

Company Name : **Zoho, India.**

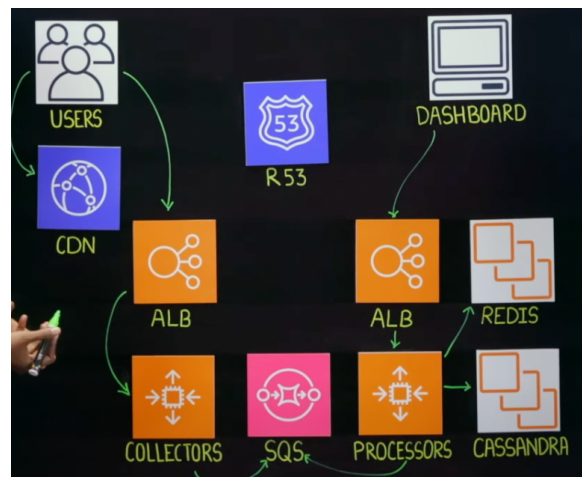
Video Link: <https://www.youtube.com/watch?v=TTIyNWh0gjM>

Solution: **Building Scalable Real-time Monitoring Systems on AWS**

End to end monitoring of the applications which scans the end-user layer, application layer, platform layer, infrastructure layer.

Challenges faced before moving to AWS:

- Its a real-time monitoring solution by collecting metrics from users. So the handle high **VOLUME** of request, **ELASTICITY**, **SCALING** part is not able to handle using their own servers.



AWS SERVICES mentioned:

CDN (Content Delivery Network) : It is a network of interconnected servers that speeds up webpage loading for data-heavy applications. For info: <https://aws.amazon.com/what-is/cdn/>

Route 53 : highly available and scalable Domain Name System (DNS) web service. For info: <https://aws.amazon.com/route53/>

ALB (Application Load Balancer) : Load Balancer distributes incoming application traffic across multiple targets, such as EC2 instances, in multiple Availability Zones. For Info: <https://docs.aws.amazon.com/elasticloadbalancing/latest/application/introduction.html>

SQS (Simple Queue Service) : Fully managed message queues for microservices, distributed systems, and serverless applications. For info: <https://aws.amazon.com/sqs/>

EC2 Instances(COLLECTORS/PROCESSORS): Autoscaled which can handle the load and process it accordingly.

REDIS: Caching layer. in-memory data structure store

Cassandra: open-source, distributed, wide-column store, NoSQL database. It can be available in multiple availability zone. So that we can achieve high availability.

Other informations:

1. They have similar architecture at different region. Reason: to meet the data regulations. GDPR, CCPA compliance. Rules of each countries while dealing with their data.

Future Enhancement:

- Improvement the ROUTE 53 to geobased ROUTE 53
- Can replace EC2 instance with Lambda functions. Because lambda is very elastically scalable.
- AWS codedeploy for automate everything.