

GLA UNIVERSITY (MATHURA)



Computer Science And Engineering Department

COURSE - JOVAC AWS

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TOPIC :-

Create an AutoScaling Group and put Load Balancer, Test it.

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STEPS FOR CREATING PROJECT ON AWS.

- Create **two server/instances**.
- Create **target group & connect server**.
- Create **Load Balancer**.
- Create **Launch template**.
- Create **Autoscaling group**.



What is Autoscaling group?

- **Autoscaling Group** helps to create automatically adjusts the number of instances to handle the load if load will decrease then instances will terminate.
- Ex:- Web Application, Netflix, Amazon, etc



What is Load Balancer ?

- A **Load Balancer** is a service that automatically distributes incoming network traffic across multiple servers or instances. The goal of a load balancer is to ensure that no single server is overwhelmed by too much traffic, thus improving the availability, reliability, and scalability of your application.

Launch Template:

Define parameters like AMI (Amazon Machine Image), instance type, key pairs, security groups, and more, to reuse across multiple instance launches.

Target group:

In AWS, a **Target Group** is a configuration resource associated with **Elastic Load Balancers (ELB)** that defines how traffic should be directed to a specific set of registered instances, containers, or IP address.

Real life Example:

- E-Commerce Website (e.g. Flipkart)
- Video Streaming Platform (e.g. Netflix)
- Financial Applications (e.g. Paytm)
- Online Gaming Services (e.g. Call of Duty)

Advantage:

- Scalability
- High Availability
- Improved Performance and User Experience
- Simplified Management and Monitoring



Conclusion

- The combination of an **Auto Scaling Group** and a **Load Balancer** provides a robust, scalable, cost-effective, and highly available architecture for your applications. It ensures that your system can handle varying loads while maintaining consistent performance, security, and availability.





THANK YOU!