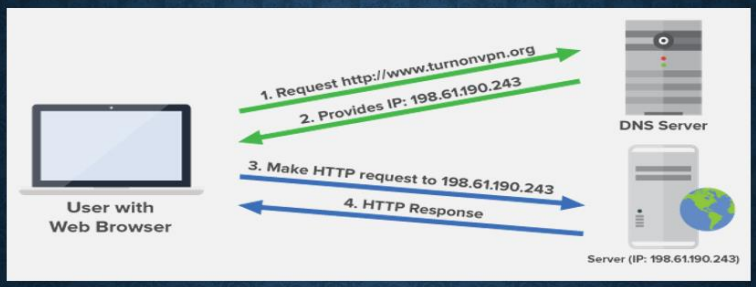
Route 53

What is DNS?



- DNS is used to convert human friendly domain names into an Internet Protocol (IP) address and vice versa.
- IP addresses are used by computers to identify each other on the network.
- Two types of IPs
  - IPv4
  - IPv6

Domain Names

- **Top Level Domain**: The last word in a domain name represents the "Top level domain"

  eg: .com

- **Second Level Domain**: The second last word in a domain name represents the "Second level domain name"

  eg: .gov.in

  .edu.in

Route53 Routing Policies

- Simple
- Weighted
- Latency
- Failover
- Geolocation

Simple Routing Policy

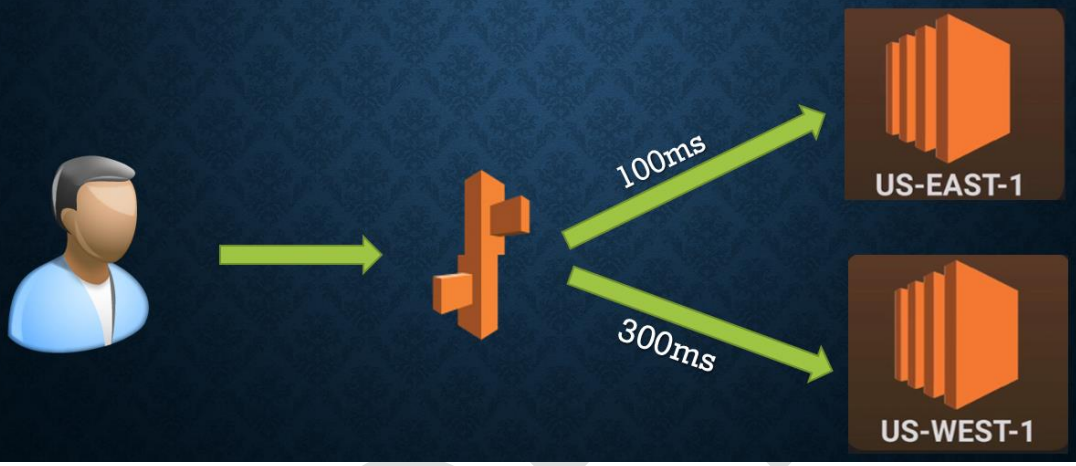
- This is the default routing policy.
- This is most commonly used when you have a single region that performs a given function for your domain

Weighted Routing Policy

- Weighted Routing Policies let you split your traffic based on different weights assigned.
- eg: 20% of your traffic to go to US-EAST-1
- 80% of your traffic to go to EU-WEST-1

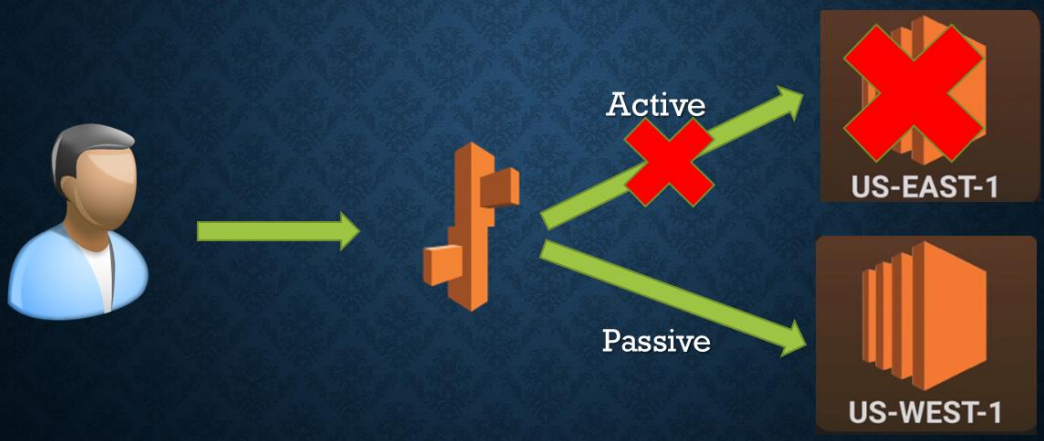
Latency Routing Policy

- Latency based routing allows you to route your traffic based on the lowest network latency for your end user (ie which region will give them the fastest response time)



Failover Routing Policy

- Failover routing policies are used when you want to create an active/passive set up.



- eg: you may want your primary site to be in US-EAST-1 and your secondary DR Site in US-WEST-1
- Route53 will monitor the health of your primary site using a health check

Geolocation Routing Policy

- Geolocation routing lets you choose where your traffic will be sent based on the geographic location of your users (ie the location from where DNS queries originate)
- eg: You might want all queries from Europe to be routed to a fleet of EC2 instances that are specially configured for your European customers. These servers may have the local language of your European customers and all prices are displayed in Euros.