

AWS Lambda

Exercise

(Challenge)

Lab overview

In this challenge lab, you create an AWS Lambda function to count the number of words in a text file.

Objectives

After completing this lab, you will be able to do the following:

- Create a Lambda function to count the number of words in a text file.
- Configure an Amazon Simple Storage Service (Amazon S3) bucket to invoke a Lambda function when a text file is uploaded to the S3 bucket.
- Create an Amazon Simple Notification Service (Amazon SNS) topic to report the word count in an email.

1. Create a S3 bucket. region us-west-2
2. uncheck block all public access
3. Create a topic in SNS..
 - type-standard,
 - select access policy -everyone
4. Create a subscription...
 - protocol-email, give your email id
 - create
5. open email to confirm subscription, copy the sns arn and paste it in text editor.
6. create a Lambda function...
 - Name,
 - Version - python
 - use existing role- Lambda access role
 - create
7. In Lambda -
 - select code tab, copy and paste the below code, in
 - the code use the sns arn from step5. click deploy.
 - Add a trigger-> select S3, the bucket name you created and
 - in event type select all object. click I acknowledge and click add.
8. Upload a file to S3 bucket

Write the code in python in lambda code and deploy the code.
The code below is to count the word count of the text file which is uploaded in s3 bucket.

```
import json
import boto3
def lambda_handler(event, context):
    s3 = boto3.client("s3")
    sns = boto3.client('sns')
    print(event)
    bucket = event['Records'][0]['s3']['bucket']['name']
    key = event['Records'][0]['s3']['object']['key']
    print(bucket)
```

```
print(key)
data = s3.get_object(Bucket=bucket, Key=key)
print(data)
contents = data['Body'].read()
total_words = contents.split()
print('The word count in the file ' ,key, ' is ' , len(total_words))

snsArn =
'arn:aws:sns:us-west-2:692038582397:Mylambda-s3-topic:022bb747-7d3f-41a0-a4cc-29d473f9
80b1'
message = "The word count in the file "+key+" is " + str(len(total_words))
response = sns.publish(TopicArn = snsArn,Message = message ,Subject='Word Count
Result')
```