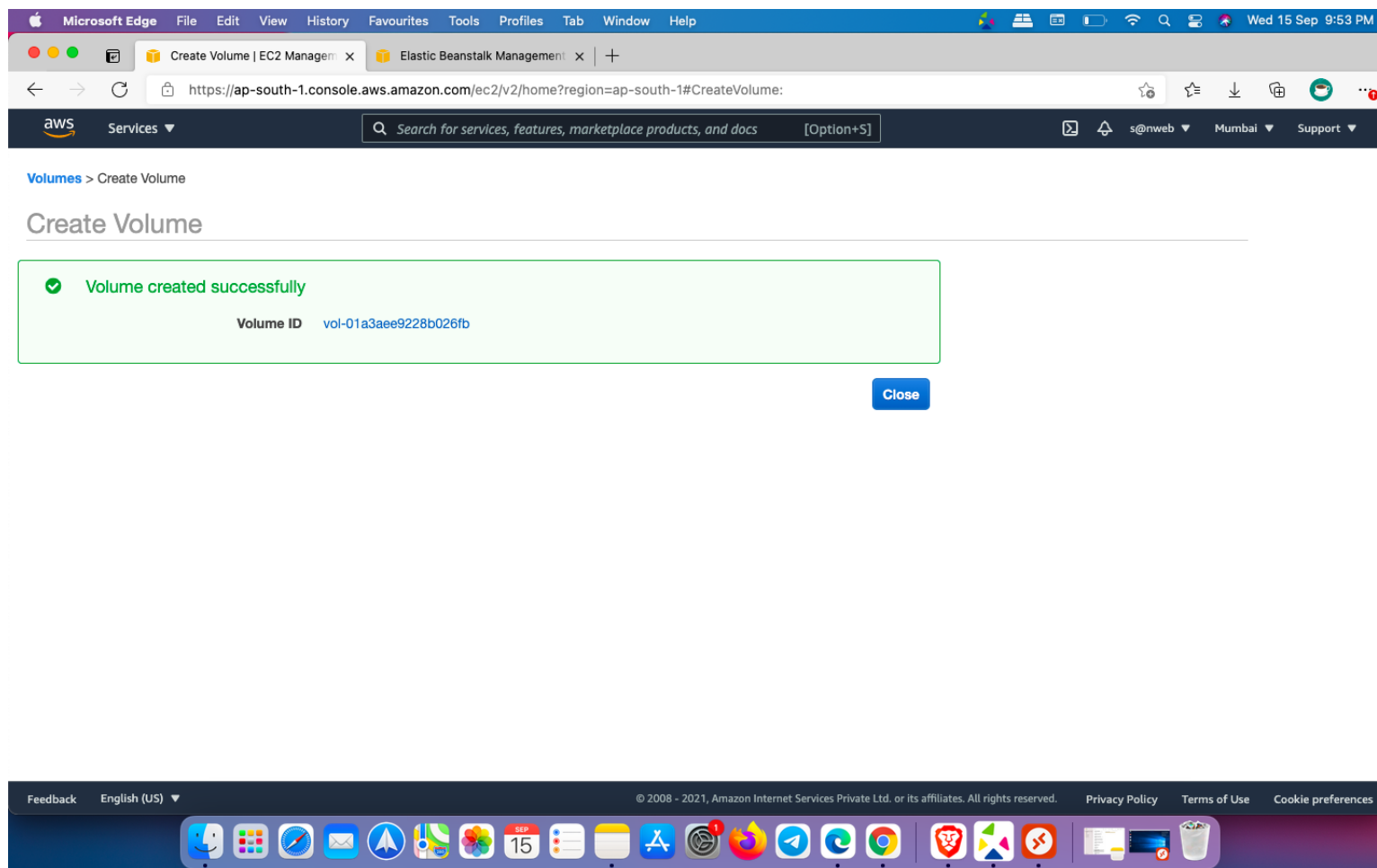


AWS ZERO TO HERO | Day 2 | Assignment 4

Working with VPC

4.1 Creating VPC



4.2 Creating Internet Gateway

The screenshot displays the AWS Management Console interface. A modal dialog titled "Attach Volume" is open, showing the following details:

- Volume:** vol-01a3aee9228b026fb in ap-south-1a
- Instance:** i-017b1b3922cad903e in ap-south-1a
- Device:** xvdf

Below the device field, it indicates "Windows Devices: xvdf through xvdp". The dialog has "Cancel" and "Attach" buttons.

In the background, the "Volumes" page is visible, showing a table of EBS volumes:

Name	Volume ID	Size	Volume Type	IOPS	Throughput	Snapshot	Created	Availability Zone	State
	vol-01a3aee...	1 GiB	gp2	100	-		September 15, 202...	ap-south-1a	available
	vol-02343d2...	30 GiB	gp2	100	-	snap-041b66b...	July 7, 2021 at 2:54...	ap-south-1a	in-use

The sidebar on the left includes navigation links for EC2 Dashboard, Events, Tags, Limits, Instances, Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity Reservations, Images, AMIs, Elastic Block Store, Volumes, and Snapshots.

4.3 Create a Subnet-Enable Auto Assign Public IP

The screenshot displays the AWS Management Console interface in a Microsoft Edge browser. The page shows the details for a specific subnet, `subnet-b22678fe`. The left-hand navigation pane lists various AWS services under 'VIRTUAL PRIVATE CLOUD' and 'SECURITY'. The main content area is titled 'subnet-b22678fe' and contains a 'Details' section. This section is organized into a grid of key-value pairs. The 'Auto-assign public IPv4 address' setting is highlighted with a red rectangular box and is currently set to 'Yes'. Other visible settings include 'State' (Available), 'Availability Zone' (ap-south-1b), 'Network ACL' (acl-6064cf0b), and 'Auto-assign customer-owned IPv4 address' (No). The bottom of the console shows a navigation bar with tabs for 'Flow logs', 'Route table', 'Network ACL', 'CIDR reservations', 'Sharing', and 'Tags'. The footer contains copyright information and links to privacy and terms of use.

Details			
Subnet ID	Subnet ARN	State	IPv4 CIDR
subnet-b22678fe	arn:aws:ec2:ap-south-1:982497270347:subnet/subnet-b22678fe	Available	172.31.0.0/20
Available IPv4 addresses	IPv6 CIDR	Availability Zone	Availability Zone ID
4091	-	ap-south-1b	aps1-az3
VPC	Route table	Network ACL	Default subnet
vpc-d22aeab9	rtb-b224a2d9	acl-6064cf0b	Yes
Auto-assign public IPv4 address	Auto-assign IPv6 address	Auto-assign customer-owned IPv4 address	Customer-owned IPv4 pool
Yes	No	No	-
Outpost ID	IPv4 CIDR reservations	IPv6 CIDR reservations	Owner
-	-	-	982497270347

4.4 Create a Route Table Make it Main Root Table

The screenshot shows the AWS Management Console interface in Microsoft Edge. The browser address bar displays the URL: <https://ap-south-1.console.aws.amazon.com/vpc/home?region=ap-south-1#RouteTableDetails:RouteTableId=rtb-b224a2d9>. The search bar contains the text "Internet gateway".

The left sidebar shows the navigation menu with the following sections:

- VPC Dashboard**
- EC2 Global View** *New*
- Filter by VPC:**
 - Select a VPC
- VIRTUAL PRIVATE CLOUD**
 - Your VPCs
 - Subnets
 - Route Tables** *New*
 - Internet Gateways
 - Egress Only Internet Gateways
 - DHCP Options Sets
 - Elastic IPs
 - Managed Prefix Lists
 - Endpoints
 - Endpoint Services *New*
 - NAT Gateways
 - Peering Connections *New*
- SECURITY**

The main content area displays the details for the Route Table **rtb-b224a2d9**. The breadcrumb navigation is **VPC > Route tables > rtb-b224a2d9**. The **Actions** dropdown menu is visible in the top right corner.

A notification banner at the top of the details section states: "You can now check network connectivity with Reachability Analyzer" with a **Run Reachability Analyzer** button.

The **Details** tab is selected, showing the following information:

Property	Value	Explicit subnet associations	Edge associations
Route table ID	rtb-b224a2d9	-	-
VPC	vpc-d22aeab9	-	-
Main	<input checked="" type="checkbox"/> Yes	-	-
Owner ID	982497270347	-	-

The **Routes** tab is also visible, showing **Routes (2)** with a search bar and a dropdown menu set to **Both**. The **Edit routes** button is located in the top right corner of the routes section.

The footer of the console displays the copyright notice: "© 2008 - 2021, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved." along with links for **Privacy Policy**, **Terms of Use**, and **Cookie preferences**.

4.4.2 Add a Route Table Entry to Internet Gateway (After Creating a Route Table & Making it Main Root Table)

The screenshot displays the AWS Management Console interface for the 'Route Table Details' page. The browser is Microsoft Edge, and the URL is <https://ap-south-1.console.aws.amazon.com/vpc/home?region=ap-south-1#RouteTableDetails:RouteTableId=rtb-b224a2d9>. The left sidebar shows the 'VIRTUAL PRIVATE CLOUD' section with various VPC resources. The main content area shows the 'Details' tab for the route table 'rtb-b224a2d9', which is the 'Main' route table for VPC 'vpc-d22aeab9'. Below the details, the 'Routes' tab is selected, showing a table of routes. The table has columns for Destination, Target, Status, and Propagated. Two routes are listed: one for 172.31.0.0/16 pointing to 'local' and another for 0.0.0.0/0 pointing to 'igw-530f9d3b'. The second route is highlighted with a red box.

Destination	Target	Status	Propagated
172.31.0.0/16	local	Active	No
0.0.0.0/0	igw-530f9d3b	Active	No

4.5 Launch an Instance in Custom VPC

The screenshot displays the AWS Management Console interface in Microsoft Edge. The browser address bar shows the URL: <https://ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#InstanceDetails:instanceId=i-017b1b3922cad903e>. The console shows the 'Instance details' page for the EC2 instance **i-017b1b3922cad903e**. The instance is in the **Running** state. The VPC ID **vpc-d22aeab9** is highlighted with a red box. The console also shows the instance's public IPv4 address (15.207.85.200), private IPv4 address (172.31.35.91), and public IPv4 DNS (ec2-15-207-85-200.ap-south-1.compute.amazonaws.com). The instance type is **t2.micro**. The console also shows the instance's private IPv4 DNS (ip-172-31-35-91.ap-south-1.compute.internal) and subnet ID (subnet-5af81131). The console also shows the instance's VPC ID (vpc-d22aeab9) and subnet ID (subnet-5af81131). The console also shows the instance's VPC ID (vpc-d22aeab9) and subnet ID (subnet-5af81131).

Instance summary for i-017b1b3922cad903e		
Instance ID i-017b1b3922cad903e	Public IPv4 address 15.207.85.200 open address	Private IPv4 addresses 172.31.35.91
IPv6 address -	Instance state Running	Public IPv4 DNS ec2-15-207-85-200.ap-south-1.compute.amazonaws.com open address
Private IPv4 DNS ip-172-31-35-91.ap-south-1.compute.internal	Instance type t2.micro	Elastic IP addresses -
VPC ID vpc-d22aeab9	AWS Compute Optimizer finding Opt-in to AWS Compute Optimizer for recommendations. Learn more	IAM Role -
Subnet ID subnet-5af81131		

The console also shows the instance's VPC ID (vpc-d22aeab9) and subnet ID (subnet-5af81131). The console also shows the instance's VPC ID (vpc-d22aeab9) and subnet ID (subnet-5af81131).