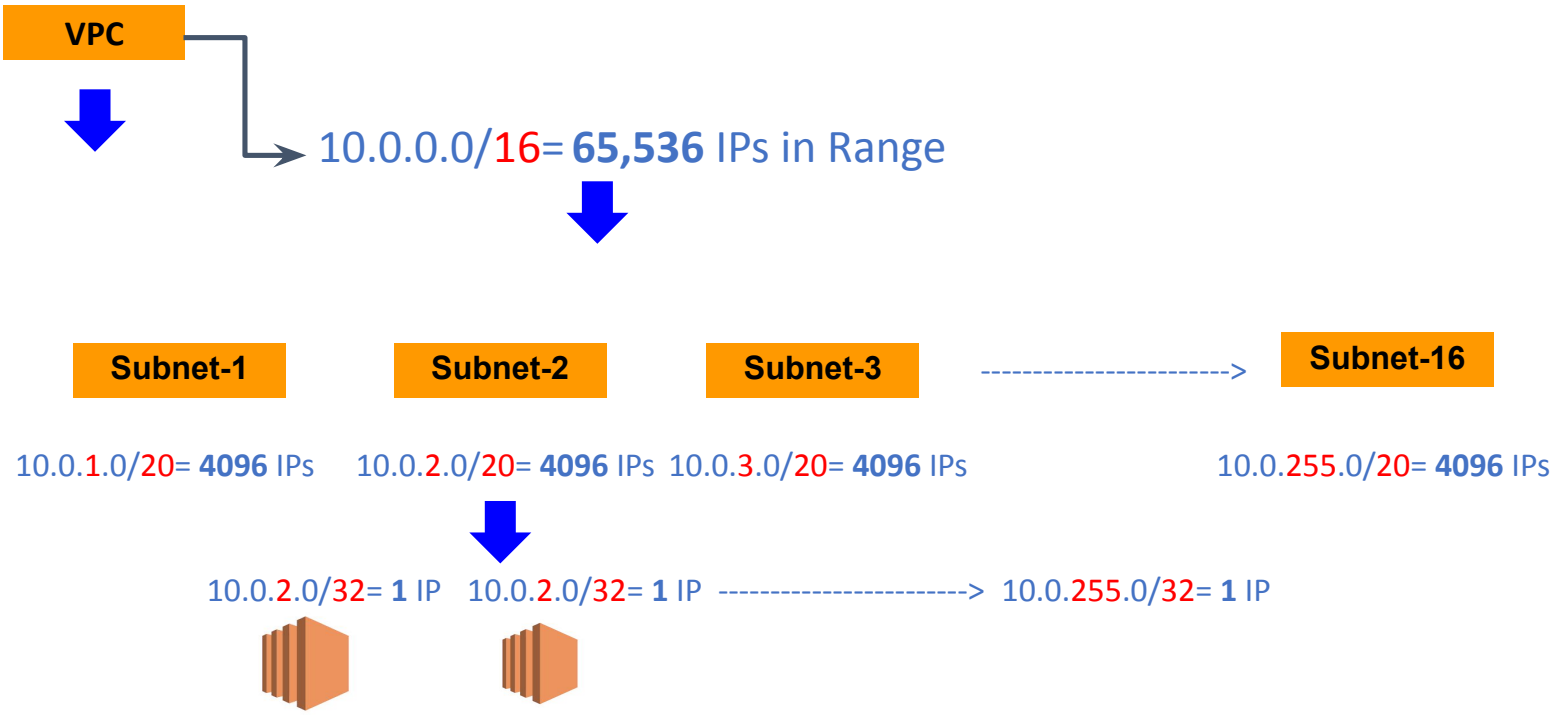
Network ACL inbound

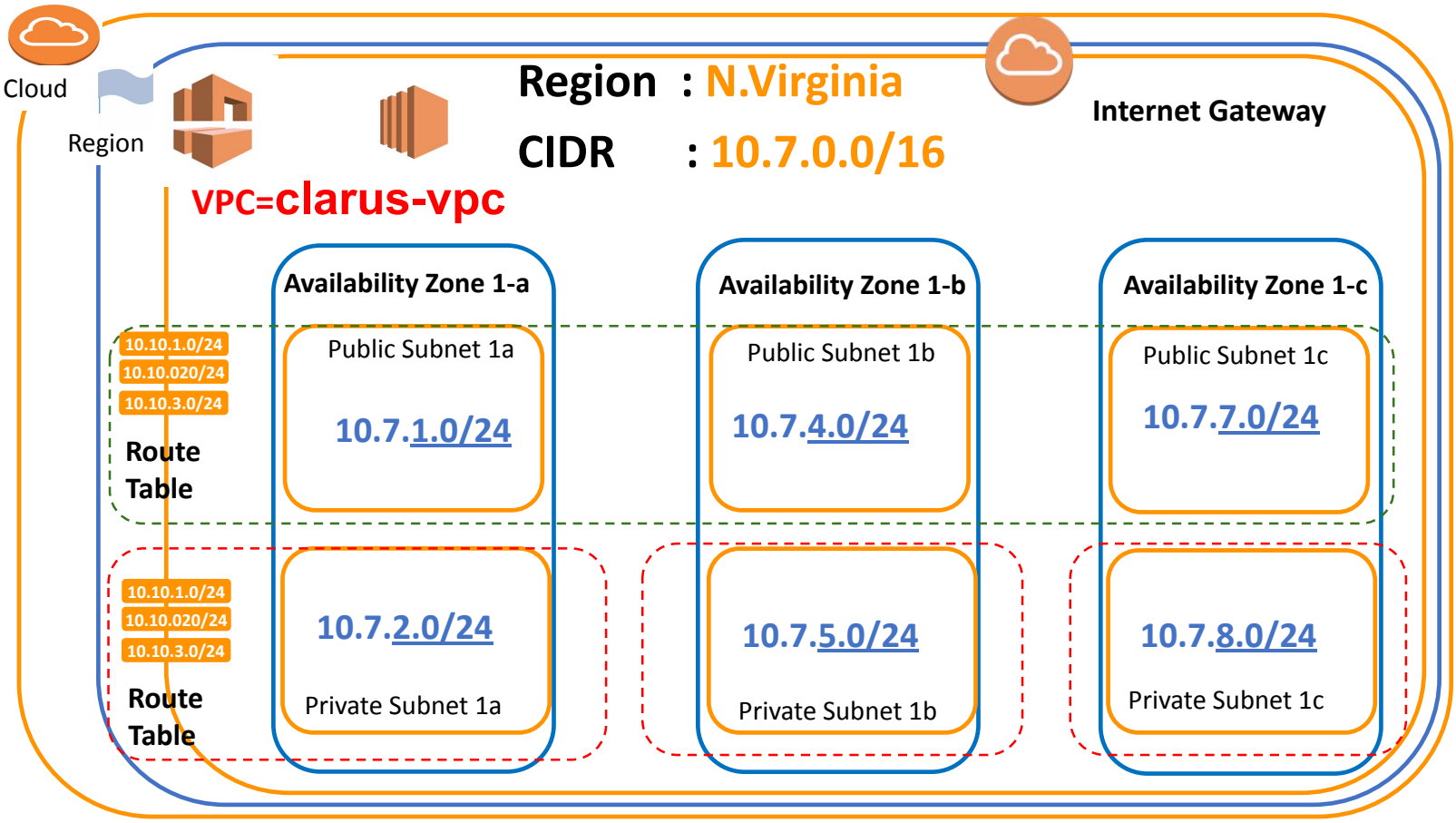
Rule	Type	Protocol	Port Range	Source/ Destination	Allow/ Deny
100	HTTP	TCP(6)	80	7.8.9.10/32	ALLOW
200	SSH-22	TCP(6)	22	0.0.0.0/0	ALLOW
300	All ICMP-IPv4	ICMP(1)	ALL	0.0.0.0/0	ALLOW
400	HTTPS	TCP(6)	443	7.8.9.10/32	DENY
*	ALL Traffic	ALL	ALL	0.0.0.0/0	DENY

65,536/256= 256 SUBNETS



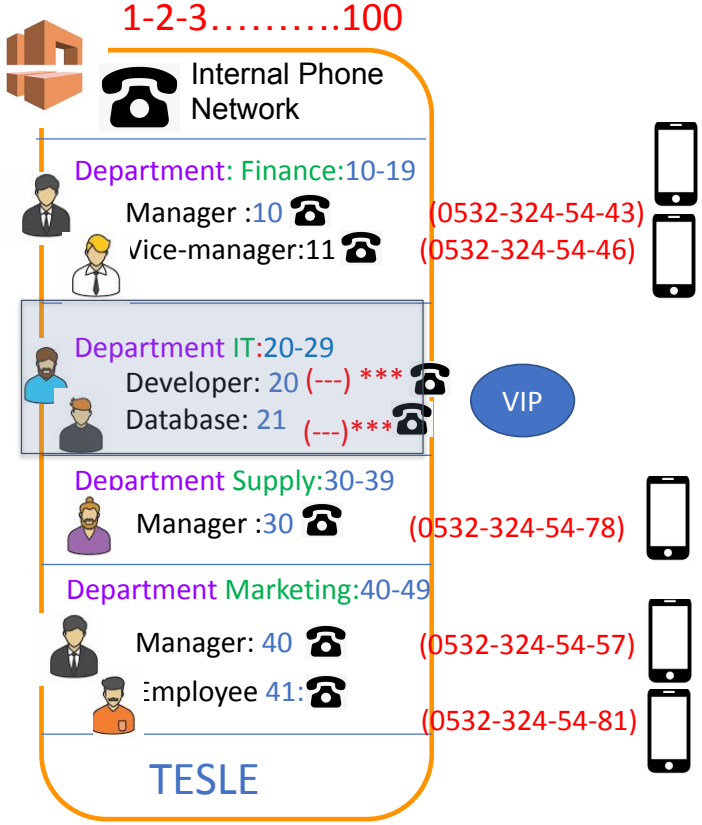
65,536/4096= 16 SUBNETS





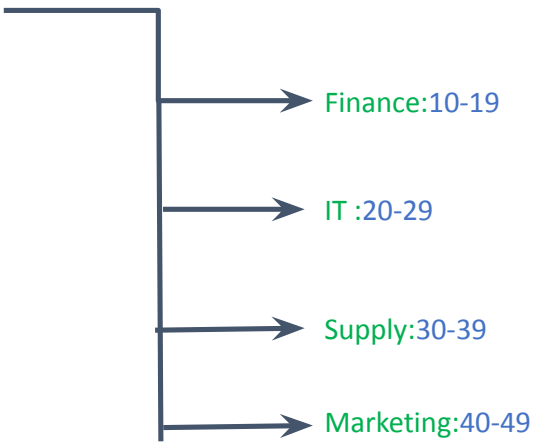
Internal Phone Number Range:

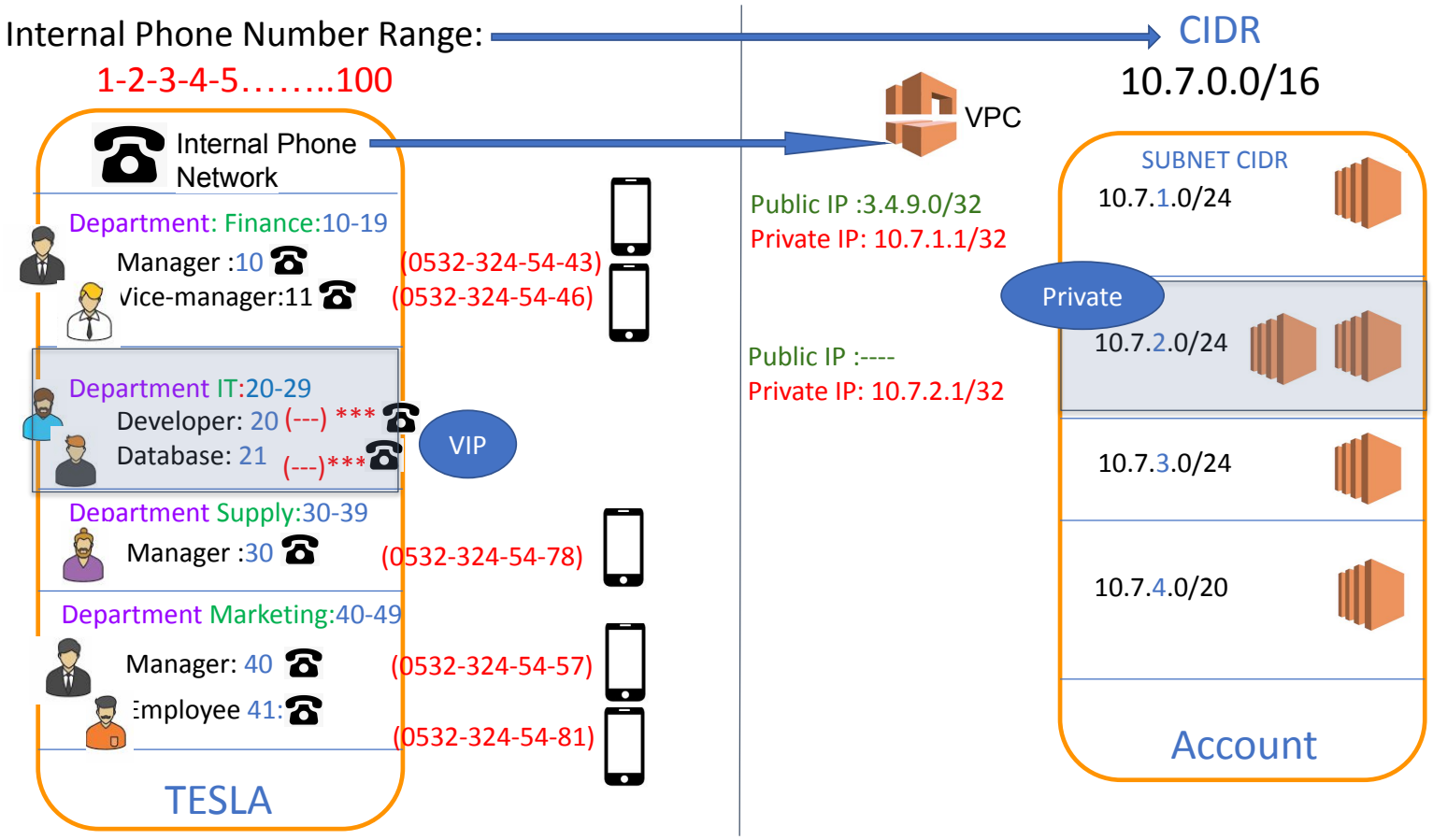
1-2-3.....100

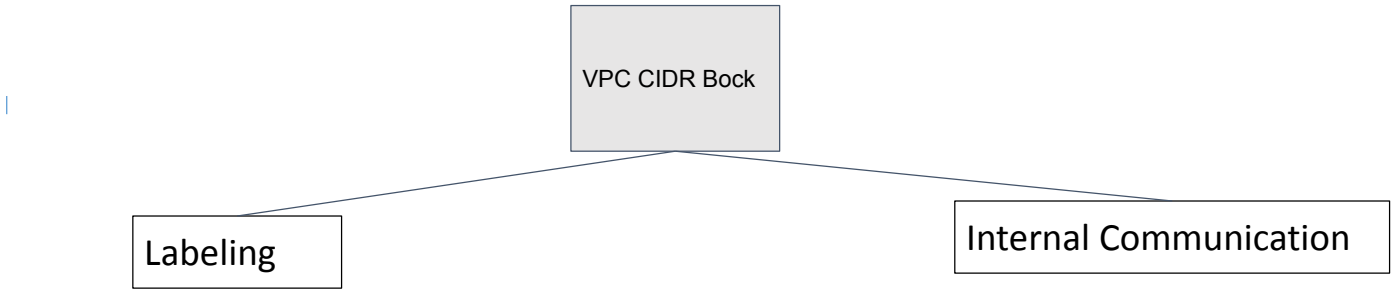


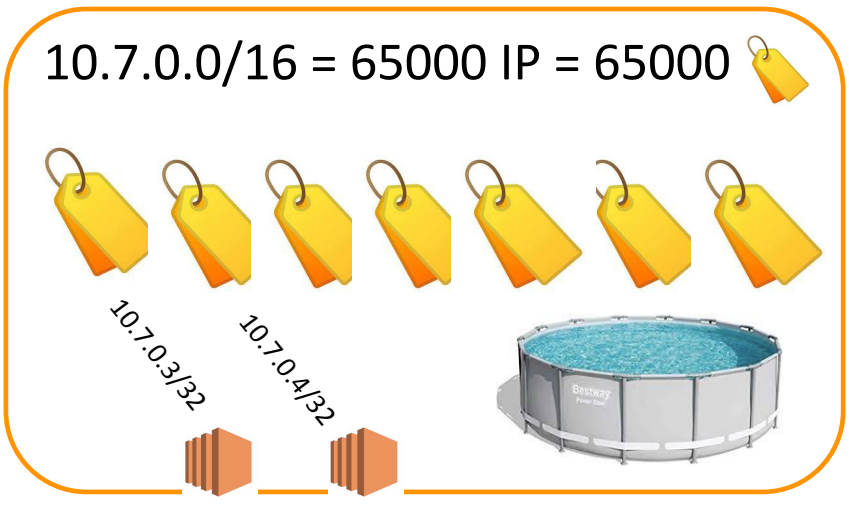
Internal Phone Number Range:

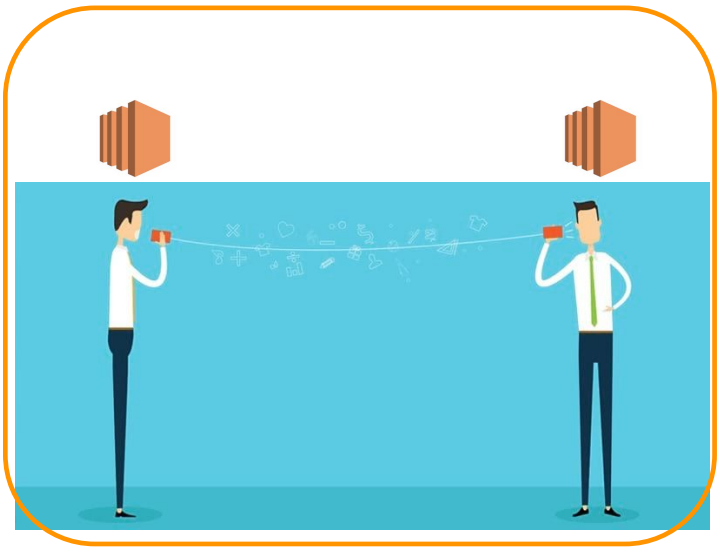
1-2-3.....100




Internal Phone Number Range:
1-2-3-4-5……..100
CIDR
10.7.0.0/16
VPC
Internal Phone Network
Department: Finance:10-19
Manager :10
Vice-manager:11
(0532-324-54-43)
(0532-324-54-46)
Department IT:20-29
Developer: 20 (---) ***
Database: 21 (---)***
VIP
Department Supply:30-39
Manager :30
(0532-324-54-78)
Department Marketing:40-49
Manager: 40
Employee 41:
(0532-324-54-57)
(0532-324-54-81)
TESLA
Public IP :3.4.9.0/32
Private IP: 10.7.1.1/32
Public IP :----
Private IP: 10.7.2.1/32
SUBNET CIDR
10.7.1.0/24
Private
10.7.2.0/24
10.7.3.0/24
10.7.4.0/20
Account


VPC CIDR Bock
Labeling
Internal Communication


10.7.0.0/16 = 65000 IP = 65000
10.7.0.3/32
10.7.0.4/32



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

VPC CIDR IP POOL

10.7.0.0/16 = 65000 IP

AWS PUBLIC IP POOL

VPC

10.7.1.0/32

10.7.2.0/32

175.0.0.1/32

Private Subnet

Public Subnet

Create VPC

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

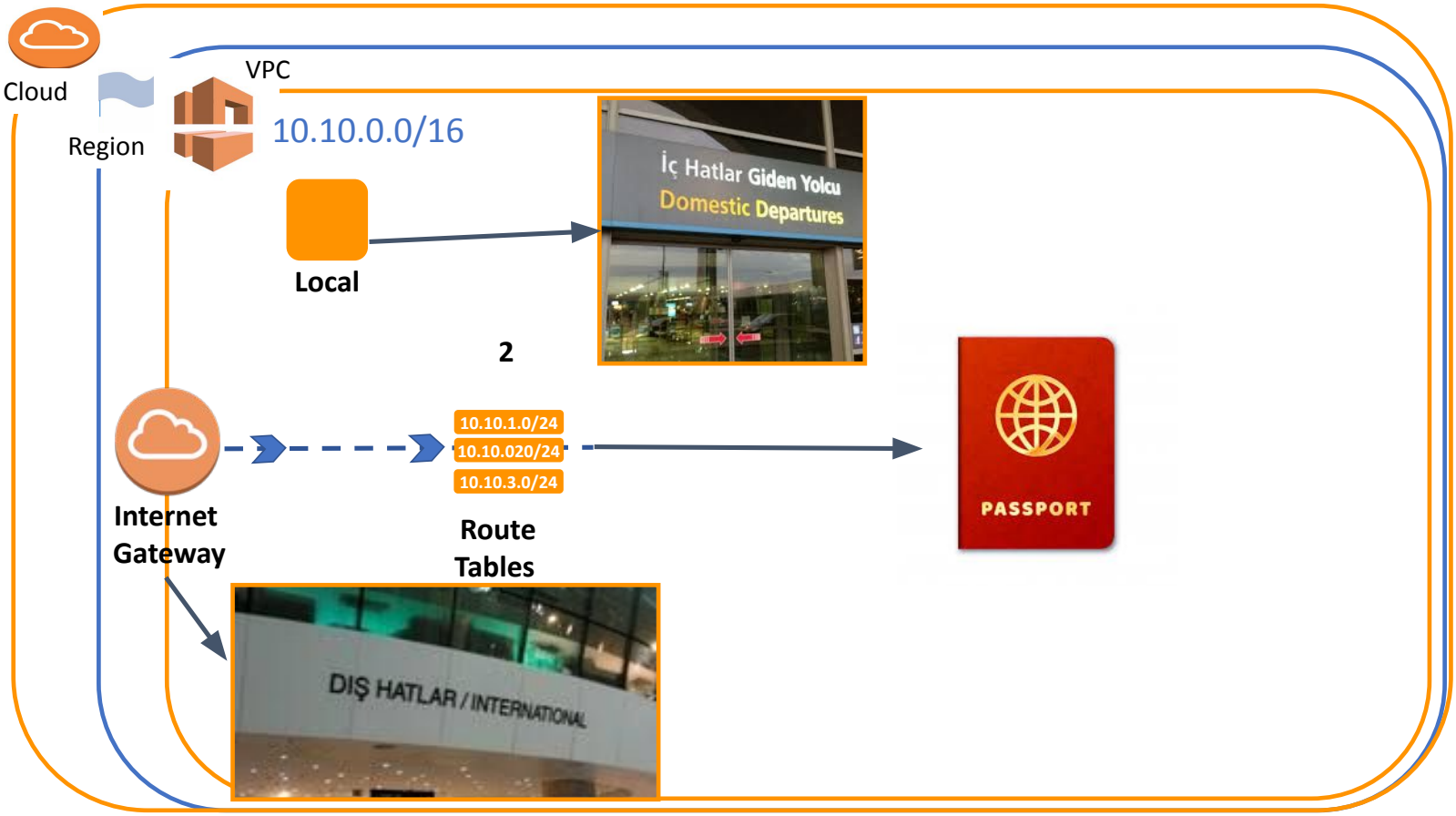
Create IGW

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



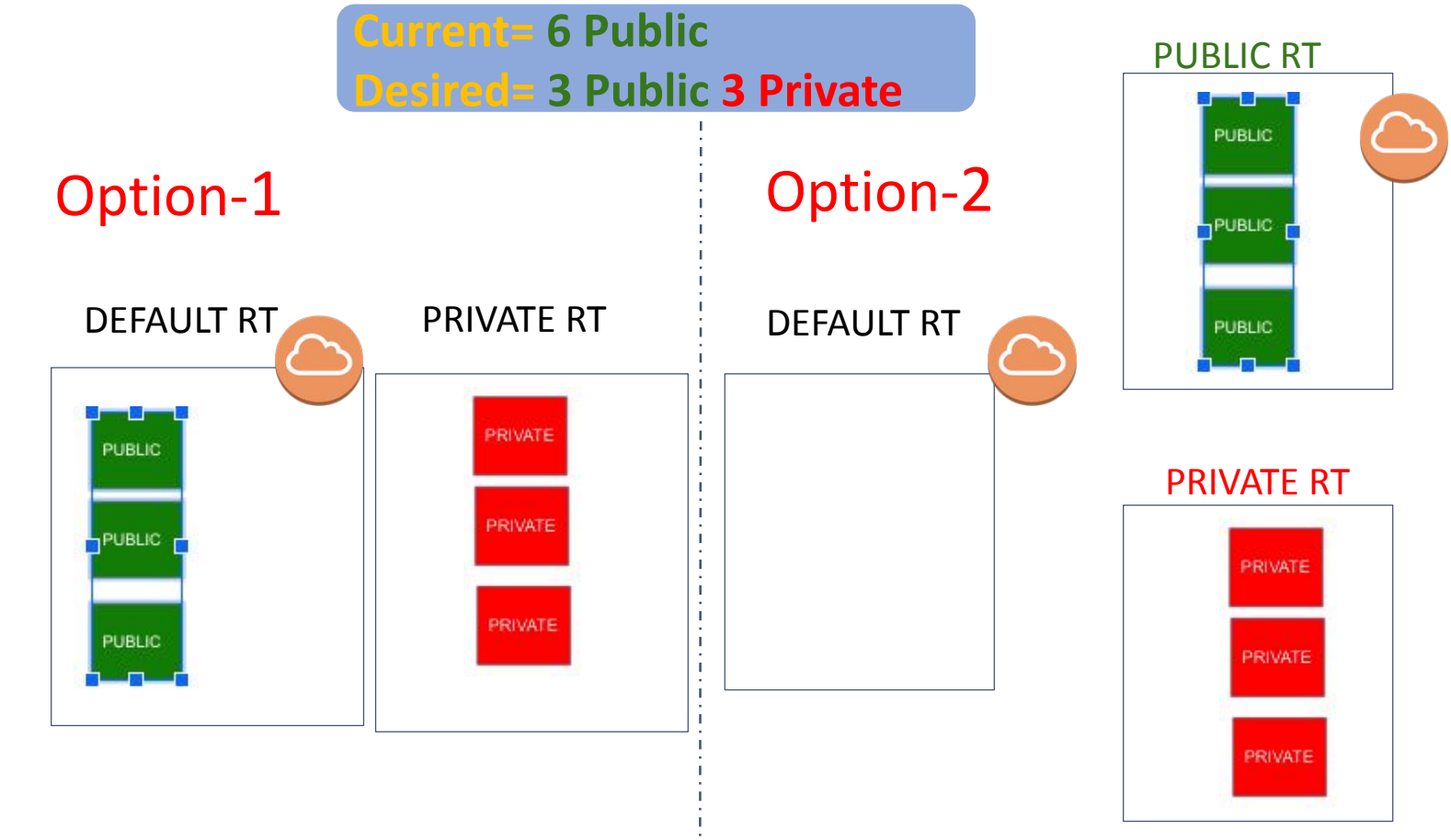
- *Name tag*: **clarus-vpc-a**
- *IPv4 CIDR block*: **10.7.0.0/16**

us-east-1a	us-east-1b	us-east-1c
• **public** • clarus-az1a-public-subnet • us-east-**1a** **10.7.1.0/24**	• **public** • clarus-az1b-public-subnet • us-east-**1b** **10.7.4.0/24**	• **public** • clarus-az1c-public-subnet • us-east-**1c** **10.7.7.0/24**
• **private** • clarus-az1a-private-subnet • us-east-**1a** 10.7.2.76 **10.7.2.0/24**	• **private** • clarus-az1b-private-subnet • us-east-**1b** **10.7.5.0/24**	• **private** • clarus-az1c-private-subnet • us-east-**1c** **10.7.8.0/24**
Spare… **us-east-1a** **10.7.3.0/24**	**Spare…** **us-east-1b** **10.7.6.0/24**	**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.0000/0 >>>>IGW**

Conclusion



Create 3 Public and 3 Private Subnets

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-Edit subnet settings

Default Route Table of VPC
3 Public Subnets
Internet Connectivity

Private Route Table Steps

a.Local

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

Launching an Instance

Create in Public Subnet

Create in Private Subnet

Private IP

\+

VPC CIDR Pool

Public IP

(Auto Assign IP)

AWS IP POOL

Private IP

VPC CIDR Pool

Route Tables

Private Subnets
Internet Connectivity

Public Subnets
Internet Connectivity