Amazon VPC-2

Reminder:

Register Your Domain
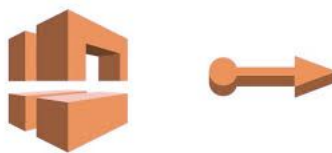
Table of Contents

▶ VPC Solutions

- Elastic IP
- Bastion Host /Jump Box
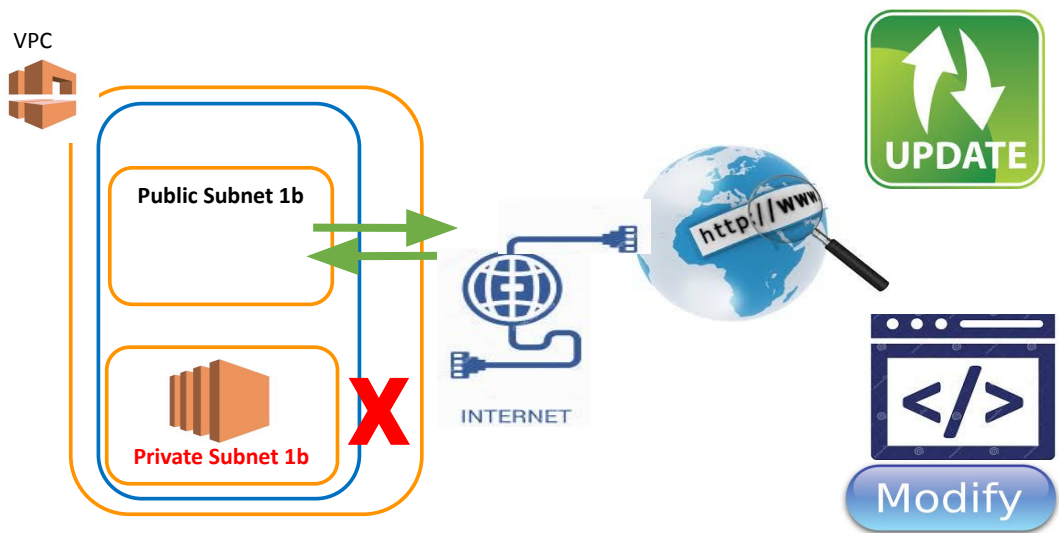- NAT Gateway
- NAT Instance

Elastic IP

• An Elastic IP address is a Static IPv4 Address

• Legal requirement for some applications or license policy to may render you to use static IP. In addition, some AWS components/services such as NAT Gateway and Route 53 may need Elastic IP.

• Elastic IP is free of charge as long as they are being used. However, you will be charged for each EIP if you reserve and not use it.
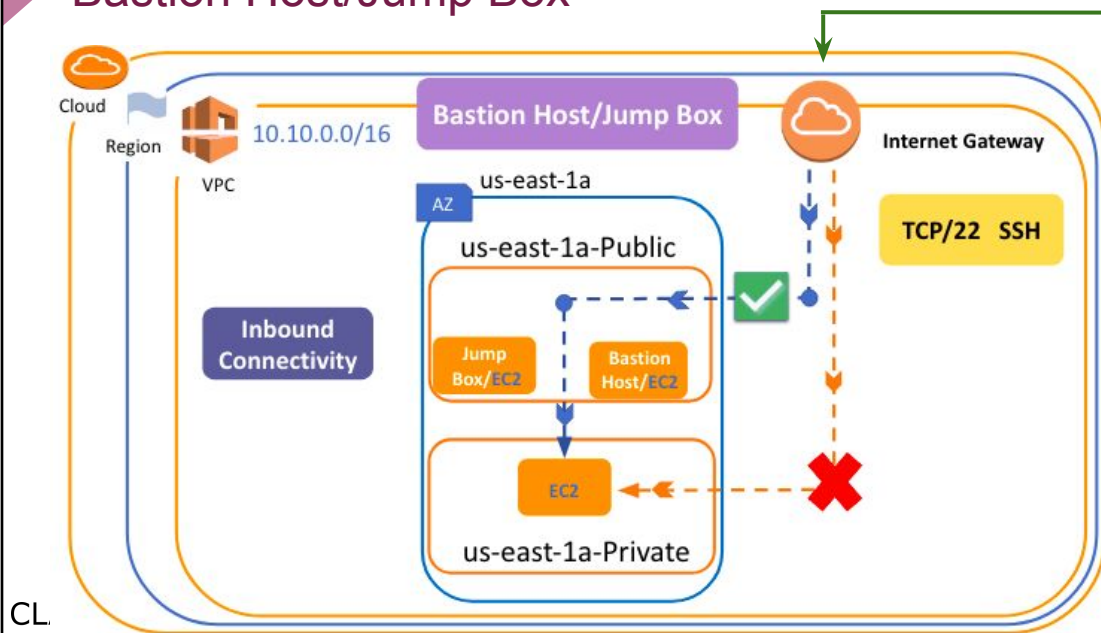
IP Address Assignment

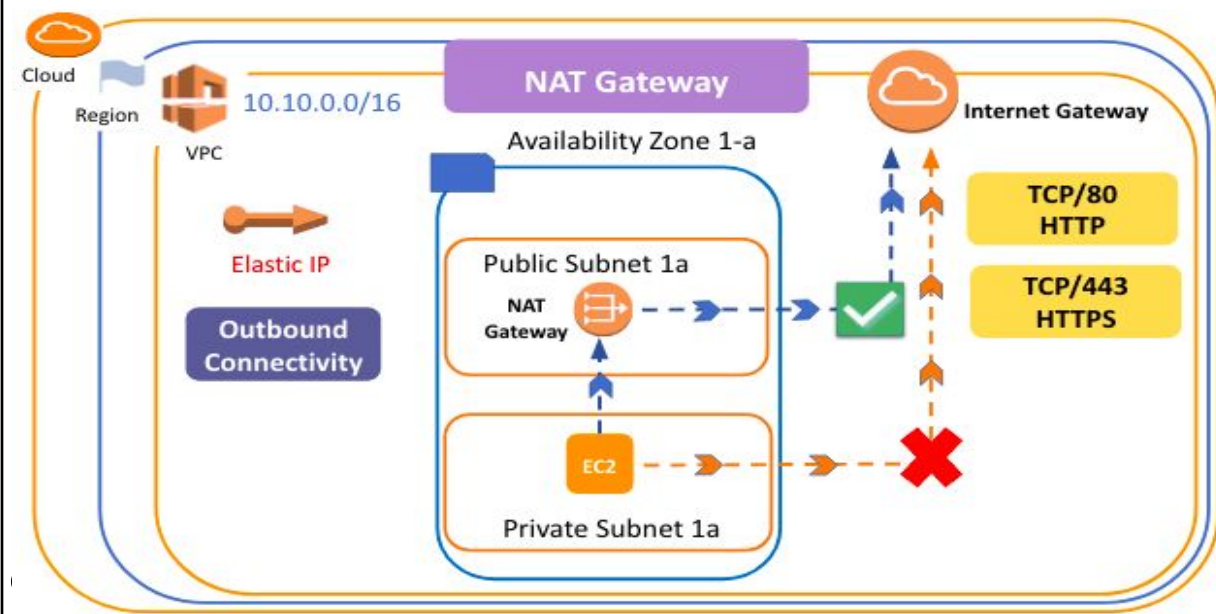|	Reboot Server	Stop Server	Terminate Server	Cost
Private IP	up to customer	up to customer	up to customer	No Cost
AWS Public IP	stays with server	server loses IP	server loses IP	No Cost
AWS Elastic IP	stays with server	stays with server (account)	stays with account	No Cost **IF** allocated to resoruces

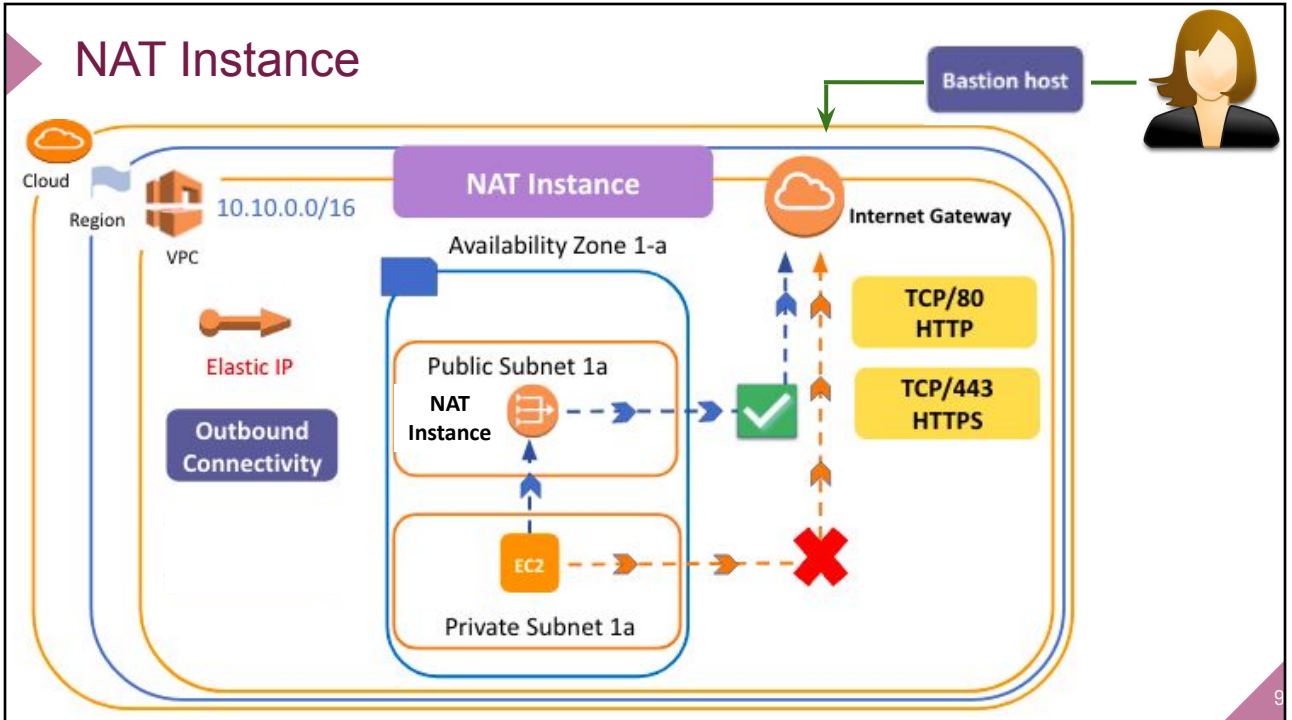# Why NAT Gateway, NAT Instance and Bastion Host?
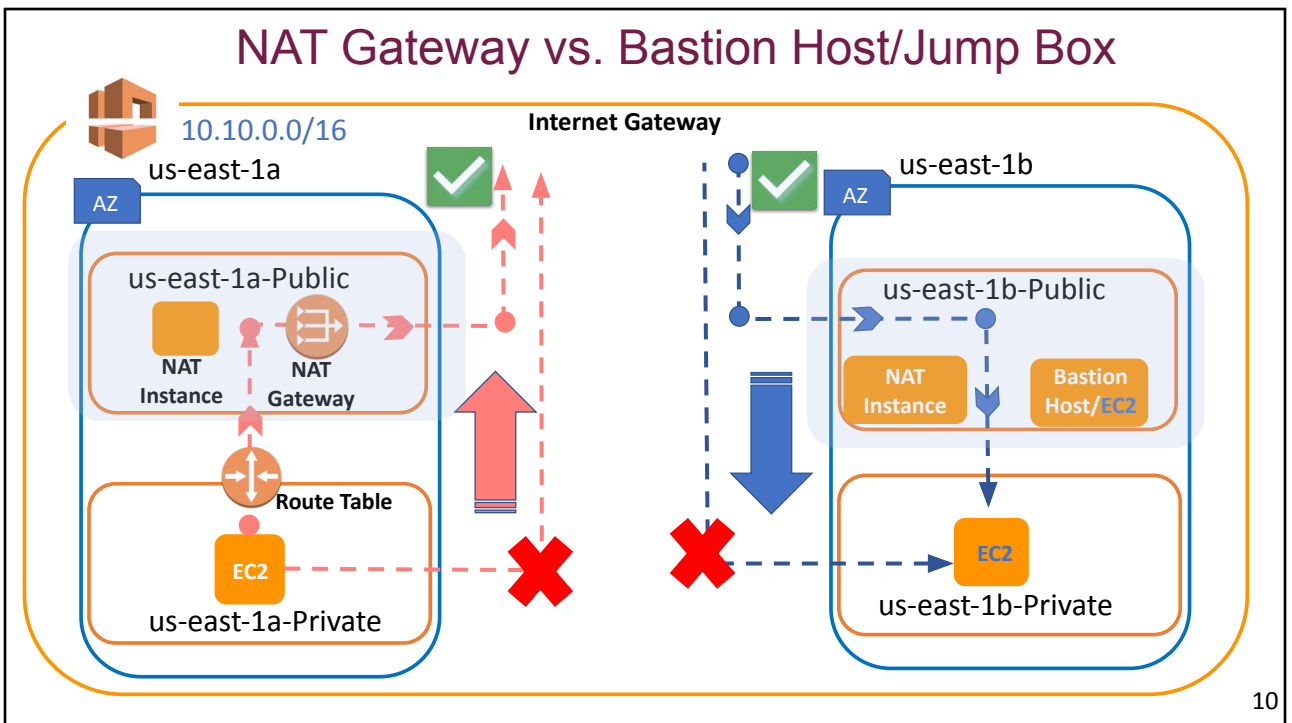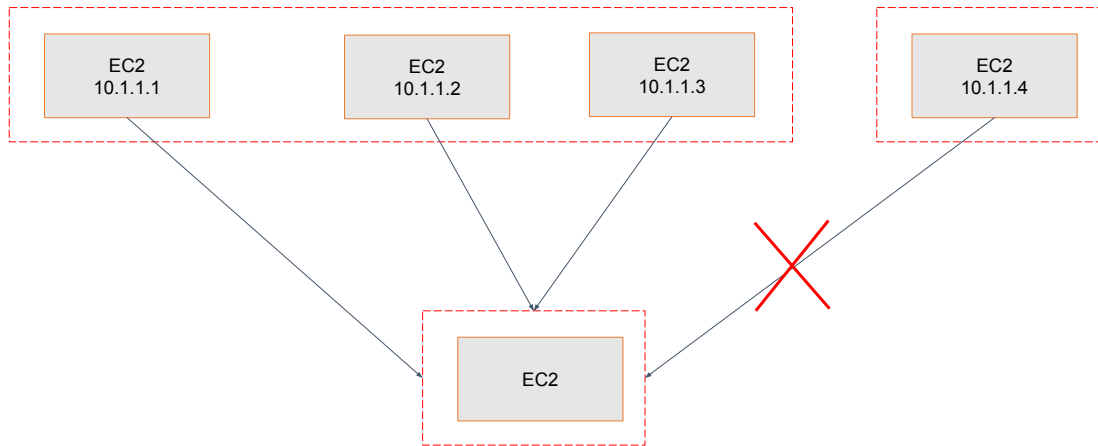
Bastion Host/Jump Box

NAT Gateway

NAT Instance

Bastion host

Cloud

Region

VPC

10.10.0.0/16

NAT Instance

Internet Gateway

Availability Zone 1-a

Elastic IP

Outbound Connectivity

Public Subnet 1a

NAT Instance

TCP/80 HTTP

TCP/443 HTTPS

EC2

Private Subnet 1a

NAT Gateway vs. Bastion Host/Jump Box

10.10.0.0/16   **Internet Gateway**

us-east-1a

AZ

us-east-1a-Public

NAT Instance   **NAT Gateway**

Route Table

EC2

us-east-1a-Private

us-east-1b

AZ

us-east-1b-Public

NAT Instance   **Bastion Host/EC2**

EC2

us-east-1b-Private

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Break
return @ 9pm

THANKS!

Any questions?