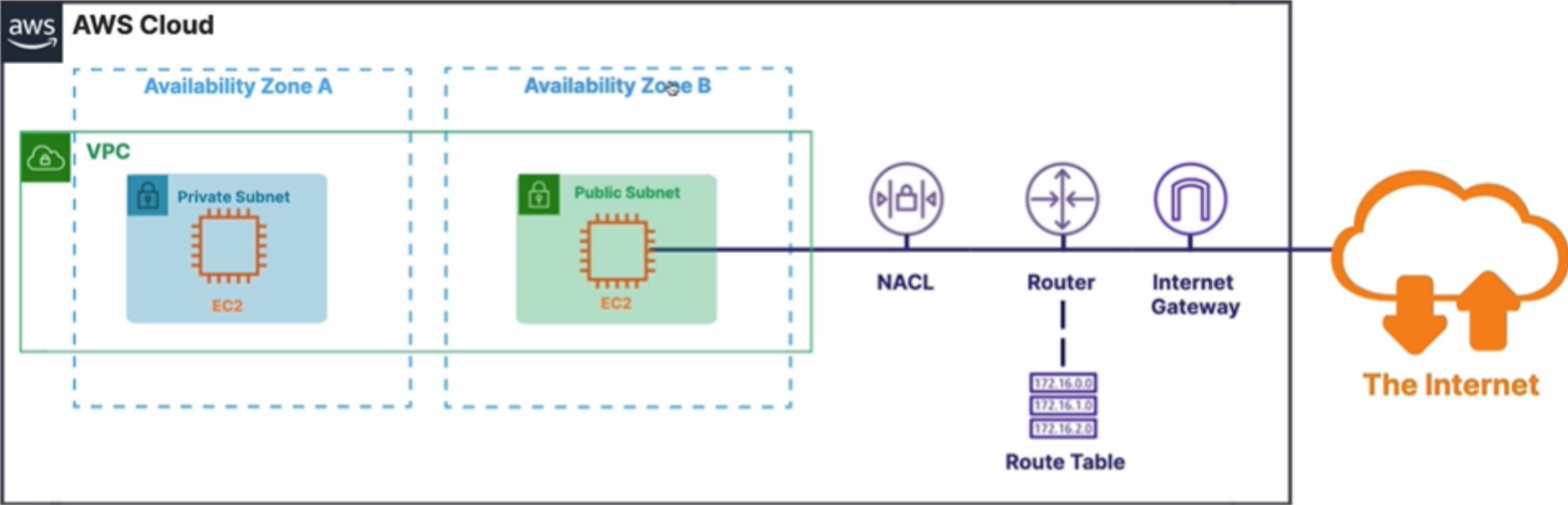
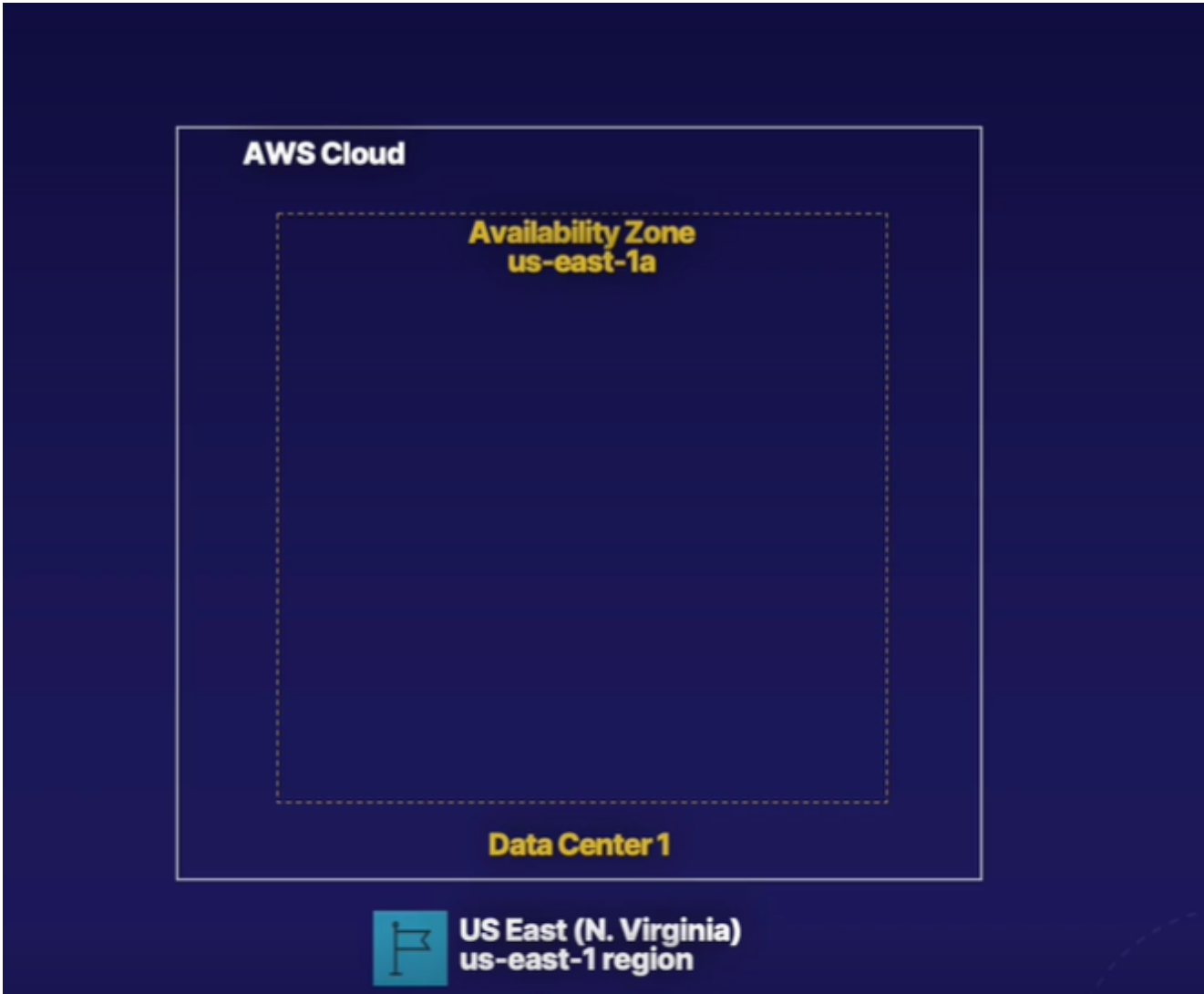


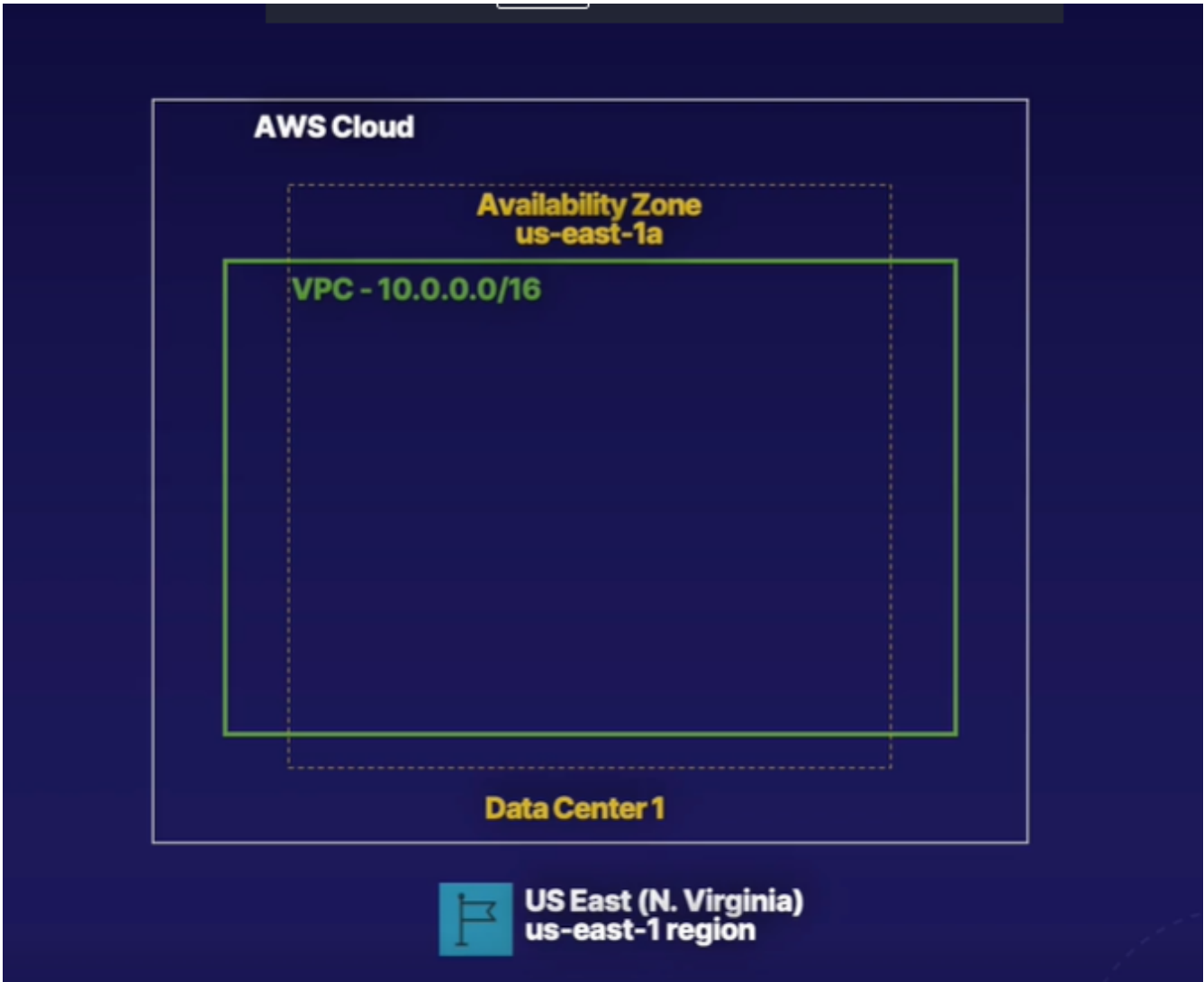
Understanding Networking Services: VPC and Subcomponents

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| Questions | reponses |
| The bigger picture | <ul style="list-style-type: none"> Networking connects computers together and allows for the sharing of data and apps , around the globe , in a secure manner using virtual routers, firewalls and network management services |
| Amazon virtual Private Cloud(vpc): internet gateway and peering vpc | <ul style="list-style-type: none"> VPC is foundational service that allows you to create a secure private network in the aws cloud where you launch your ressources private virtual network launch ressources like ec2 instances inside the vpc isolate and protect ressources a vpc spans az in a region |
| diagramm |  <p>The diagram illustrates the AWS Cloud network architecture. It shows two Availability Zones, A and B, each containing a VPC. The VPC in Availability Zone A has a Private Subnet with an EC2 instance. The VPC in Availability Zone B has a Public Subnet with an EC2 instance. A line connects the EC2 instance in the Public Subnet to a series of network components: a NACL (Network Access Control List), a Router, and an Internet Gateway. The Router is connected to a Route Table, which lists three IP addresses: 172.16.0.0, 172.16.1.0, and 172.16.2.0. The Internet Gateway is connected to 'The Internet', represented by an orange cloud with up and down arrows.</p> <ul style="list-style-type: none"> subnet: allows you to split the network inside the vpc . This is where you launch ressources like EC2 instrnaces Network ACL: access control lists (ACLs) ensure the proper traffic is allowed into the subnet Routr and route table: defines where network is routed Internet Gateway: an internet gateway allows traffic ro the internet from a VPC |
| VPC peering allows you to connect 2 vpcs together | <ul style="list-style-type: none"> peering facilitates the transfer of data in a secure manner |
| Things to remeber | <ul style="list-style-type: none"> an Internet gateway allows traffic to the public internet and peering connects 2 VPCs together |

- At the first looks like this:



- then we will create a custom VPC:



- then routers , internet Gateway and finally launch an ec2 instance within your subnet with security group
- there is two way to create a VPC
 - you can use the VPC wizard
 - create it manually