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Cloud Computing Architecture

More on Load Balancing



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More on Load Balancing

This presentation:

- Elastic Load Balancing
 - Connection Draining
 - Sticky Policy Configuration
 - Elastic IP Addresses







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Why Choose Elastic Load Balancing?

Elastic Load Balancing provides the following features:

-  High availability
-  Health checks
-  Security features
-  Layer 4 or layer 7 load balancing

Connection Draining for Your Load Balancer



Enabling connection draining causes the load balancer to **stop sending new requests** to the back-end instances when instances are **de-registering** or **become unhealthy**.

Why is this important?

You can perform maintenance without affecting your end users.

Enable connection draining through:

- 📦 AWS Management Console
- 📦 API
- 📦 AWS Command Line Interface, or AWS CLI
- 📦 AWS CloudFormation

Sticky Policy Configuration

- ❏ Defines a cookie expiration, which establishes the duration of validity for each cookie, automatically updated after its duration expires.
- ❏ Application-controlled session stickiness:
 - ❏ Uses a special cookie to associate the session with the original server that handled the request.
 - ❏ Follows the lifetime of the application-generated cookie that corresponds to cookie name specified in the policy configuration.
 - ❏ Load balancer inserts new stickiness cookie if the application response includes a new application cookie.
 - ❏ If the application cookie is removed or expires, the session stops being sticky.

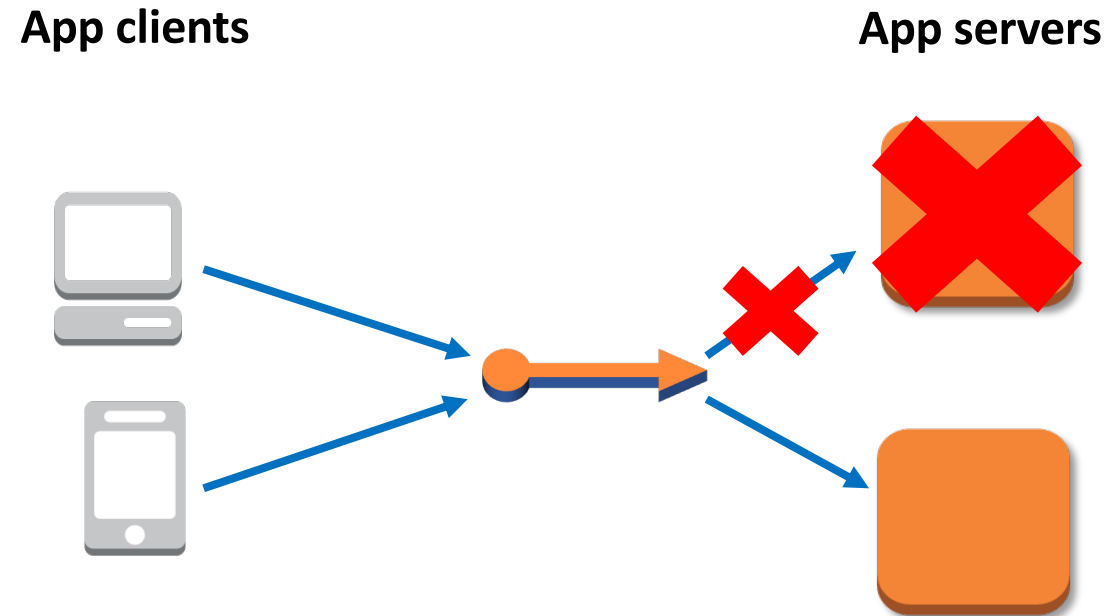
Elastic IP Addresses



Elastic IP Addresses:

- Are **static IP addresses** designed for dynamic cloud computing.
- Can be attached to **Amazon EC2 instances**.
- Enable you to **mask the failure** of an instance or software by allowing your users and clients to **use the same IP address with replacement resources**.

Elastic IP Addresses Enable HA



If one instance goes down, clients can use the same IP address to reach the replacement instance.

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Lecture References

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References

Recommend Viewing

Swinburne Lecture – High Level Overview

AWS Academy – Deeper dive

ACA Module 9

