

## Assignment - 1. Adv - DevOps.

Q.1. use S3 bucket and host bucket streaming  
→ The Step by Step procedure is as follows.

Step 1) create S3 bucket

- (1). Log into your AWS management console.
- (2). Navigate to S3 Under Storage Section.
- (3). click create Bucket and provide a unique bucket name.
- (4). configure permissions.
- (5). complete the bucket creation process.

Step 2) Upload video files on S3.

- (1). click on your bucket name.
- (2). use the Upload button to add your video file.
- (3). Set the access control list (ACL) to allow public read access.

Step 3) Enable static website hosting.

- (1) Inside the S3 bucket, go inside the properties tab.
- (2) Scroll the static website hashing section and enable it.
- (3). Set the index document and provide an optional error document.



Step 4) configure bucket permissions to allow public access.

Step 5) 1. create a index.html file containing a video player using `<video>` tag.

2. upload this index.html to your S3 bucket

Step 6) Access your hosted video your video would be playable in embedded HTML Page.

Q.2. BMW and ~~Hot~~ Hotstar Case Study using AWS.

- BMW uses AWS to power its connected car system, enabling real time data processing, over the air updates and personalized driving experience. AWS global infrastructure help BMW manage large scale vehical data allowing maintainence and enhancing customer experience through features like traffic info, parking availability.
- Hotstar a leading Streaming platform relies on aws to manage massive traffic strikes during live event like IPL where millions of user connect simultaneously. This ensures smooth service during peak loads enabling hostare to handle over 25 million users.

03/10/2



Q.3. Why Kubernetes and its advantages and disadvantages Adidas case study  
 → Kubernetes automates the deployment, scaling and management of containerized application, making it popular choice for orchestrating microservices.

### Advantages

- Automated Scaling and Self-healing.
- ~~Support~~ Supports multi-cloud and hybrid deployment.
- efficient resource usage through container orchestration.

### Disadvantages

- Complexity in Setup and operation.
- require steep learning curve for configuration.

Adidas uses Kubernetes to manage its E-commerce infrastructure, which involves deploying 100's of microservices. Kubernetes enables Adidas to handle ~~Peak~~ Peak traffic during product launches by scaling services automatically and distributing load efficiently.



Q 4 What is Nagios and how it is used in E-services?

→ Nagios is an open source monitoring tool used to monitor the health and performance of IT infrastructure. It tracks system metrics, like CPU, memory, disk usage, alert administrator of potential risks.

In E-Services, Nagios ensures ~~of time~~ uptime and performance of critical online services by monitoring service health, detecting failures and automatically triggering failure actions. downtime and maintain service availability, making it a crucial tool for maintaining seamless user experience.