CLOUD COMPUTING

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CLOUD COMPUTING

Software as a Service

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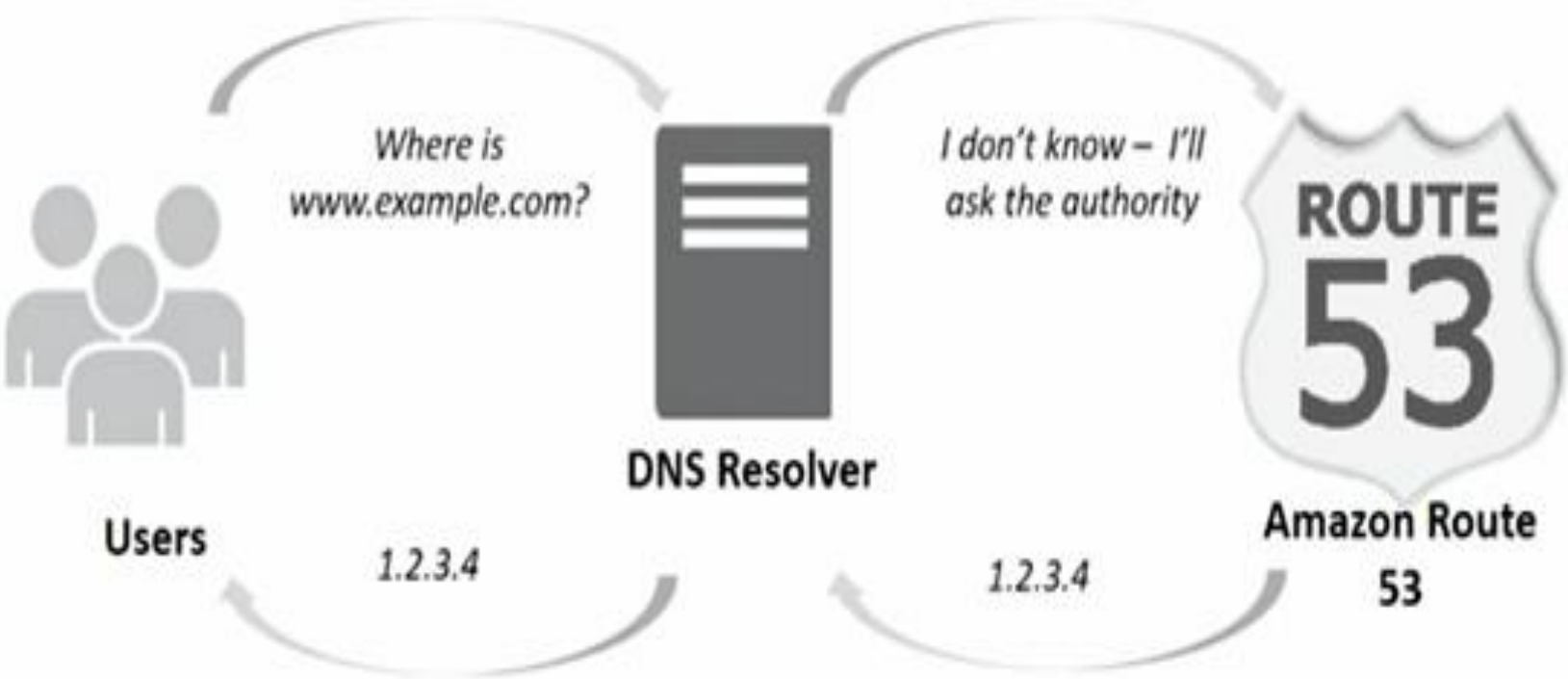
CLOUD COMPUTING

Scenario

https://www.youtube.com/watch?v=BtiS0QyiTK8

CLOUD COMPUTING

Scenario



https://www.youtube.com/watch?v=w0FWGdVmjAk

Amazon Route 53

- Amazon Route 53 is a highly available and scalable Cloud Domain Name System (DNS) web service
- 3 Major Functions

  If a website requires a name, it registers the name for the website

  Connects the browser with the website when the user types the domain name

  Measures health of resources by sending automated request over the internet to the resource

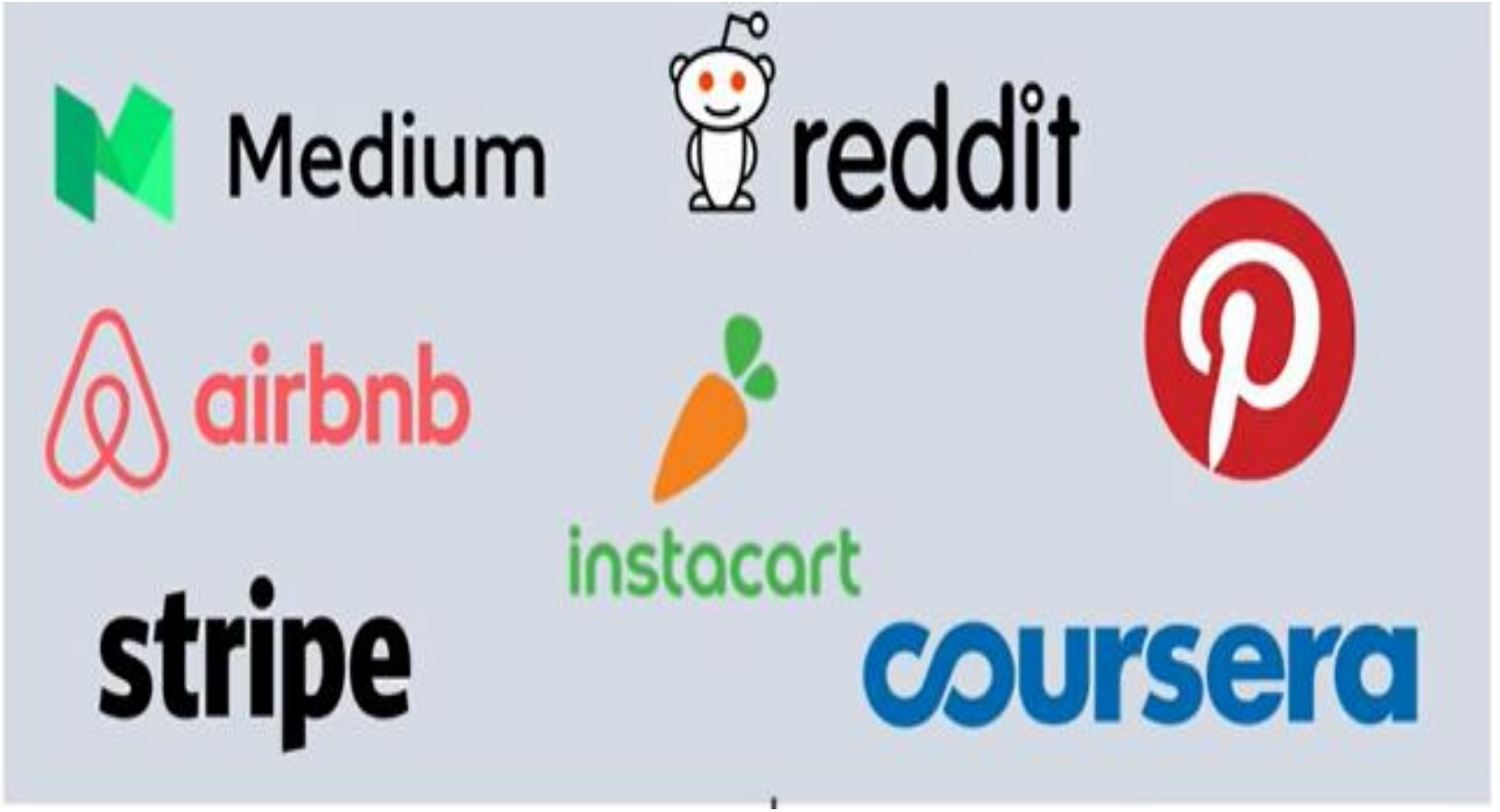
Amazon Route 53

- Extremely reliable and cost effective way to route end users to Internet applications by translating names like www.example.com into the numeric IP addresses like 192.0.2.1 that computers use to connect to each other
- Route 53 is fully compliant with IPv6
- Route 53 can connect to EC2, S3, Elastic Load Balancers etc
- It can be used to route users to infrastructure outside AWS

Amazon Route 53

- Manage the traffic globally through variety of routing types like Simple routing, failover routing, latency based routing, Geo DNS, GeoProximity and weighted round robin
- It also provides the domain name registration, you can purchase and manage domain
- AWS route 53 automatically configure DNS settings for your domains
- It also provides a visual dashboard about the end-users routed to the endpoint

Amazon Route 53



Route 53 - Benefits

- **Simple and Fast** – easy to use API, can integrate with any web applications
- **Cost-effective** – pay only for the number of queries that the service answers for each of your domains
- **Highly reliable and available** – rerouting ensures reliability and distributed DNS servers ensures availability
- **Flexible** – visual editor to monitor endpoint health, geographic location, and latency
- **Secure and scalable** – can be integrated with IAM roles ensures security and it can address to queries in large volumes
- **Simplify hybrid cloud** – recursive DNS for VPC

Hosted Zones

- Route 53 allows you to register for a new domain with specific pricing based on significance
- Or you can take the benefit of hosted zone which is already hosted in external medium
- A hosted zone is a container for records, and records contain information about how you want to route traffic for a specific domain
- A hosted zone and the corresponding domain have the same name
- 2 types of hosted zones: Private and Public
- Public hosted zones route traffic to internet
- Private hosted zones route traffic to VPC

Amazon Route 53

- Sign in to the AWS Management Console and open the Route 53 console
- If you're new to Route 53, choose **Get started** under **DNS management**. If you're already using Route 53, choose **Hosted zones** in the navigation pane.
- Choose **Create hosted zone**.
- In the **Create Hosted Zone** pane, enter the name of the domain that you want to route traffic for. You can also optionally enter a comment.
- For **Type**, accept the default value of **Public Hosted Zone**.
- Choose **Create**.
- Create records that specify how you want to route traffic for the domain and subdomains.

Amazon Route 53

Some Record Types:

- A record – route traffic to a resource such as web server using IPv4
- AAAA record – route traffic to a resource such as web server using IPv6
- CNAME maps from one domain to another domain/subdomain
- MX record specifies the names of your mail servers. Each value for an MX record contains two values, priority and domain name
- NS record identifies the name servers for the hosted zone
- TXT record contains one or more strings
- CAA – Certificate Authorities

Amazon Route 53

- **Step 6** – Go back to Route 53 console and select the go to record sets option. This will show you the list of record sets. By default, there are two record sets of type NS & SOA.
- **Step 7** – To create your record set, select the create record set option. Fill the required details such as: Name, Type, Alias, TTL seconds, Value, Routing policy, etc. Click the Save record set button.
- **Step 8** – Create one more record set for some other region so that there are two record sets with the same domain name pointing to different IP addresses with your selected routing policy.
- Once completed, the user requests will be routed based on the network policy.

THANK YOU

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