

AWS Resource Usage

Writing a Shell Script for resource usage in AWS. Like how many buckets are there in AWS S3? How many instances are there in AWS EC2? How many IAM Users are there, Lambda functions. And finally integrate these with CronJob.

1. First we will check if there is AWS CLI is installed or not using the command → `$aws`
2. Now we will login to the AWS account and create a S3 Bucket along with the key pair. After that we will be needed for the AWS Access Key Id and AWS Secret Access Key which we will be getting through the IAM by creating or retrieving the secret Key and copy that for the future reference.
3. Then we will be connecting our Ubuntu machine to SSH using the command → `$ ssh -i .pem file location ubuntu@ipaddress`
4. Again checking the `$aws` command after that we will configure the AWS by running `$ aws configure`. After running this it will be asking for the AWS Access Key Id which we have retrieve earlier and along with that AWS Secret Access Key.
5. Next step will be Creating a Shell scripting file. Here I have created a file named → `AWS_Resource_Usage.sh`
6. Command → `$ vim AWS_Resource_Usage.sh`
7. Inside the file we have to write the Shell Scripting command which will be fetching the usage of AWS S3 Like How many S3 buckets are there? How many AWS EC2 Instances are running? Listing the Running AWS Lambda Functions? And List the AWS IAM Users.

```
2. /home/mobaxterm/Desktop/AWS x
#!/bin/bash
#####
# Author: Aditya Kumar
# Date : 24-04-2024
#
# Shell script for tracking the resource usage in AWS mainly for AWS S3, IAM, EC
2, Lambda
#
# Version : V1
#
#####

set -x # Debug Mode

# Listing the AWS S3 buckets and saving the information in a file format
aws s3 ls > resourceTracker

aws ec2 describe-instances | jq '.Resource[].Instance[].InstanceId'
# Here in AWS EC2 jq is for JSON file & if there is YAML file then we will using
yq.

aws lambda list-functions >>> resourceTracker

# Listing the AWS IAM Users.
aws iam list-users

█
~
~
~
~
~
~
~

25,0-1 All
obaXterm by subscribing to the professional edition here: https://mobaxterm.mobatek.net
```

8. The above script will list all the S3 buckets, EC2 Instances, Lambda and IAM Users & save all the output of commands in a file. For saving the outputs in a file command used is: >>>*resourceTracker* at the end of each command.
9. Now we will change the permissions of file using *\$chmod 777 AWS_Resource_Usage.sh*
10. After this we will be running the Script using *\$./AWS_Resource_Usage.sh*
11. So this shell script will give us the list of currently running S3 Buckets, IAM Users, EC2 Instances & Lambda.