

# **ASSIGNMENT – 6**

## **1. EXPLAIN THE BELOW AWS ARCHITECTUR**

### **ELASTIC LOAD BALANCER**

- The load balancer distributes incoming application traffic across multiple targets such as EC2 instances in multiple Availability Zones. This increases the availability of our application.
- It monitors the health of its registered targets, and routes traffic only to the healthy targets.

### **ELASTIC COMPUTE CLOUD**

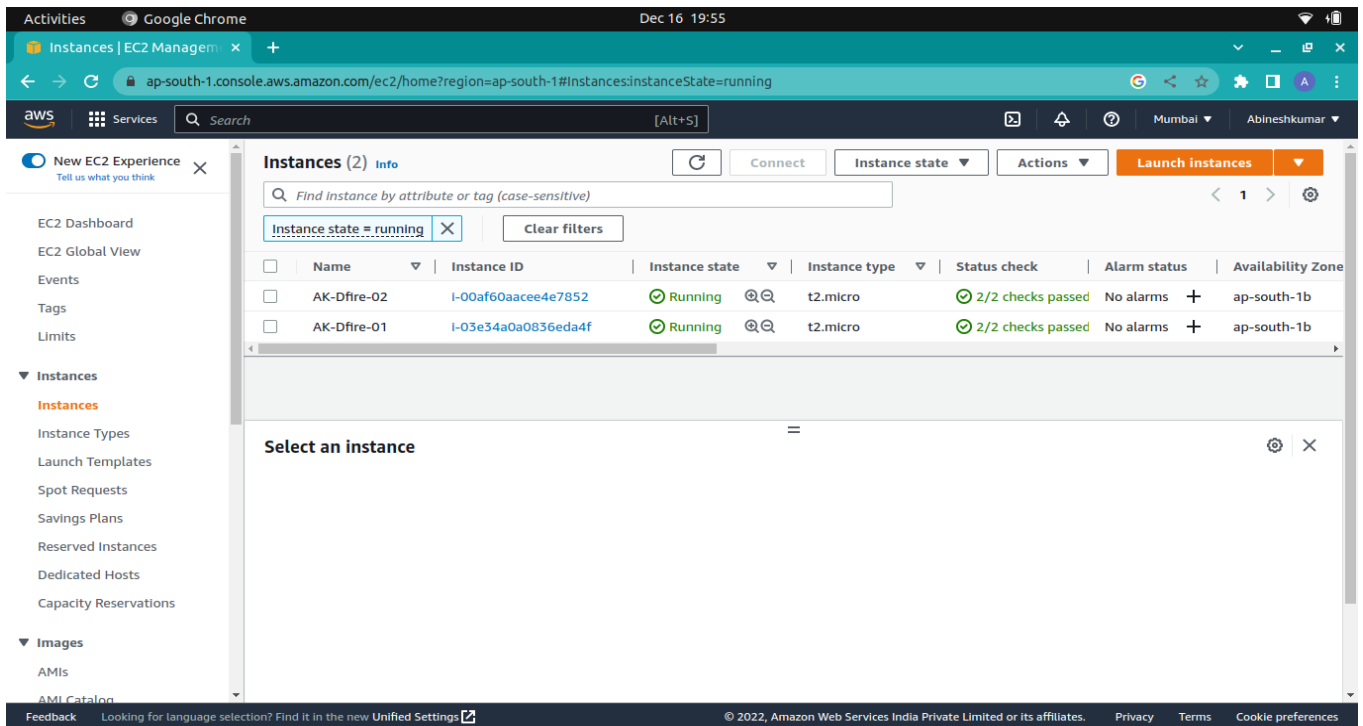
- Elastic Compute Cloud provides scalable computing capacity in the Amazon Web Services Cloud we can use Amazon EC2 to launch as many or as few virtual servers as we need.
- Amazon EC2 enables us to scale up or down to handle changes in requirements or spikes in popularity, reducing our need to forecast traffic.

### **RELATIONAL DATABASE SERVICE**

- Amazon RDS is a Relational Database Cloud Service
- Amazon RDS minimizes relational database management by automation
- Amazon RDS creates multiple instances for high availability and failovers
- Amazon RDS supports PostgreSQL, MySQL, Maria DB, Oracle, SQL Server, and Amazon Aurora. Relational databases are often used for storing transactional and analytical data
- Relational databases provide stability and reliability for transactional databases

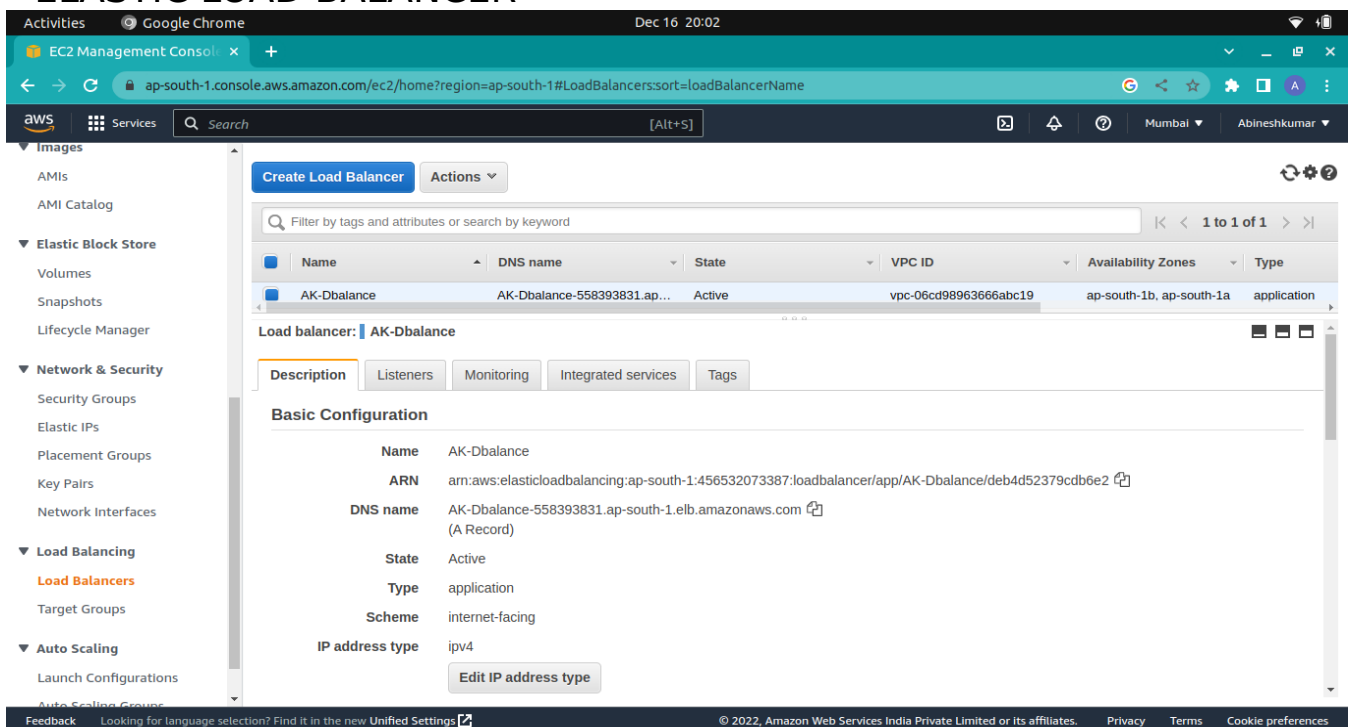
## 2. Implement the same in the AWS

### Launched EC2 instance

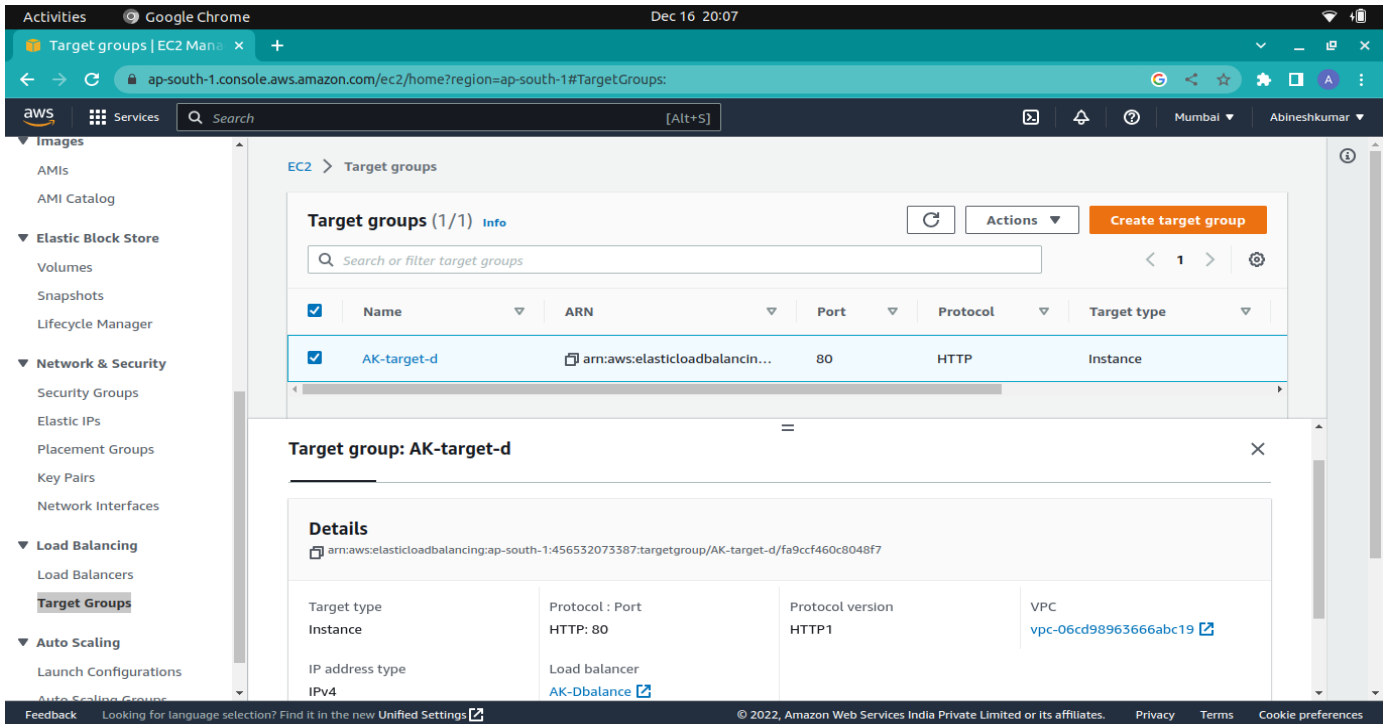


- Two instances launched for load balancing

### ELASTIC LOAD BALANCER



## Target group created



The screenshot shows the AWS Management Console interface for the 'Target groups' page. The left sidebar lists various services, including 'Network & Security' and 'Load Balancing'. The main content area displays a table of target groups. One target group, 'AK-target-d', is selected and its details are shown in a modal window.

Name	ARN	Port	Protocol	Target type
AK-target-d	arn:aws:elasticloadbalancing...	80	HTTP	Instance

**Target group: AK-target-d**

**Details**

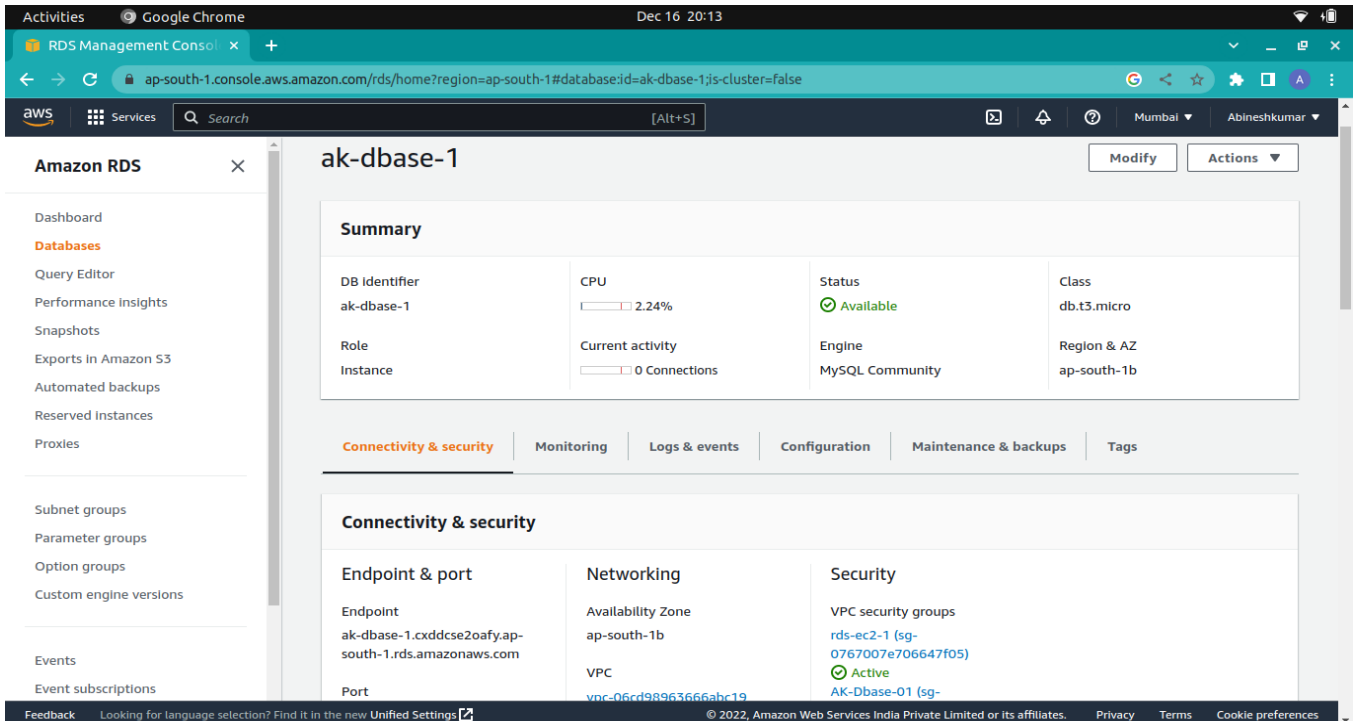
arn:aws:elasticloadbalancing:ap-south-1:456532073387:targetgroup/AK-target-d/fa9cc460c8048f7

Target type	Protocol : Port	Protocol version	VPC
Instance	HTTP: 80	HTTP1	vpc-06cd98963666abc19

IP address type: IPv4

Load balancer: AK-Dbalance

## Created relational database engine MySQL



The screenshot shows the AWS Management Console interface for the 'ak-dbase-1' RDS instance. The left sidebar lists various services, including 'Amazon RDS'. The main content area displays the details for the 'ak-dbase-1' instance, including its status, CPU usage, and connectivity information.

**Summary**

DB Identifier	CPU	Status	Class
ak-dbase-1	2.24%	Available	db.t3.micro

Role: Instance

Current activity: 0 Connections

Engine: MySQL Community

Region & AZ: ap-south-1b

**Connectivity & security**

Endpoint & port	Networking	Security
Endpoint: ak-dbase-1.cxddcse2oafy.ap-south-1.rds.amazonaws.com Port: 3306	Availability Zone: ap-south-1b VPC: vpc-06cd98963666abc19	VPC security groups: rds-ec2-1 (sg-0767007e706647f05) Active: AK-Dbase-01 (sg-0767007e706647f05)

## And connected EC2 instance AK-Dbase-01

