

# ROUTE53

[http://clusterfrak.com/notes/certs/aws\\_saa\\_notes/](http://clusterfrak.com/notes/certs/aws_saa_notes/)

Amazon Route 53 is a highly available and scalable cloud Domain Name System (DNS) web service.

- ELBs do not have a pre-defined IPv4 address. You resolve them using a DNS name.
- The Apex domain record MUST be an A record or an alias.
- Aliases map AWS resources to zone records.
- Alias records you are not charged for, CNAME records you are charged for
- Always chose an alias record, over a CNAME record, as alias records are free, and can be mapped to a domain apex record where CNAMEs cannot
- Limit of 50 Domain Names can be managed in Route53. This limit can be raised by support.
- Route 53 Routing Policies:
  - Simple
    - Default routing policy when you create a new record set.
    - Most common when you have a single resource that performs given function for your domain.
    - Route53 will respond to DNS queries that are only in the record set.
    - No Intelligence is built into the response.
  - Weighted
    - Let you split traffic based on different weights defined.
    - 1 AZ can be set to 90%, and another can be set to 10% for example.
  - Latency
    - Allows you to route your traffic based on the lowest network latency for your end user. (Which region will give them the fastest response time).
    - Create a latency resource record set in each region that hosts your website.
    - When Route53 receives a query for your site, it selects the latency resource for the region that gives the user the lowest latency.
  - Fail-over
    - Used when you want to create an active/passive set up.
    - Route53 will monitor the health of your primary site using a health check.
    - Health check monitors the health of your endpoints.
  - Geo-location
    - Lets you choose where your traffic will be sent based on the geographic location of your users.
    - Good if you want all queries from Europe to be routed to a fleet of EC2 instances in one of the EU regions.
    - Servers in these locations could have all prices and language set to EU standards for example.

Resource or Operation	Default Limit
Hosted zones:	500
Domains:	50
Resource record sets per hosted zone:	10,000
Reusable delegation sets:	100
Hosted zones that can use the same reusable delegation set:	100
Amazon VPCs that you can associate with a private hosted zone:	100
Health checks:	50
Traffic policies:	50
Policy records:	5