

Course Title: AWS R53

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What is Amazon Route 53?

"Amazon Route 53 is a highly available and scalable Domain Name System (DNS) web service. It is designed for developers and corporates to route the end users to Internet applications by translating human readable names like www.mydomain.com, into the numeric IP addresses like 192.0.2.1 that computers use to connect to each other."

















Benefits

<u>Highly available and Reliable</u> The distributed nature of our DNS servers helps ensure a consistent ability to route your end users to your application.

<u>Flexible:</u> You can configure multiple traffic policies and decide which policies are active at any given time.

Simple: Amazon Route 53 can start to answer your DNS queries within minutes.

<u>Fast:</u> Using a global anycast network of DNS servers around the world, Amazon Route 53 is designed to automatically route your users to the optimal location depending on network conditions.



















Amazon Route 53 Features

TRAFFIC FLOW:

Easy-to-use and cost-effective global traffic management, route end users to the best endpoint for the application based on geo proximity, latency, health, and other considerations.

LATENCY BASED ROUTING:

Route end users to the AWS region that provides the lowest possible latency.



















GEO DNS:

Route end users to a particular endpoint that specify based on the end user's geographic location.

PRIVATE DNS FOR AMAZON VPC:

Manage custom domain names for the internal AWS resources without exposing DNS data to the public Internet.



















DNS FAILOVER:

Automatically route the website visitors to an alternate location to avoid site outages.

HEALTH CHECKS AND MONITORING:

Amazon Route 53 can monitor the health and performance of the application as well as the web servers and other resources.

















Amazon Route 53 Features

DOMAIN REGISTRATION:

Amazon Route 53 offers domain name registration services, where user can search for and register available domain names or transfer in existing domain names to be managed by Route 53.

CLOUDFRONT ZONE APEX SUPPORT:

When using Amazon CloudFront to deliver the website content, visitors to the website can now access the site at the zone apex (or "root domain").



















S3 ZONE APEX SUPPORT:

Visitors to the website hosted on Amazon S3 can now access the site at the zone apex (or "root domain")

AMAZON ELB INTEGRATION:

Amazon Route 53 is integrated with Elastic Load Balancing (ELB).



















Amazon Route 53 Features

WEIGHTED ROUND ROBIN:

Amazon Route 53 offers Weighted Round Robin (WRR) functionality.

SCALABLE:

Route 53 is designed in such a way that it automatically handles large volume queries without the user's interaction..

















COST-EFFECTIVE:

Pay only for the domain service and the number of queries that the service answers for each domain.

SECURE:

By integrating Route 53 with AWS (IAM), there is complete control over every user within the AWS account, such as deciding which user can access which part of Route 53.

FLEXIBLE:

Amazon Route 53 Traffic Flow routes traffic based on multiple criteria, such as endpoint health, geographic location, and latency.













