Amazon Route 53

It is a highly available and scalable domain Name system (DNS) web service. It is designed for developer and corporates to route the end users to internet applications by translating human readable names like www.google.com,into the numeric IP address 192.0.2.21 that computers use to connect to each other. It's named "Route 53" because DNS operates on port 53.

Steps to Configure Route 53:

1. **Sign in to the AWS Management Console**
2. **Open Route 52 Console**
3. **Create a Hosted Zone**

   Click on Create Hosted zone, Enter your domain name for Example— skylinedevops.com in the domain name field. Optionally, you can add a comment Click on Create.

Add record:

1. Inside your newly created hosted zone, click on Created Record set.
2. Enter the name of your record for Example www in the "Name" field.
3. Here you'll define the DNS records for your domain, such as a A records for pointing to IPV4 addresses, AAAA records for IPV6 addresses, CNAME records for aliases, MX records for mail servers, TXT records for various purpose like spf etc.

Routing Policies:

If you have advanced routing needs, such as distributing traffic across multiple resources or routing based on geographic location, choose the appropriate routing policy. Configure the policy settings accordingly.

Types of routing polices:

1. **Simple Routing:**

   Sends all traffic to one place, like your main website server.

2. **Weighted Routing:**

   Divides traffic based on percentages you set. For example , you can send 70% to one server and 30 % to another.

3. **Latency-Based Routing:**

   Routes users to the server that responds fastest based on their location.

4. **Failover Routing:**

   Automatically switches to a backup server if the main one goes down.

5. **Geolocation Routing:**

   Sends users to different servers based on where they are in the world.