AWS Route 53

AWS Route 53 is one of the most popular and widely used services of Amazon Web Services. This is generally because it is highly available and reliable and flexible for the customer/users to use.

Overview of Route 53

Amazon Route 53 is a highly efficient and scalable cloud web service and is also used for the health checking of resources. It provides developers with an efficient and extremely reliable way to connect users to internet applications without any downtime, it still has downtime in servers or applications but users/customers may not be aware of it. It effectively connects user requests to AWS such as Amazon EC2 instances, Elastic Load Balancing, or Amazon S3 buckets. AWS Route 53 mainly performs three functions:-

- It registers the name for the website (Domain name) which needs a name. Like if you want to buy a domain name, you that domain name through Route 53.
- It helps the user to connect the website or web application with the browser in the server when he/she enters the website name.
- It keeps checking the health of resources before the customer notices it by sending an automated request over the internet to resources.

Benefits Of Using Route 53

- Highly **efficient and reliable** ensures a consistent ability to route applications.
- It can handle millions of millions of requests because it is **highly scalable**.
- It can handle large queries without user interaction.
- It's very **easy to use, to sign up for, and configure** and provides fast responses.
- It's very **cost-effective** like paying only for the services you used.
- It's very **secure**, because of Identity and Access Management (IAM).

Types Of Routing Policy

1. **Simple Routing:-** It allows to configure DNS with no special Route 53 Routing. It is mainly used when you have a single resource that performs a given function for your domain

AWS Route 53 Introduction

February 17, 2023 by Ayush Jain Leave a Comment
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AWS Route 53 is one of the most popular and widely used services of Amazon Web Services. This is generally because it is highly available and reliable and flexible for the customer/users to use.
In this blog, we are going to cover everything that you need to understand about **AWS Route 53:-**

- Overview of Route 53
- Benefits of using Route 53
- Types of Routing Polices
- Key Features of Route 53
- Steps To Configure Amazon Route 53
- Frequently Asked Questions

Overview of Route 53

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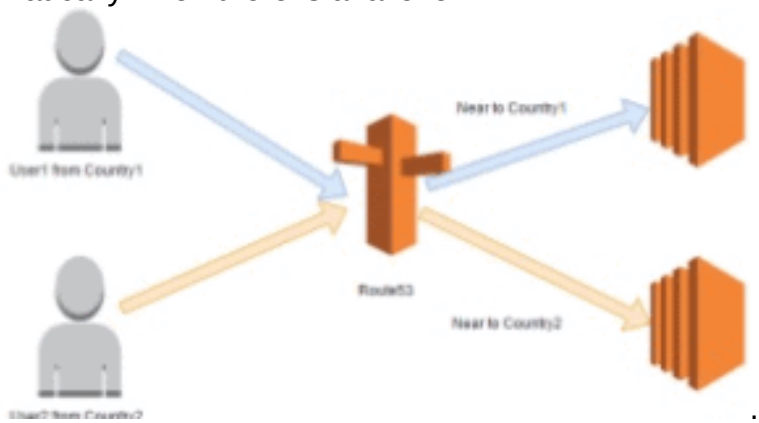
Types Of Routing Policy

1. **Simple Routing:-** It allows to configure DNS with no special Route 53 Routing. It is mainly used when you have a single resource that performs a given function for your domain.

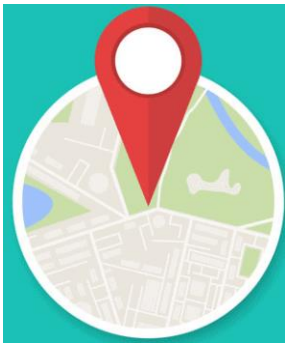
2. **Failover Routing:-** It routes traffic to another or alternate resource when the previous resource is unhealthy. It makes one ELB (Elastic Load Balancing) on active mode and the other on standby mode. It switches

automatically when there is a failover



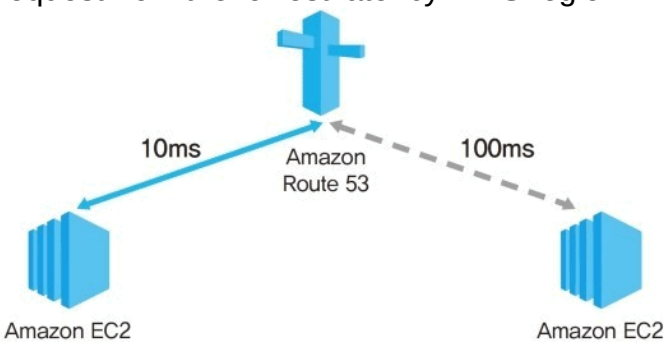
3. **Geolocation Routing:-** It routes the resources based on the geographic location of the users. It localizes the content or website in the language of the user. These are specified by continent, or by country.

4. **Geoproximity Routing:-** It routes traffic to the resources based on the geographic location of users and their resources based on the geographic location of users and their resources. There is an option available to route less traffic or more to a given resource.



5. **Latency-based Routing:-** It is mainly used when we have installed or hosted a website across multiple AWS regions. It improves the performance by serving their

request from the lowest latency AWS region.



6. **Weighted Routing:-** It routes multiple resources with a single domain name and controls the traffic to be routed to each resource. It is mainly useful for testing and load-balancing new versions of the software.

Key Features Of Route 53

- **DNS Failover:-** It helps the user to automatically detect an outage of its website and then redirect your end users to another location where your website/application is working properly.
- **Traffic Flow:-** It routes end users to the endpoint which provides a better user experience.
- **Health Checkups:-** It automatically checks and monitors the health and performance of the applications or resources as well as of resources.
- **Weighted balancing:-** It routes traffic between several services via a round-robin algorithm. It also allows the user to set their own weight.
- **Root Domain Website Hosting:-** It allows the user to access its website without specifying the www in the web address or the search bar.
- **Domain Registration:-** It registers the domain name of the website (if needed), with the AWS console.
- **ELB Integration:-** Route 53 helps the user to easily map his /her root domain because route 53 is integrated with Elastic Load Balancer (ELB). It can be implemented in very little time while maintaining a high level of reliability with customers.
- **Scalable** − It can handle large volume queries without the user's interaction automatically.

Route 53 Key Features

Reliable	• 54 Edge Locations • Supported by AWS SLA
Fast	• Worldwide anycast network • Fast propagation of changes across edge networks
Integrated with AWS	• ELB-Alias Queries. Map the root or apex of your hosted zone to your Elastic Load Balancer.
Easy to Use	• SDK, CLI, Programmatic API • Management Console
Cost Effective	• Cheaper • Pay as you go model
Flexible	• Supports Weighted Round Robin, Specify the frequency with which different responses are served. • Run applications in multiple AWS regions and route users to the one that provides the lowest latency with Latency based routing.