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## VPC Solutions

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# Elastic IP



- An Elastic IP address is a **Static IPv4 Address** designed for dynamic cloud computing.
- 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 need Elastic IP.
- Elastic IP is free of charge **as long as they are being used**. However, you will be charged \$0.01/hr for each EIP if you reserve and do not use.

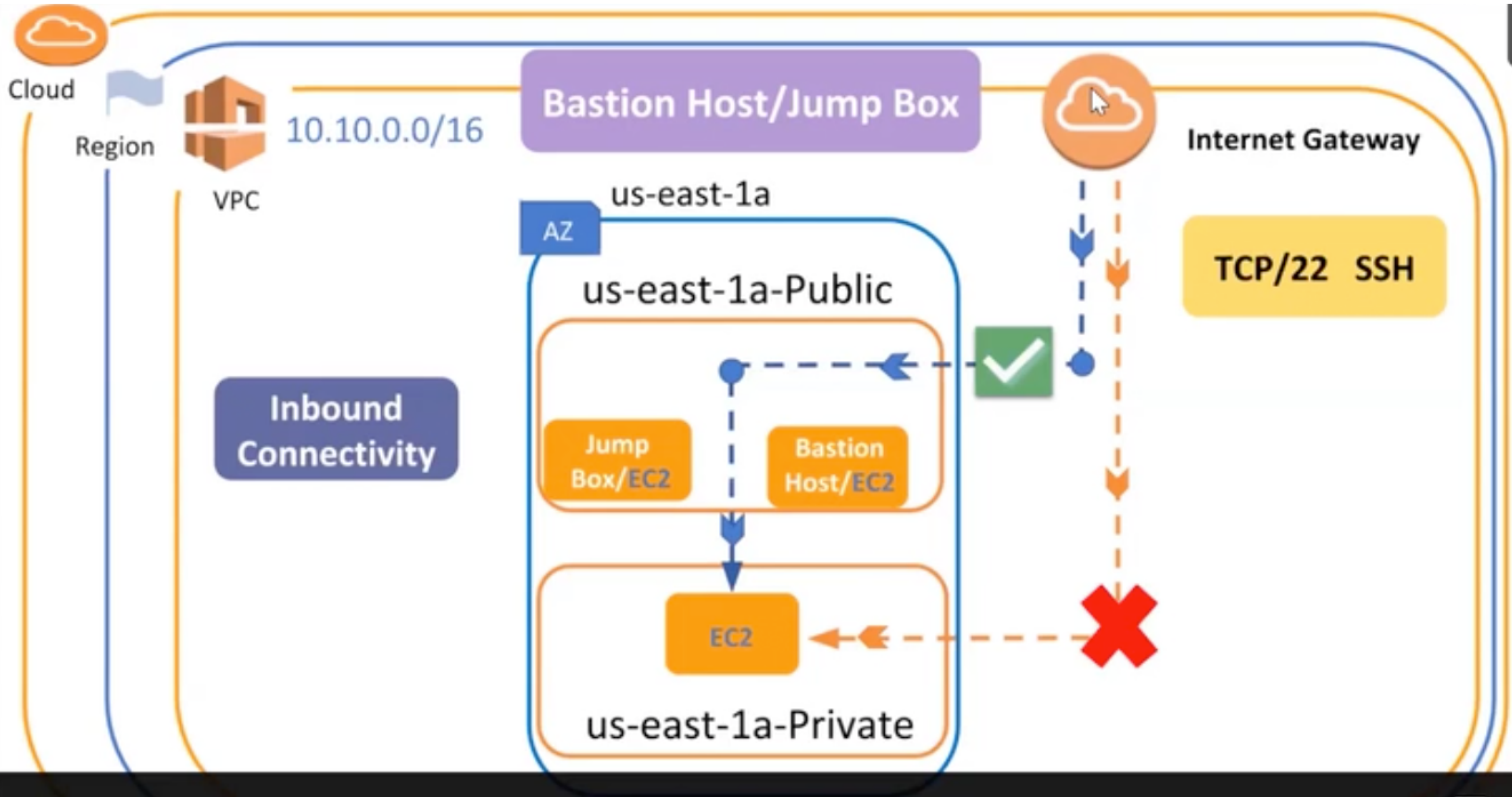


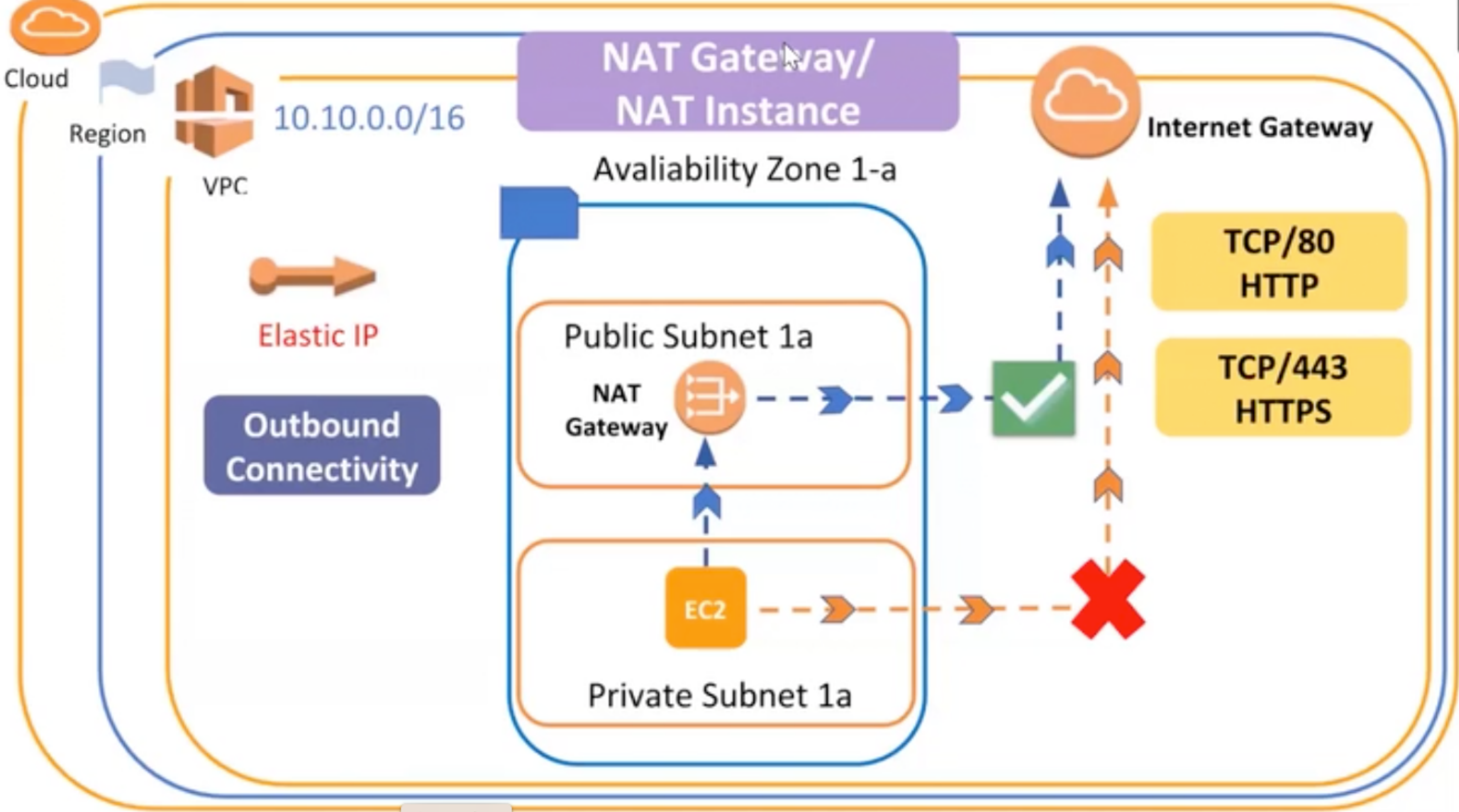
# NAT Gateway/NAT Instance & Bastion Host/Jump Box

- While the Public IP is allocated to the instance in Public subnet, there is no such **public IP for the instance in Private Subnets** for the security precautions.
- So, the instances in Public Subnet can connect the internet via public IP. As for instances in **Private Subnet**, **neither they can get traffic from the internet nor connect to the internet directly.**
- But, on the other hand, we need to keep the instances in Private Subnet accessible for updates, monitoring, pulling package etc.

<https://docs.aws.amazon.com/vpc/latest/userguide/vpc-nat-comparison.html>









# NAT Gateway/NAT Instance & Bastion Host/Jump Box

