Adv DevOps

04/03

Ass-1

Q1 Use S3 bucket and host video streaming

Step 1 :- Setup amazon s3 bucket

(i) Search for s3 on the services section Click on its then create bucket. This will directly you to bucket confirm creation page Here, give a name your bucket

(ii) After creating the bucket, add video to this bucket Click on the name of the bucket, this will redirect you to object screen screen. Click on upload

(iii) Select the required mp4 file and upload it

(iv) This will start uploading process

Step-2 Setup CloudFront

(i) Search for CloudFront on services tab open it in a new tab

(ii) on the left pane, under security, Click on origin access. Here go to identities Create an origin identity access

(iii) Go back to distributions and create a cloudfront distribution

(iv) in origin field, select s3 bucket where video is uploaded. under origin access, select legacy access identities - Select legacy access identities select the identity that has been created. Click on yes update bucket policy in default cache behaviour under viewer, select redirect - HTTP/HTTPS under web Application firewall, select enable security protections.

Step-3 - Accessing the hosted video
(i) once distribution is deployed, copy it's domain na
(ii) go to the video in the bucket where it is upload
click on its name copy the key of video
(iii) on your address URL bar, the link as
<domain name> / key of ~~key~~ video>
Thus we deployed a video on S3 bucket

Q2 Discuss BMW & HOTstar case studies using AWS
BMW a renowned global automotive leader, leverages AWS
to drive it's digital transformation & enhances its operat
efficiency BMW utilizes AWS to power its connected
drive. AWS ~~to~~ Platform, offering real time upd
navigation & remote diagnostics by processing vast
amounts of vehicals sensor data.
AWS services like, Amazon Sagemaker & AWS IO
Enable BMW to perform advanced data analytics &
machine learning, optimizing vehicle
Hotstar, a leading, optimizing vehicle
Hotstar a leading indian Streaming platform, relie
AWS to manage massive traffic spikes particul
during live events using AWS scalable infra
Hotstar ensures seamless content delivery to millions of
viewers through services like Cloud services
Amazon S3 & Amazon EC2 AWS pay as you g
model optimizes costs by scaling resources accordi
demand. The global CDN provided by AWS ensure
latency & high performance delivery high quali
experiences

3 Why Kubernetes advantage & disadvantages of kubernetes. Explain how adidas uses it

→ kubernetes is an open source container orchestration platform that automates the deployment, scaling by management of containerized applications

Advantages:

→ Automation: Automates deployment scaling & management of containerized application

2) Portability Runs on various environments including public clouds, private clouds & premises

3) Scalability: Easily scales applications horizontally meet increasing demands

Disadvantages:

1) Complexity: It can be complex to set up & manage

2) portability Runs on various environments including Public Clouds, private Clouds & premises

3) Scalability :- Easily scales applications significant time & effort to learn & master

4) Initial setup: The initial setup can be time consuming & may raise special knowledge

How adidas uses kubernetes:

Adidas leverages kubernetes to enhances its application Scalability & reliability By microservices / kubernetes.

Adidas ensures efficient load balancing, automated scaling & seamless application updates. kubernetes orchestration capabilities allow adidas to manage its containerized application efficiency & optimized performance across its digital platform across.

Q4 What are nagios & Explain how nagios are used in e-service?

→ Nagios is a robust & versatile open source monitoring tool designed to oversee & manage IT infrastructure. It primarily focuses on monitoring systems, networks & infrastructure, providing insights into the performance & health of servers, applications, services & network protocol. Nagios operates by periodically checking the status of various resources through plugins, which can be customized to suit specific monitoring needs. When it detects issues or potential problems, Nagios alerts administrators via notification, enabling timely intervention to prevent downtime & ensure system reliability. In the context of E-services, Nagios plays a critical role by ensuring the continuous availability. It detects issues like server overloads, network outages or application failures, network outages by using Nagios organizations can proactively manage their e-services.