Introduction to Amazon Simple Storage Service (S3)

**Lab Details:**

1. This lab walks you through to Amazon Simple Storage Service. Amazon S3 has a simple web services interface that you can use to store and retrieve any amount of data, at any time, from anywhere on the web. In this lab we will demonstrate aws S3 by creating a sample S3 bucket, uploading an object to S3 bucket and setup bucket permission and policy.
2. Duration: 00:30:00 Hrs
3. AWS Region: US East (N. Virginia)

**Tasks:**

1. Login to AWS Management Console.
2. Create a S3 bucket.
3. Upload an object to S3 Bucket.
4. Access the object on browser.
5. Setup bucket policy and permission and test the object accessability.

**Steps:**

1. Launch your lab environment by clicking on **Start Lab** button.
2. Once your lab environment is created successfully your **Console Login** button will be active, Now click on **Console Login** button, this will open your **AWS Console** Account for this lab in a new tab.
3. Navigate to S3 by clicking on the “services” menu in the top,then click on “S3” (in the “Storage” section).
4. **Create Bucket :**
   1. On the S3 dashboard click on **+ Create bucket** button and fill the bucket details.
   2. **Bucket name :**Enter a bucket name.
   3. **Region :**Select US East (N. Virginia)
   4. No need to change anything just click on **Create** button.
5. Once you see your bucket name the list , click on it.
6. You will see this message "This bucket is empty. Upload new objects to get started", Now we are uploading an object into our bucket.
7. **Upload Object :**
   1. Download the image from below Download Me link to upload into the bucket you created.  
      [Download Me](https://play.whizlabs.com/site/download_file?file=smiley.jpg)
   2. Click on **upload** button.
   3. Click on **Add files** button.
   4. Browse the image **smiley.jpg** which you downloaded previously.
   5. Click on **Upload** button.
   6. You can watch the progress of the upload from within the Transfer panel at the bottom of the screen. Since this is a very small file, you might not see the transfer. Once your file has been uploaded, it will be displayed in the bucket.
8. **Make Object Public :**
   1. **Click on image name, You will see the image details like Owner, size, link etc.**
   2. **Open image Link** in a new tab.
   3. You will see **AccessDenied** message, means the object is not publicly accessible.
   4. Keep this browser tab open, but return to the web browser tab with the S3 Management Console, and goto your bucket and open your uploaded image again.
   5. click the **Permissions** tab, then configure:
      1. Under the **Public access** section, select **Everyone**.
      2. Select **Read object**
      3. Click **Save**
   6. Return to the browser tab that displayed **Access Denied** and refresh the page.
   7. You can see your image is loaded successfully and publicaly accessable now.
9. **Create a Bucket Policy :**
   1. In the previous step, you granted read access only to a specific object. If you wish to grant access to an entire bucket, you should need to create a **bucket policy**
   2. Go to bucket list and click on your bucket name.
   3. click the **Permissions** tab, then configure:
      1. In the **Permissions** tab, click on **Bucket Policy**
      2. A blank **Bucket policy editor** is displayed.
      3. Before creating the policy, you will need to copy the ARN (Amazon Resource Name) of your bucket.
      4. Copy the **ARN** of your bucket to the clipboard. It is displayed at the top of the policy editor its look like "ARN: arn:aws:s3:::your-bucket-name"
      5. In below policy update your bucket ARN in Resource key value and copy the policy code.
      6. {
      7. "Id": "Policy1",
      8. "Version": "2012-10-17",
      9. "Statement": [
      10. {
      11. "Sid": "Stmt1",
      12. "Action": [
      13. "s3:GetObject"
      14. ],
      15. "Effect": "Allow",
      16. "Resource": "replace-this-string-from-your-bucket-arn/\*",
      17. "Principal": "\*"
      18. }
      19. ]
      20. }

* 1. Paste the bucket policy into the **Bucket policy editor**.
  2. Click on **save**

1. **Upload new object and test :**
   1. Download the image from below Download Me link to upload into your bucket.  
      [Download Me](https://play.whizlabs.com/site/download_file1?file=smiley_done.png)
   2. Click on **upload** button.
   3. Click on **Add files** button.
   4. Browse the image **smiley\_done.png** which you downloaded previously.
   5. Click on **Upload** button.
   6. Once the image uploaded successfully, copy the image link and open in to the browser.
   7. You can see your image is loaded successfully and publicaly accessable.
2. You have successfully completed the lab.