Cloud Computing Exercise #8

Basic S3 Bucket Operations

A. Preparation

1. Sign in to your AWS account as the non-root admin user.

B. Create Bucket

1. Go to the S3 dashboard (Services/Storage/S3) and select “Create Bucket”. Provide a unique bucket name (make sure there are no uppercase letters), and click on “Create Bucket”. You should see the newly created bucket in your bucket list (Amazon S3/Buckets).

C. Upload/Download files

1. Click on your new bucket to see the list of objects in it (there should be none). On your local machine, open a text editor and create a text file named test.txt in one of your local directories with the following content:

Example text file for S3 exercise.

1. Click on “Upload”, and then select “Add files”. In the file select window, navigate to your test.txt file and select it, and then click “Upload”. The file will be uploaded and displayed on the “Objects” list of your bucket.
2. Click on the file name (test.txt), and review its properties (Object overview). Note the owner’s name, the key associated with your object, the ARN and the object URL for your object.
3. Click on the “Download” button on the top of the screen, download the file with your browser, open it and verify its content.
4. Modify the local copy of the test.txt file (on your computer) by adding a 2nd line to the file and saving the result, so that the file would look like this:

Example text file for S3 exercise.

Added the second line.

1. Go back to your bucket and select “Upload” and upload the modified file “test.txt” again. Download the file, and you should see the modified file with the 2nd line added.
2. Click on the “Versions” tab. The old version of you file was not retained, so the 2nd upload simply overwrote the 1st upload. The 1st version of your file is gone from S3.

D. Enable and Use Bucket Versioning

1. Go back to your bucket and select the “Properties” tab. Scroll down to “Bucket versioning” and select “Edit”. Select “Enable” and save the changes. This will enable bucket versioning, so older versions of your files in this bucket will be retained with different version numbers.
2. Modify the local copy of the test.txt file (on your computer) by adding a 3nd line to the file and saving the result, so that the file would look like this:

Example text file for S3 exercise.

Added the second line.

Added the third line.

1. Go back to your bucket and select “Upload” and upload the modified file “test.txt” again. Download the file, and you should see the modified file with the 3nd line added.
2. Now, if you toggle the “Show versions” switch by the object search window, you should see two versions of the same file (the 2nd and the 3rd). If you select the older one and download it, you should get the 2nd version (without the 3rd line added). Also, if you select the file and then click on the “Versions” tab, you should be able to see the current and previous versions of your file. Again, you can select and download whichever version you wish.
3. Check the select box in front of the latest (3rd) version of the file, click on the “Delete” button and confirm the object deletion. This means that we could delete the most recent (3rd) version of an object while keeping the older (2nd) version.
4. Similarly, delete the 2nd version of the test.txt file as well. Now your bucket should be empty again.

E. Clean up after yourself

1. Go back to the S3 main console (Amazon S3/Buckets), select your bucket and delete it by clicking on the “Delete” button and confirming the operation. Verify that the bucket was successfully deleted.
2. Log out of AWS.