

AWS Route53 Notes

AWS DNS Service (Domain Name System)

Internet traffic – Public hosted zone - Example (Internet Gateway)

Internal VPC – Private hosted zone e.g. (NAT gateway)

Uses:

- Domain Name registration (www.example.com)
 - Route internet/Internal traffic
 - Manage health checks for DNS services
1. Domain Name registration
 - a. www.example.com, www.example.org
 2. Route internet traffic
 - a. Hosted Zone
 - i. Multiple records
 1. A Record → IPv4 IP
 2. AAAA Record → IPv6 IP Address
 3. NS → Name Servers
 4. SOA → Start of Authority
 5. MX – Mail exchange
 6. CName → Canonical Name
 3. Health Check for Resources
 - a. 80 → http
 - b. 443 → https

Routing Policies in Route53

1. Simple Policy

Simple Routing Policy:

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

2. Weighted Routing Policy

Weighted Routing Policy:

Use the weighted routing policy when you have multiple resources that perform the same function (for 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).

3. Low latency Routing Policy → Less query and faster response time

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 Route 53 to respond to DNS queries with the resources that provide the best latency. For 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.

4. Failover Routing Policy

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.

5. Geolocation Routing Policy

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.

FQDN → Fully Qualified Domain Name