

Q4. Create an S3 bucket and deploy the reactjs static application on it and provide the public url for use.

- Amazon Simple Storage Service (Amazon S3) is an object storage service offering industry-leading scalability, data availability, security, and performance according to AWS.
- We can deploy webpages, applications in the s3 with the help of buckets.
- The objects uploaded enable them to host a static application or webpage.
- We have created a sample application of reactjs and deployed it in S3.

Procedure:

- First, create a reactjs application and deploy it in your browser.
- We can create a S3 bucket and upload the objects in it.
- Properties and permissions also should be edited accordingly.
- Enabling the public access and static website hosting can deploy the application.

Steps to be followed:

1. Initially, create a bucket with unique name across the globe.\
2. Select ACL , enable the versioning of buckets which helps to maintain different versions of bucket.
3. Enable public access to access the URL.
4. Create the S3 bucket.

Creating a Reactjs application:

1. Open command prompt and check node version. Node is mandatory to for reactjs
2. Now, install npm to create an app.

Npm install -g create-react-app.

3. Now create my-app with **create-react-my-app**
4. Change pwd to my-app by **cd my-app**
5. Execute **npm start** for the application.
6. Execute **Npm run build** to run the application in a browser.
7. Then, the commands **npm install -g serve**

Serve -s build

Displays the react application in browser.

IN S3:

1. Choose the s3 bucket and click on upload.
2. Browse the my-app in local machine and upload the contents of build in the bucket.
3. Now, select the bucket and open permissions tab and edit the bucket policy.

```
{  
  "Version": "2012-10-17",  
  "Statement": [  
    {  
      "Sid": "PublicReadGetObject",  
      "Effect": "Allow",  
      "Principal": "*",  
      "Action": [  
        "s3:GetObject"  
      ],  
      "Resource": [  
        "arn:aws:s3:::Bucket-Name/*"  
      ]  
    }  
  ]  
}
```

4. Now go to properties tab and scroll down to static web hosting.
5. Edit the settings in it.
 - Enable static web site hosting.
 - Give index.html in index document.
 - Save the changes.
6. Copy the public URL and paste it in browser.

<http://mybucky1.s3:website-us-east-1.amazonaws.com>

This deploys the static web application in S3 buckets.