Cloud Computing Architecture

Load Balancing Exercise and Monitoring

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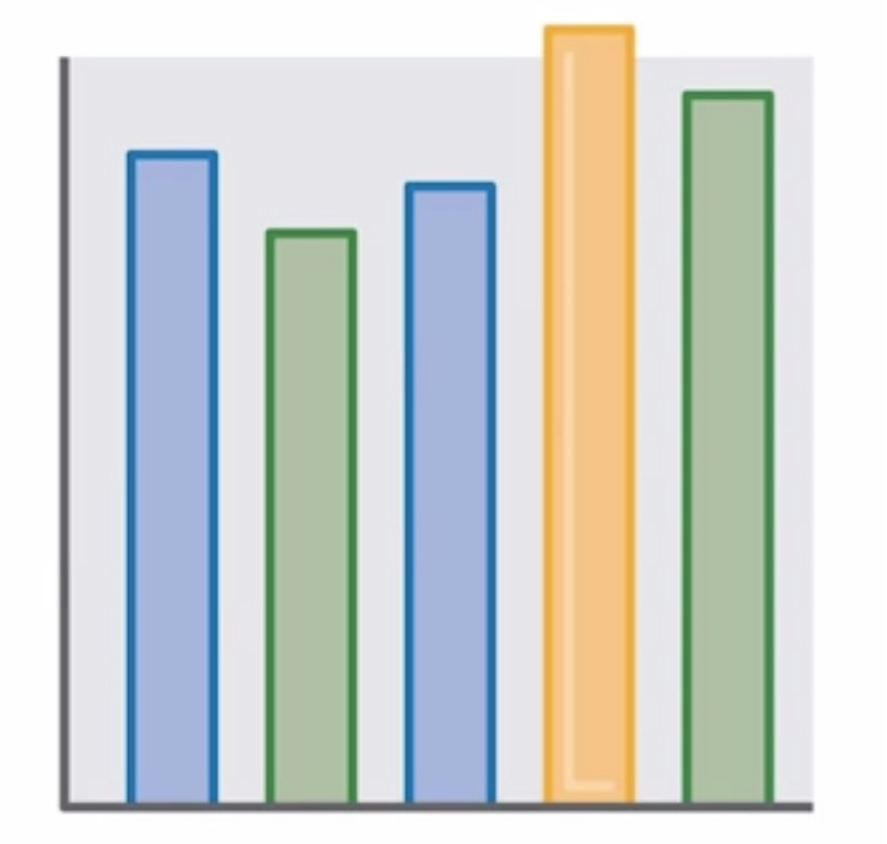
Activity: Elastic Load Balancing

You must support traffic to a containerized application.	Application Load Balancer
You have extremely spiky and unpredictable TCP traffic.	Network Load Balancer
You need simple load balancing with multiple protocols.	Classic Load Balancer
You need to support a static or Elastic IP address, or an IP target outside a VPC.	Network Load Balancer
You need a load balancer that can handle millions of requests per second while maintaining low latencies.	Network Load Balancer
You must support HTTPS requests.	Application Load Balancer

Load balancer monitoring



- **Amazon CloudWatch metrics** – Used to verify that the system is performing as expected and creates an alarm to initiate an action if a metric goes outside an acceptable range.
- **Access logs** – Capture detailed information about requests sent to your load balancer.
- **AWS CloudTrail logs** – Capture the who, what, when, and where of API interactions in AWS services.

Section 1 key takeaways

- Elastic Load Balancing distributes incoming application or network traffic across multiple targets in one or more Availability Zones.
- Elastic Load Balancing supports three types of load balancers:
  - Application Load Balancer
  - Network Load Balancer
  - Classic Load Balancer
- ELB offers instance health checks, security, and monitoring.

Lecture References

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Recommend Viewing

Swinburne Lecture – High Level Overview

AWS Academy – Deeper dive

ACF Module 10