Amazon Web Services

Endpoint

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Endpoint (AWS Private Link)

- A VPC endpoint enables us to privately connect our VPC to support AWS services. Instances in our VPC do not require Public IP Addresses to communicate with resources in the service. They remove the need of Internet Gateway, Nat Gateway and VPN Connection to access AWS services.

- Endpoints are virtual devices. They are horizontally scaled, redundant, and highly available VPC components. They allow communication between instances in our VPC and services without imposing availability risks or bandwidth constraints on our network traffic.

Endpoint - Types

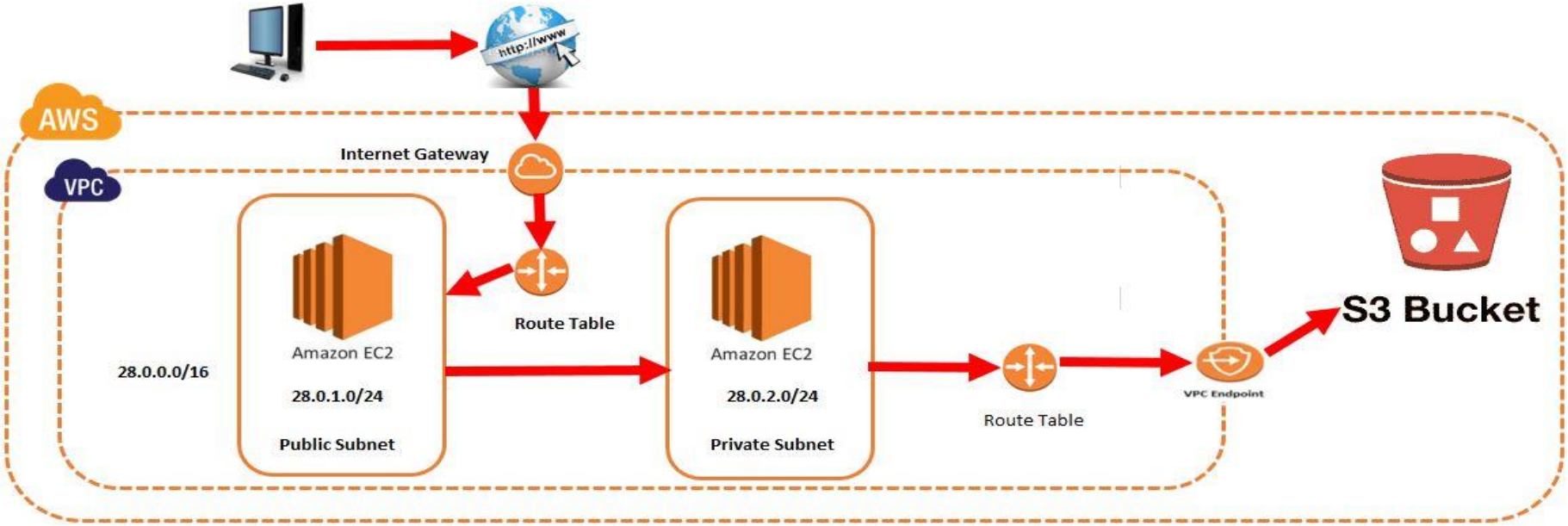
- Interface Endpoint
- Gateway Endpoint

- **Interface Endpoint**: Interface Endpoint is an Elastic Network Interface with a private IP address which will act as an entry point for the traffic destined to a particular service.

- It Support most AWS Services such as Amazon CloudWatch, Amazon SNS, etc.
- For each interface endpoint, only one subnet per Availability Zone can be selected.
- Each interface endpoint can support a bandwidth of up to 10 GBPS per Availability Zone by default. Additional capacity may be added automatically based on your usage.

Endpoint - Types

- **Gateway Endpoint**: Gateway Endpoint is a gateway which is targeted for a specific route in your route table.
- Amazon S3 and DynamoDB are the only services which are supported by Gateway Endpoints.
- Endpoint cannot be created between a VPC and an AWS service in a different region.
- Endpoint cannot be transferred from one VPC to another, or from one service to another



Endpoint - Gateway

- Create VPC
- Click on Create VPC
- Enter the Name
- Enter IPV4 CIDR Block
- Click on Create VPC
- Create Public & Private Subnet
- Create Internet Gateway
- Attach Internet gateway to VPC

Endpoint - Gateway

- Create Route table
- Attach route table to Subnet
- Attach Internet Gateway with Route table
- **Create End point**
- Go to Endpoint
- Click on Create endpoint
- Find S3

Endpoint - Gateway

- Select S3 for type gateway
- Select our VPC
- Select private subnet route table
- Click on Create endpoint
- Create Linux EC2 Machine in public subnet
- Create security group
- Select type as SSH and source as My IP

Endpoint - Gateway

- Create Linux EC2 Machine in private subnet

- Create Security group

- Select type as SSH & Source as custom (Enter Public Subnet CIDR Block)

- Connect the Public Subnet Instance

- Create Pem file to connect Private instance using Public Instance

vim <pemfilename>.pem

- Change the Permissions

chmod 400 <pemfilename>.pem

Endpoint - Gateway

- switch user

sudo su

- Copy & Paste the SSH Command of Private Instance

- switch user

sudo su

- Configure AWS

aws configure

- Create New Access Key ID

- Enter Access Key ID & Secret Key ID

Endpoint - Gateway

- Enter default region

- Enter output format

- AWS S3 Commands **Click Here**

- Create S3 Bucket

aws s3 mb s3://<Bucket_Name>

- List of S3 Buckets

aws s3 ls

- For better understand about endpoint delete the endpoint & Try to create S3 Bucket

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