AWS Route53

TNGS LEARNING SOLUTIONS

Domain Name System

- Internet traffic – Public hosted zone – e.g. (Internet Gateway)
- Internal VPC – Private hosted zone e.g. (NAT gateway)
- **Uses:**
  I. Domain Name registration
  II. Route internet/Internal traffic
  III. Manage health checks for DNS services

Domain Name System

- Domain Name registration
  - www.example.com, www.example.org .....
- Route internet/internal traffic
  - Hosted Zone
    - Multiple records
      - A Record → IPv4 IP
      - AAAA Record → IPv6 IP Address
      - NS → Name Servers
      - SOA → Start of Authority
      - MX – Mail exchange
      - CName → Canonical Name

Health Check for Resources

- 80 → http
- 443 → https

Routing Policies in Route53

1. Simple Routing Policy:

Use a simple routing policy when you have a single resource that performs a given function for your domain.

Example:

One web server that serves content for the example.com website. In this case, Amazon Route 53 responds to DNS queries based only on the values in the resource record set, for example, the IP address in an A record.

Routing Policies in Route53

2. Weighted Routing Policy:

Use the weighted routing policy when you have multiple resources that perform the same function

Example

(web servers that serve the same website) and you want Amazon Route 53 to route traffic to those resources in proportions that you specify (for example, one quarter to one server and three quarters to the other).

Routing Policies in Route53

3. Latency Routing Policy:

Use the latency routing policy when you have resources in multiple Amazon EC2 data centers that perform the same function, and you want Amazon Route53 to respond to DNS queries with the resources that provide the best latency.

Example:

You might have web servers for example.com in the Amazon EC2 data centers in Ireland and in Tokyo. When a user browse to www.example.com, Amazon Route 53 chooses to respond to the DNS query based on which data center gives your user the lowest latency.

Routing Policies in Route53

4. Failover Routing Policy (Public Hosted Zones Only):

Use the failover routing policy when you want to configure active passive failover, in which one resource takes all traffic when it’s available and the other resource takes all traffic when the first resource isn’t available.

Example:

Disaster Recovery for RDS database.

Routing Policies in Route53

5. Geolocation Routing Policy:

Use the geolocation routing policy when you want Amazon Route 53 to respond to DNS queries based on the location of your users.