AWS-2

01-12-2019

AWS Fundamentals – Route 53

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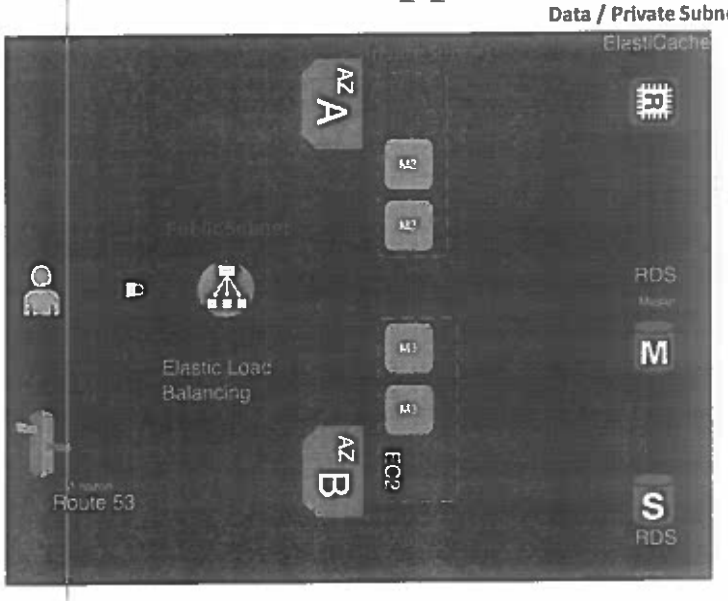
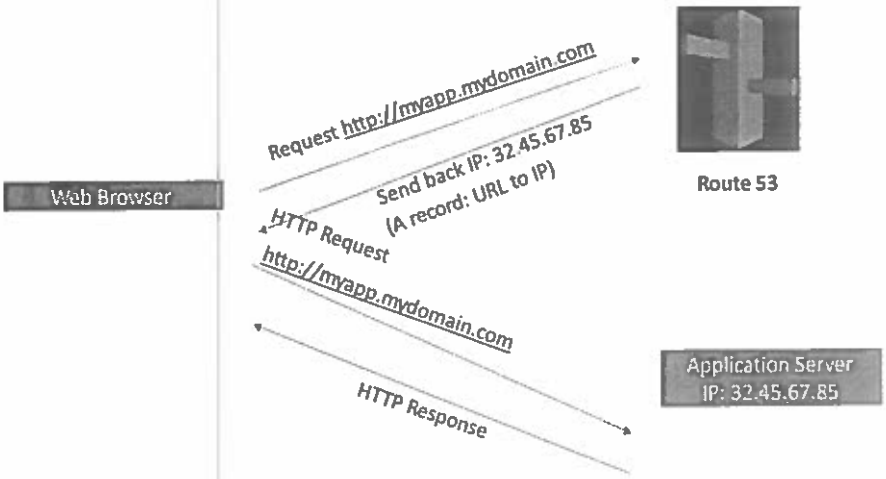
Typical architecture Web App 3-tier



AWS Route 53 Overview

- Route53 is a Managed DNS (Domain Name System)
- DNS is a collection of rules and records which helps clients understand how to reach a server through URLs.
- In AWS, the most common records are:
  - A: URL to IPv4
  - AAAA: URL to IPv6
  - CNAME: URL to URL
  - Alias: URL to AWS resource.

Route 53 – Diagram for A Record



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AWS Route 53 Overview

- Route53 can use:
  - public domain names you own (or buy) application1.mypublicdomain.com
  - private domain names that can be resolved by your instances in your VPCs. application1.company.internal

- Route53 has advanced features such as:
  - Load balancing (through DNS – also called client load balancing)
  - Health checks (although limited…)
  - Routing policy: simple, failover, geolocation, geoproximity, latency, weighted

- Prefer Alias over CNAME for AWS resources (for performance reasons)

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Working with Records and Routing Policies

- **Simple routing policy** – Use for a single resource that performs a given function for your domain, for example, a web server that serves content for the example.com website.

- **Failover routing policy** – Use when you want to configure active-passive failover.

- **Geolocation routing policy** – Use when you want to route traffic based on the location of your users.

- **Geoproximity routing policy** – Use when you want to route traffic based on the location of your resources and, optionally, shift traffic from resources in one location to resources in another.

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Working with Records and Routing Policies

- **Latency routing policy** – Use when you have resources in multiple AWS Regions and you want to route traffic to the region that provides the best latency.

- **Multivalued answer routing policy** – Use when you want Route 53 to respond to DNS queries with up to eight healthy records selected at random.

- **Weighted routing policy** – Use to route traffic to multiple resources in proportions that you specify.

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AWS Route 53 Overview

- You should know all the record types:
  - A: URL to IPv4
  - AAAA: URL to IPv6
  - CNAME: URL to URL
  - Alias: URL to AWS resource
- You should know to use Alias records over CNAME for AWS resources