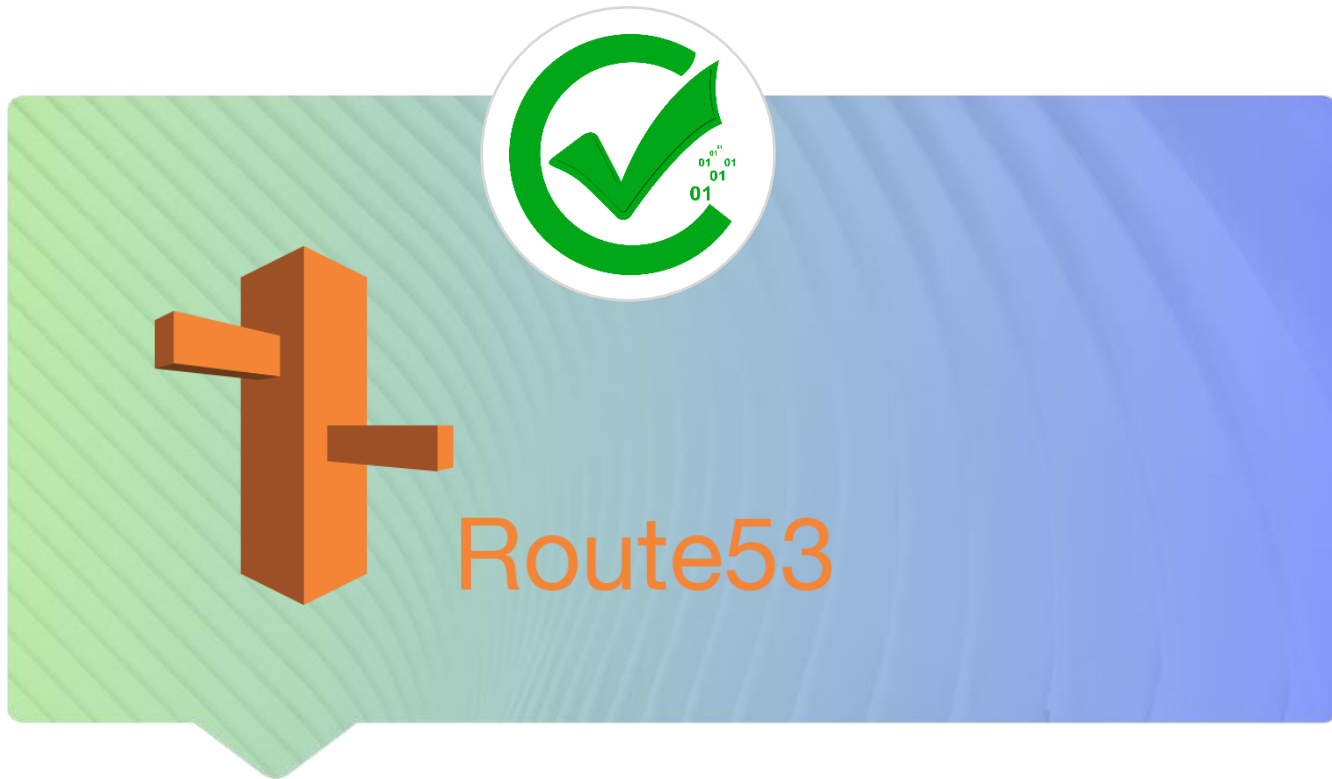




BATCH : 149
LESSON : AWS
DATE : 05.09.2023
SUBJECT : Route 53 - 1

ZOOM GİRİŞLERİNİZİ LÜTFEN **LMS** SİSTEMİ ÜZERİNDEN YAPINIZ





AWS Route 53





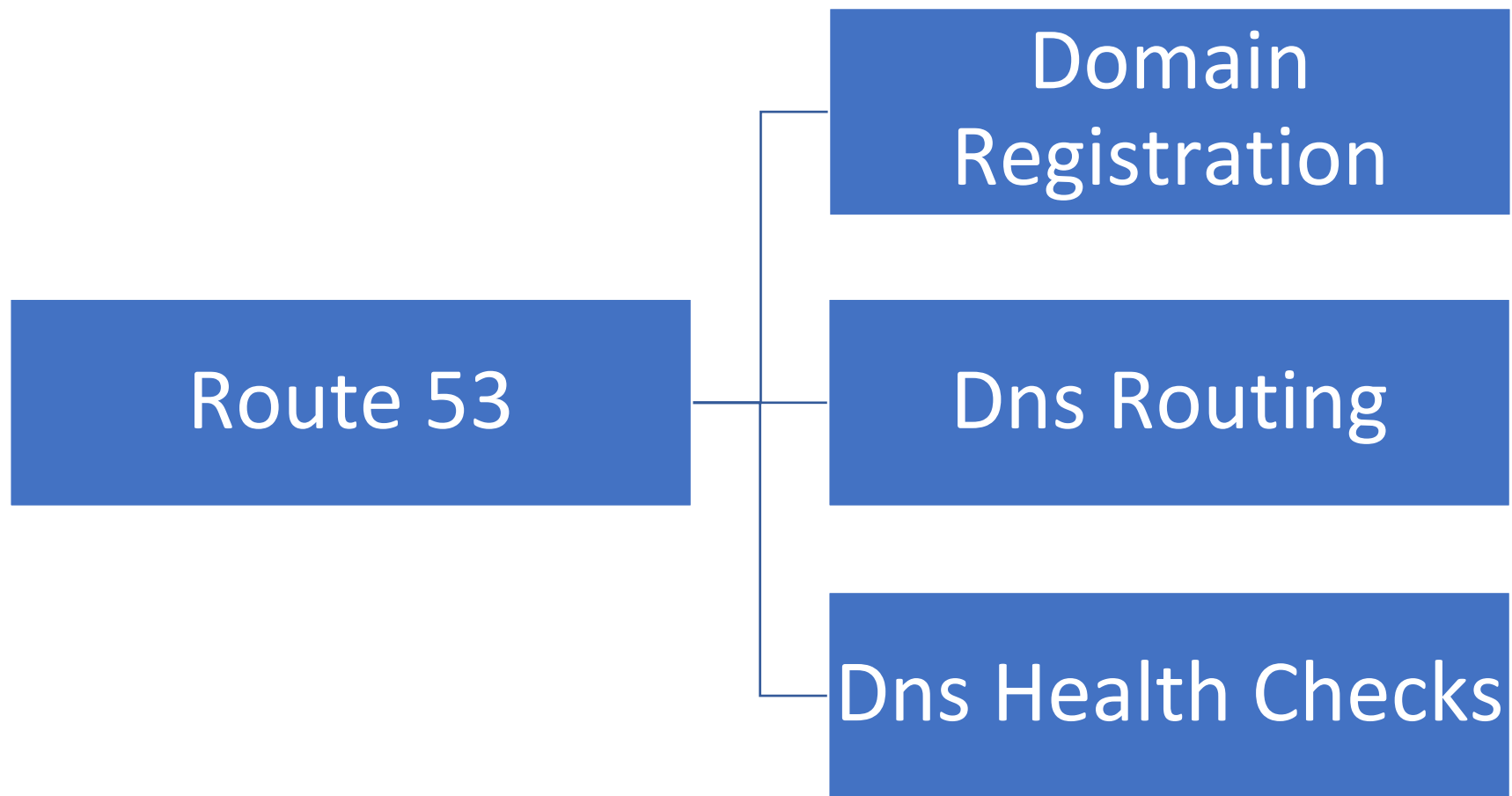
What is AWS Route 53?



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

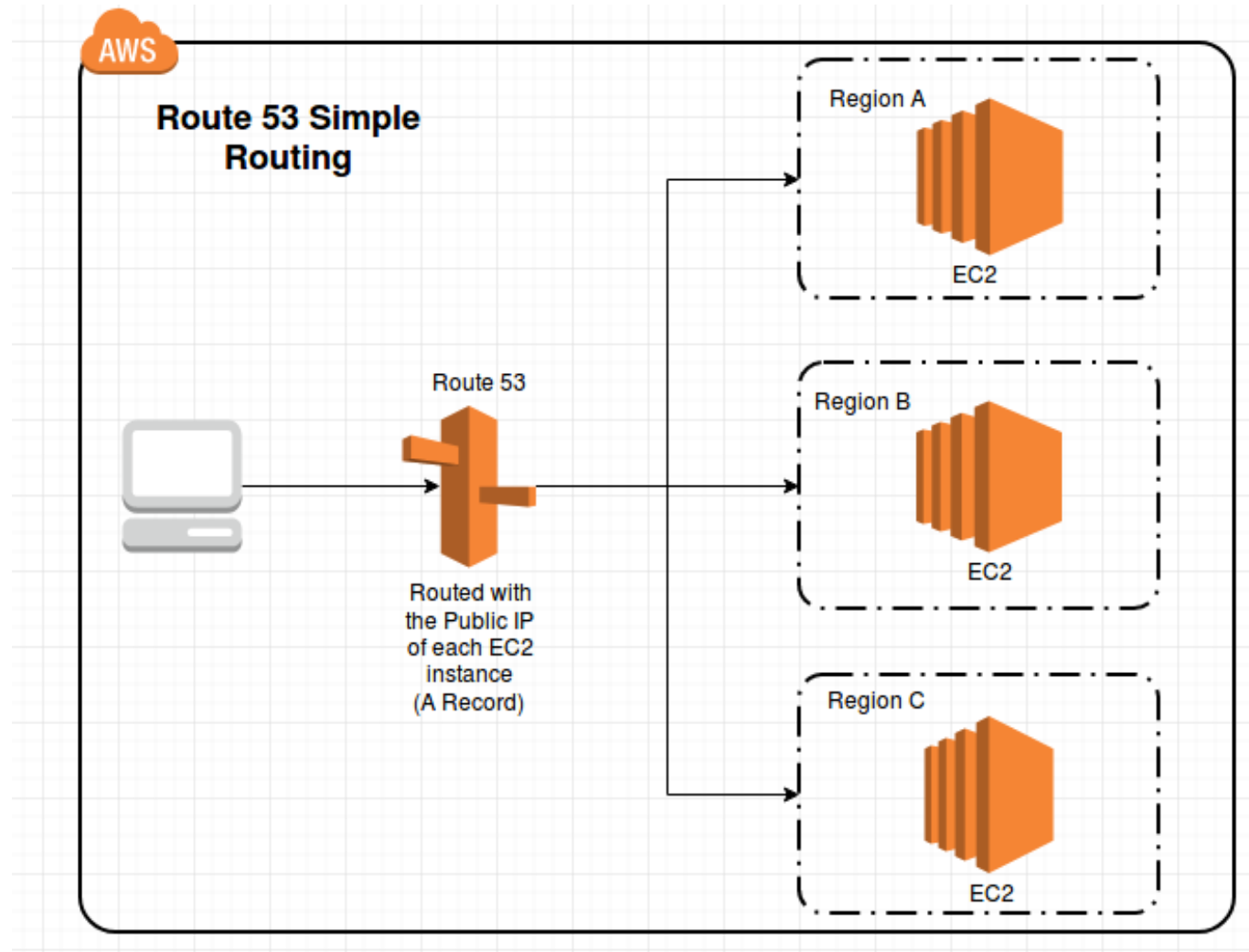


What is Amazon Route 53 used for?





What is Amazon Route 53?





What is DNS ?



- DNS stands for the Domain Name System. It is a system used for transferring human-readable domain names such as `www.techproeducation.com` to a machine-readable IP address like `1.2.3.4.5`



Concepts of DNS

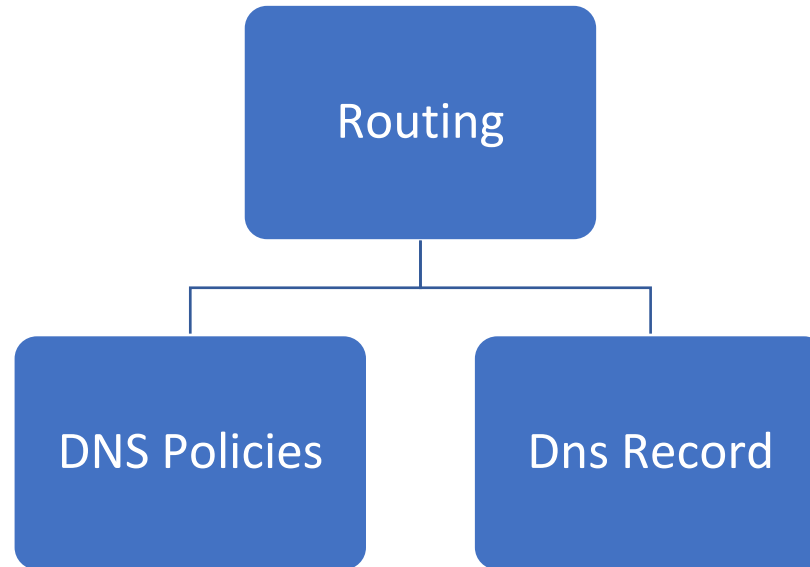
https://www.techproeducation.com (.)



- Root, TLD (top level domain), domain name, sub domain name, FQDN (fully qualified domain name)
- Registrars: GoDaddy, Amazon Route 53
- Zone File contains DNS records
- Name Server resolves DNS queries
- Authoritative: customer can update records
- Non-authoritative



Concepts of Amazon Route 53



- Route 53 directs the internet traffic by providing a connection and mapping between your domain and web server.
- Route 53 routes the web traffic of your domain with the help of the DNS Record Sets and DNS Policies.



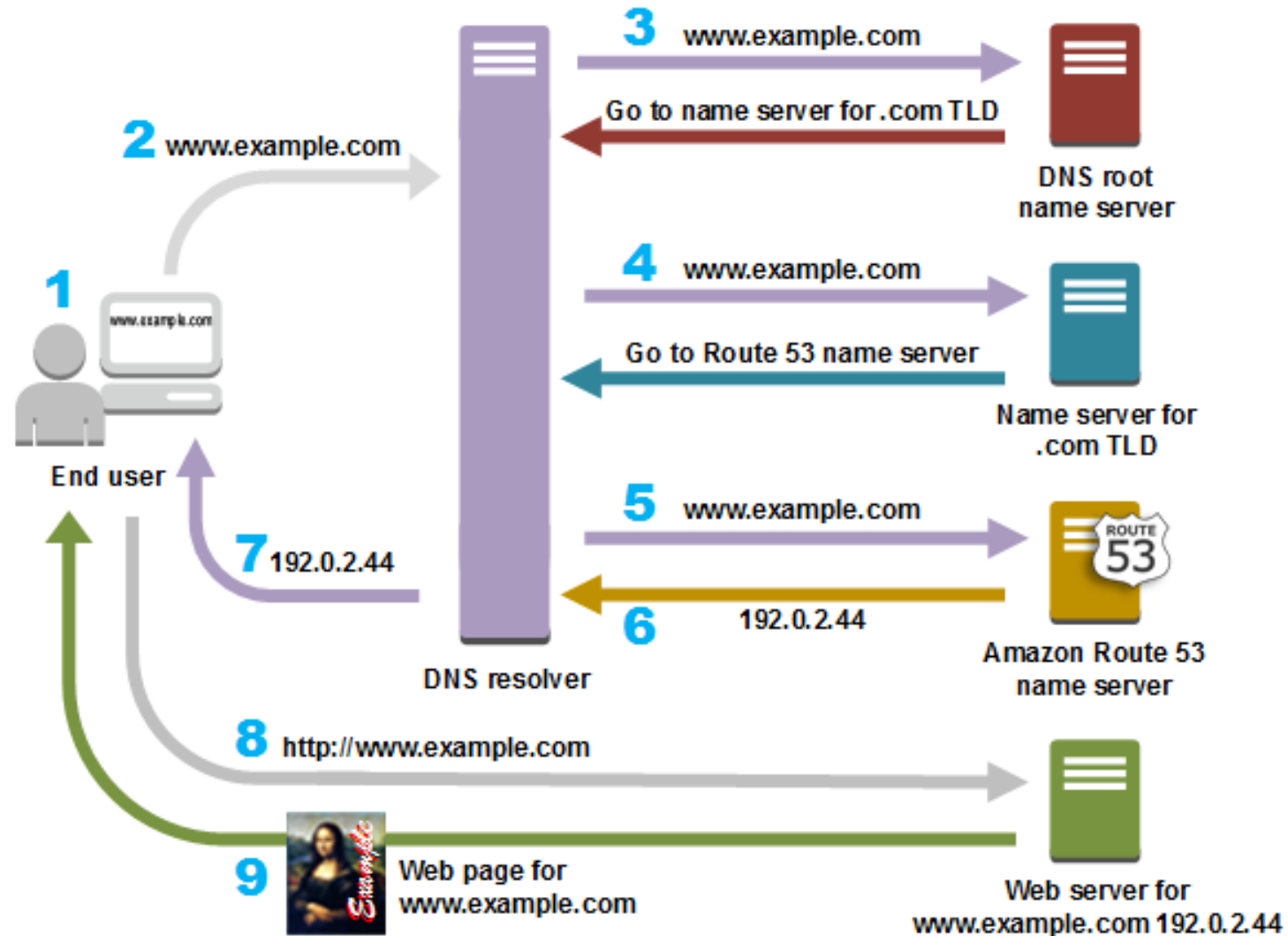
Concepts of Amazon Route 53

- **Time to live (TTL) refers to the amount of time or “hops” that a packet is set to exist inside a network before being discarded.**
- TTL is a parameter that determines how long ISPs (Internet Service Provider) will cache the DNS record.
- If the DNS resolver receives a request for the same domain before the TTL expires, the resolver returns the cached value.
- It decreases the workload of the name servers.

The words 'Time To Live' are written in a handwritten style. Each letter of 'Time', 'To', and 'Live' is individually circled in red ink. The word 'Time' is on the top line, 'To' is on the middle line, and 'Live' is on the bottom line.



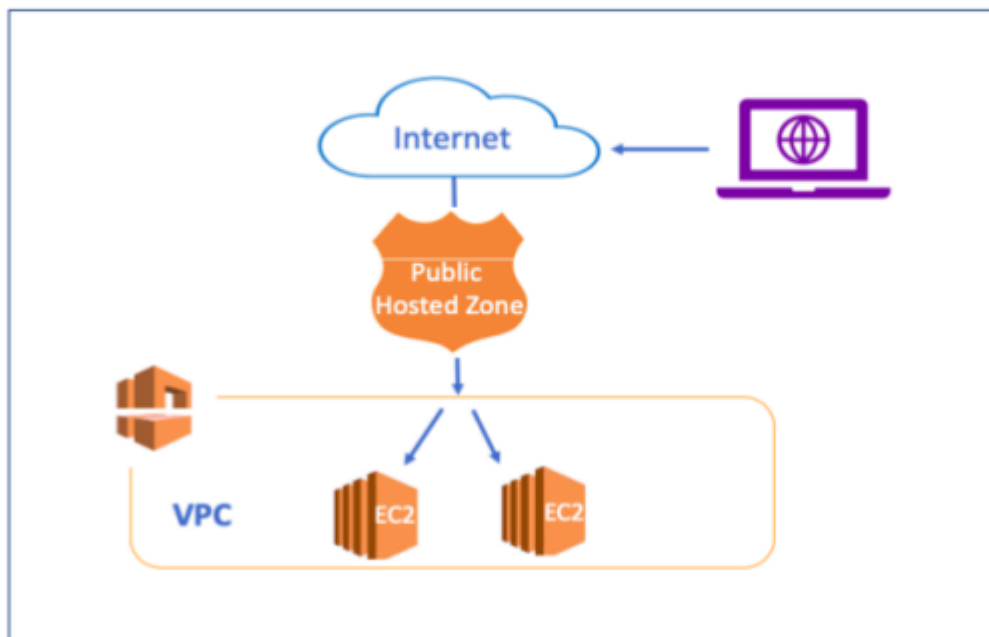
How Does DNS Route Traffic To Your Web Application?



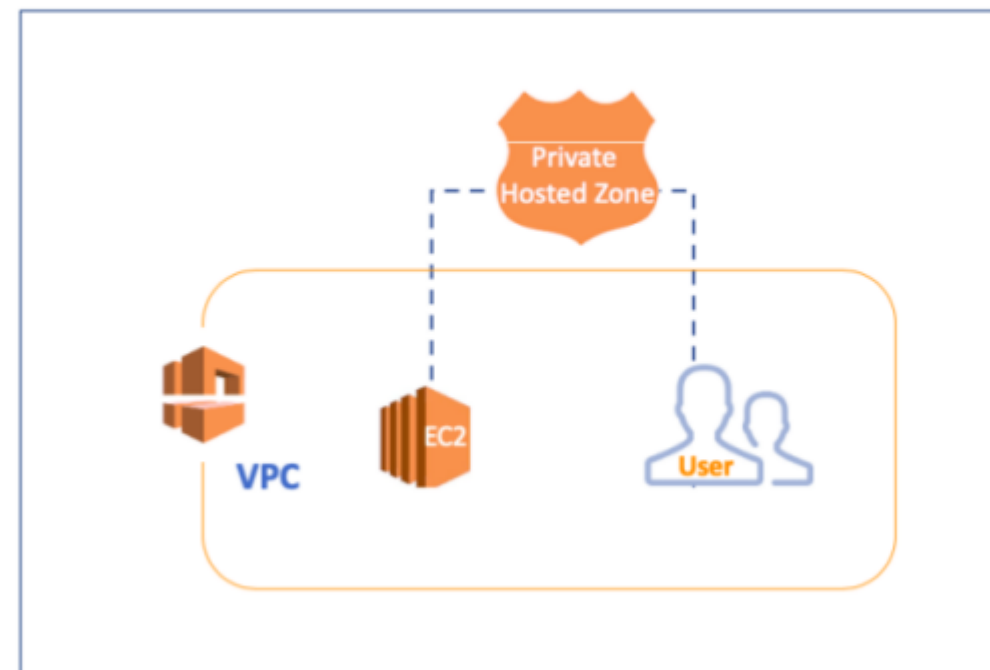


Components of Amazon Route 53

Public Hosted Zone



Private Hosted Zone

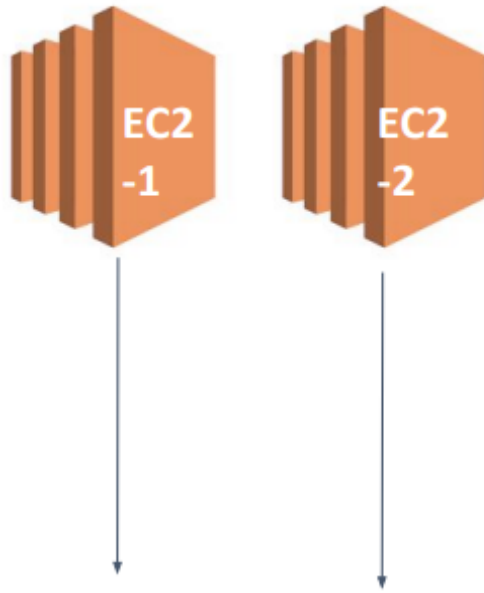




Components of Amazon Route 53 (DNS Records)

- NS (Name Server Record)
- SOA (Start of Authority Record)
- A (Address Record)
- CNAME (Canonical Name Record)
- PTR(Pointer Record)
- TXT(Text Record)
- CAA (Certification Authority Authorization)
- MX (Mail Exchange Record)
- NAPTR(Name Authority Pointer Record)
- AAAA(IPv6 Address Record)
- SPF (Sender Policy Framework)
- SRV(Service Locator)

Server Option and Their Outputs

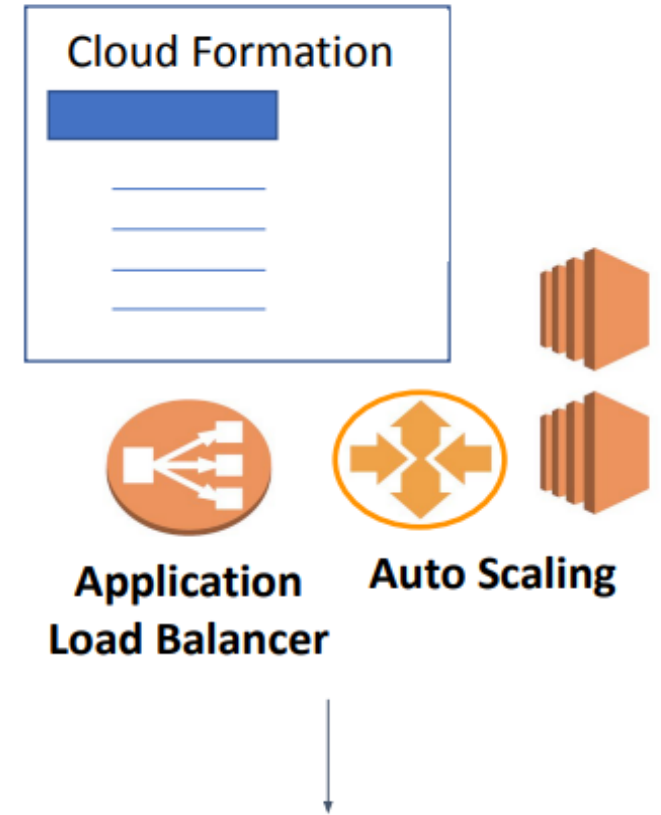


Public IP: 52.87.192.40

Public DNS
:ec2-52-87-192-40.compute-1.amazonaws.com



<http://info.awsdevopsteam.net.s3-website-us-east-1.amazonaws.com>



URL:
<http://route-myApp-1PSMDG52MTLZ-1967692276.us-east-1.elb.amazonaws.com>

- Public IP: 52.87.192.40
- Public DNS :ec2-52-87-192-40.compute-1.amazonaws.com
- <http://info.awsdevopsteam.net.s3-website-us-east-1.amazonaws.com>

Not Human readable






Amazon Route 53



Not Human Edible

What does Route 53 do?

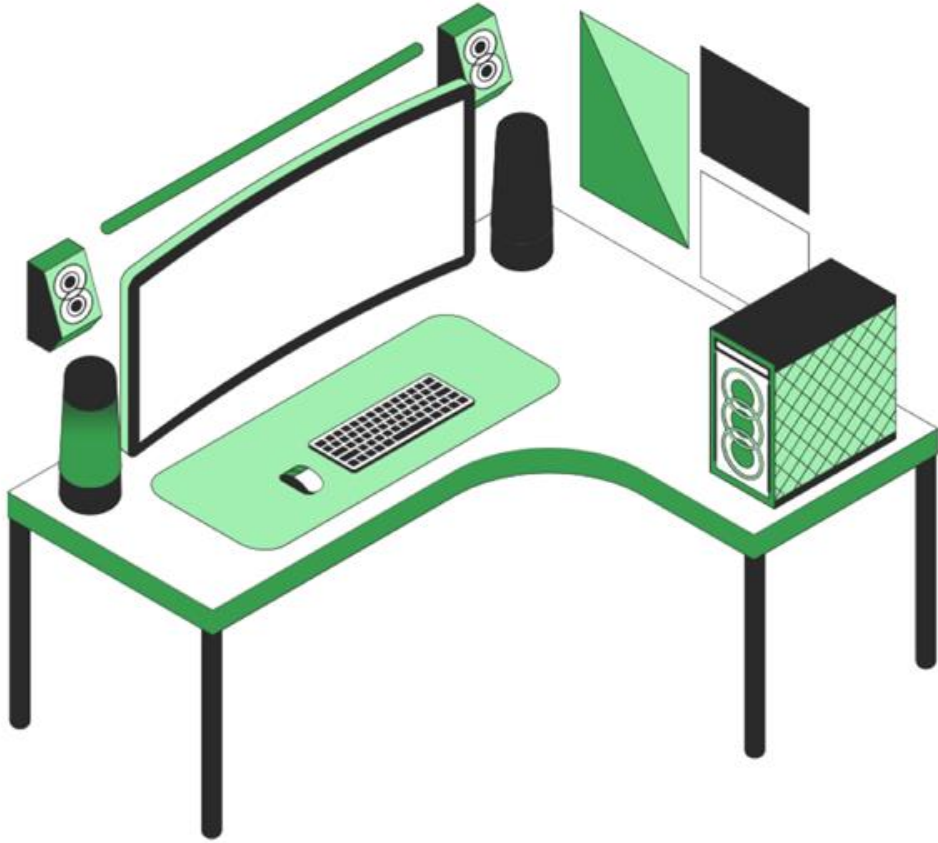
Buy and Register a Domain	Create Domain Variations via Sub Domains	Mapping Value	Value Type	Record Type
awsdevopsteam.net (naked domain)	xxxx.awsdevopsteam.net	 Point out	<ul style="list-style-type: none">● IP of Server 1.2.3.4.5● Domain Name www.xxxxxx.com● End point S3 Bucket url Load Balancer	<div> A AAA</div> <div>CNAME</div> <div> Alias</div>

Value type determines the record type

Refers to  **IP**  **A Record**

Refers to  **Sub
Domain**  **CNAME**

Refers to  **AWS
Resource**  **Alias**



Do you
have any
questions?

Send it to us! We hope you learned
something new.