Load Balancer

Advantages of a Load Balancer

1. **Load Distribution:**
    - A Load Balancer distributes incoming traffic across multiple web servers, ensuring that no single server is overwhelmed. This helps to optimize resource utilization, improve response times, and increase the overall availability of applications.
2. **Health Monitoring:**
    - A Load Balancer continuously monitors the health of the web servers. If a server fails a health check, the Load Balancer automatically stops sending traffic to that server until it recovers and becomes healthy again. This ensures that only healthy servers handle traffic, maintaining the reliability of the service.

Load Balancer - Lab Setup

Steps to Create a Classic Load Balancer

1. **Navigate to Load Balancers:**
    - Go to the Load Balancers section in the AWS Management Console.
    - Click on Create Load Balancer.
2. **Select Load Balancer Type:**
    - Choose Classic Load Balancer and click on Create.

3. **Configure the Load Balancer:**
    - **Load Balancer Name:** Enter MyLB.
    - Click Next.
4. **Security Group:**
    - **Select an Existing Security Group:** Choose WebSG.
    - Click Next.
5. **Availability Zones:**
    - Select all Availability Zones to ensure high availability across regions.
    - Click Next.
6. **Instance Selection:**
    - Select the EC2 instances you want to include in the load balancer (select both instances).
    - Click Next.
7. **Review and Create:**
    - Review the settings.
    - Click Create to finalize the setup.
    - After creation, click Close.
8. **Test the Load Balancer:**
    - Copy the DNS name of the Load Balancer.
    - Paste it into your browser.
    - You should see the content from your web servers displayed on the web page.