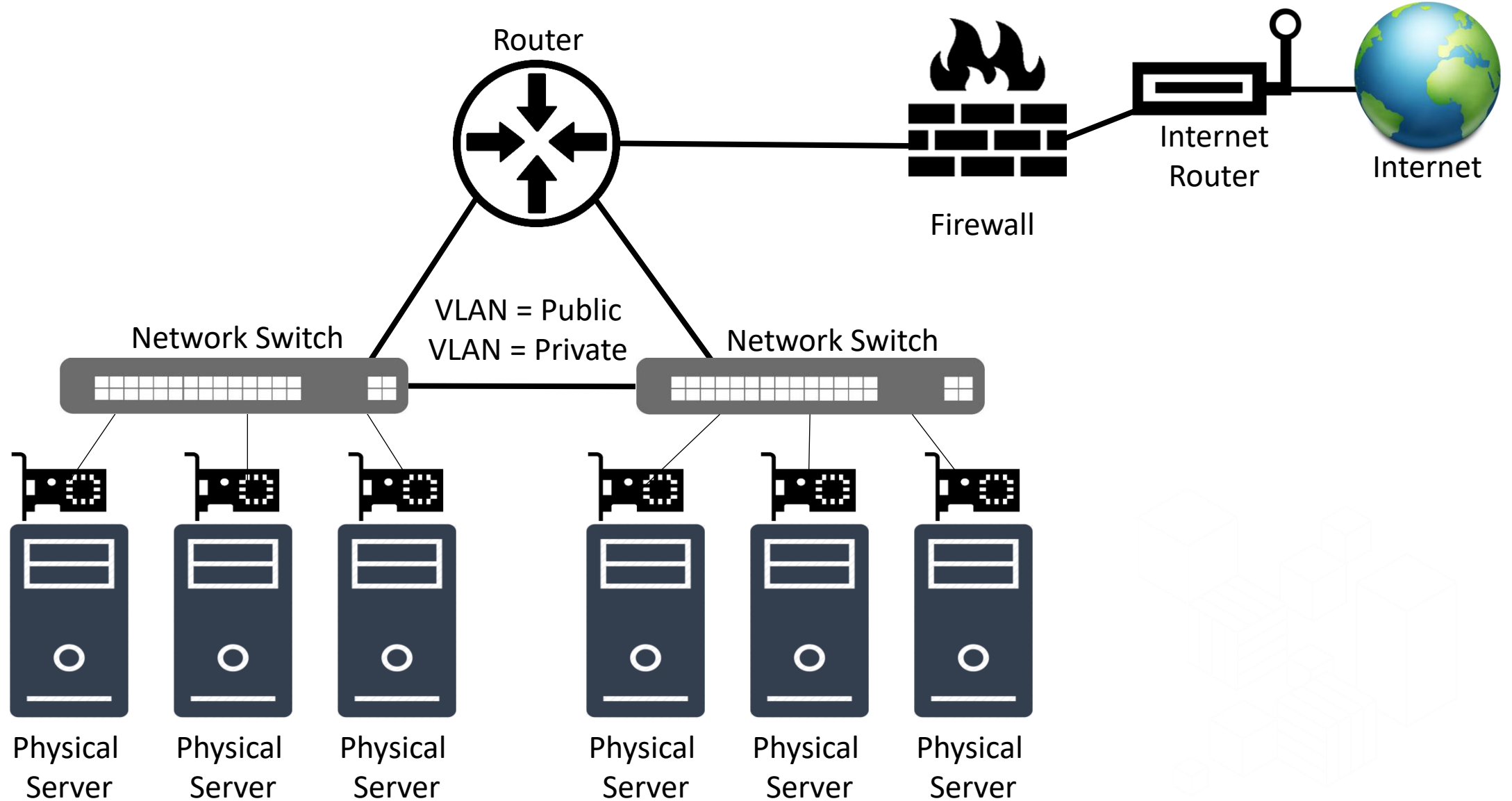


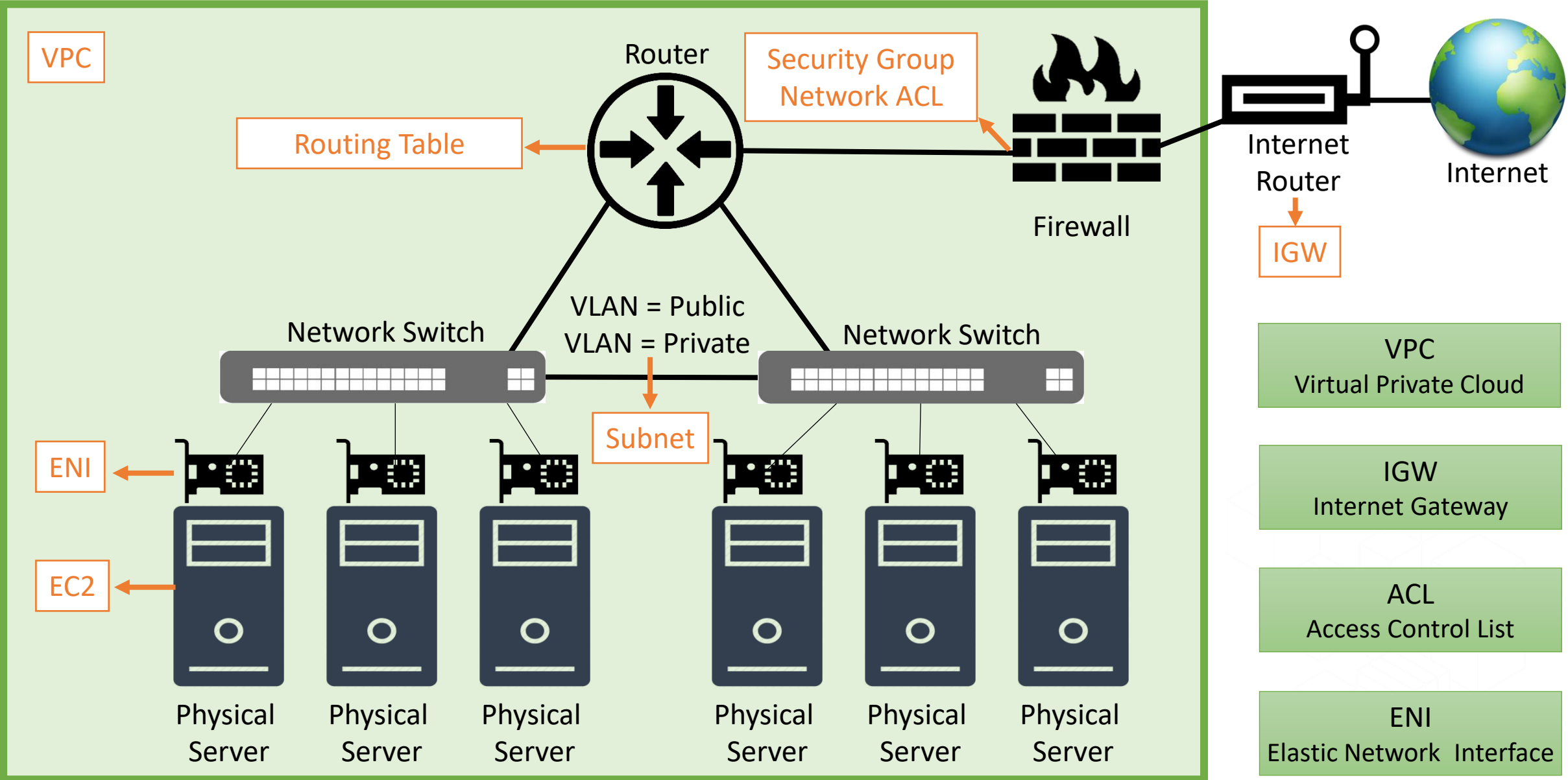


Networking Basics

Networking in Physical World



Networking in AWS





Amazon VPC

Amazon VPC

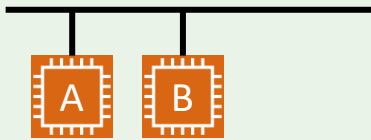


Region 1

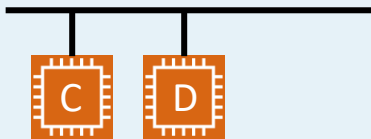


VPC (10.0.0.0/16)

Public subnet
10.0.1.0/24

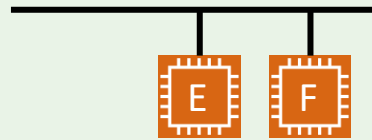


Private subnet
10.0.11.0/24

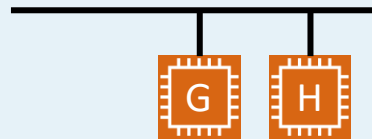


Availability Zone 1

Public subnet
10.0.2.0/24



Private subnet
10.0.12.0/24



Availability Zone 2



Reference:

[FAQs](#)

Category:

Networking
and Content
Delivery



Amazon VPC

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[Ashish Prajapati](#)



What?

- Amazon Virtual Private Cloud (Amazon VPC) enables you to provision a logically isolated section of the AWS Cloud where you can launch AWS resources in a virtual network that you have defined.
- This virtual network closely resembles a traditional network that you would operate in your own data center.

Why?

- You can define your own network space, and control how your network and the Amazon EC2 resources inside your network are exposed to the Internet.
- You can also leverage more granular access to and from the Amazon EC2 instances in your virtual network.

When?

- You want to launch AWS resources in a logically isolated virtual network and spend less time setting up, managing, and validating your virtual network.
- You want to use multiple layers of security, including security groups and network access control lists.

Where?

- VPC is a regional entity and spans across all of the Availability Zones in the region.
- Each subnet must reside entirely within one Availability Zone and cannot span zones.
- You can launch AWS resources, such as EC2 instances, into a specific subnet.

Who?

- Your AWS resources are automatically provisioned in a ready-to-use default VPC or you can create additional VPCs.
- You can specify an IP address range for the VPC, add subnets, associate security groups, and configure route tables.

How?

- When you create a VPC, you must specify an IPv4 CIDR block for the VPC. Afterwards you can add subnets, route tables, security groups, network access control list, an internet gateway, and other gateways as necessary.

How much?

- There is no additional charge for using a VPC. There are charges for some VPC components, such as NAT gateways, Reachability Analyzer, and traffic mirroring. Usage charges for other Amazon Web Services, including Amazon EC2, still apply at published rates for those resources, including data transfer charges.