Route 53 (DNS)

DNS-Domain name system. It means when we search any website ex- [www.amazon.com](http://www.amazon.com) so computer cannot understand this only understand IP addresses. So name converting into IP address is called DNS server.

You can use Route53 to register new domains, transfer existing domains, route traffic to your domain to AWS and external resource and monitor the health of your resources.

You can route 53 to route internet traffic for a domain that you registered with another domain registrar.

Check the health of your domain. It send automatically request over the internet to resource, to verify that the server is reachable & functioned.

Route 53 function

1. DNS management
2. Traffic management
3. Availability monitoring
4. Domain registration

Route 53 Routing policy – when you create a record you choose a routing policy which determines how Amazon Route 53 respond to query.

1. Simple routing policy- if you choose the SRP you can have one record with multiple IP address. If you specify multiple value in a record route 53 return all value to the user in random order. It doesn’t have health check option.

If you choose SRP for an alias record you can specify only one AWS resource or one record in the current hosted Zone.

1. Weighted routing policy- allow you to split your traffic based on different weight assigned. You can set 30% traffic on server1 & 70 % traffic on server2.
2. Latency based routing policy- allow traffic based on latency for your end user. It’s mean which region gives the fastest response time.
3. Failover routing policy- it is used where we want active & passive server. If active server is unhealthy then route 53 send traffic to passive server. Failover routing policy is applicable for only public hosted zone.
4. Geolocation routing policy- you choose the resources that serves your traffic based on the geographic location of your users. That is location that DNS query originate from.

Example- you may have presence your server in Asia & Europe. Now u want user in Asia to be served from Asia server & Europe user served from Europe server.

You can localize your content & present some or your entire website in the language of your users.

You can also use geolocation routing to restrict distribution of content to only the location which you have distribution rights.

You can specify geographic location by continent, by country or by state in the United States.

1. Multivalue routing policy- use when you want route53 to respond to DNS quires with up to 8 healthy records selected at random.

Multivalue answer routing lets u configure Amazon route53 to return multiple values such as IP address for your web server in response to DNS queries.