Shell-Scripting Project to list AWS Active Resourses

In this project we write script file in this when user run the script along with parameter like
. <script filename>.sh <region> <service_name> it list down the All the Active resources.

```bash
1   #!/bin/bash
2
3   ###############################################################################
4   # Author: Abhishek Veeramalla
5   # Version: v0.0.1
6
7   # Script to automate the process of listing all the resources in an AWS account
8   #
9   # Below are the services that are supported by this script:
10  # 1. EC2
11  # 2. RDS
12  # 3. S3
13  # 4. CloudFront
14  # 5. VPC
15  # 6. IAM
16  # 7. Route53
17  # 8. CloudWatch
18  # 9. CloudFormation
19  # 10. Lambda
20  # 11. SNS
21  # 12. SQS
22  # 13. DynamoDB
23  # 14. VPC
24  # 15. EBS
25  #
26  # The script will prompt the user to enter the AWS region and the service for which the resources n
27  #
28  # Usage: ./aws_resource_list.sh  <aws_region> <aws_service>
29  # Example: ./aws_resource_list.sh us-east-1 ec2
30  ###############################################################################
31
```

```bash
32  # Check if the required number of arguments are passed
33  if [ $# -ne 2 ]; then
34      echo "Usage: ./aws_resource_list.sh  <aws_region> <aws_service>"
35      echo "Example: ./aws_resource_list.sh us-east-1 ec2"
36      exit 1
37  fi
38
39  # Assign the arguments to variables and convert the service to lowercase
40  aws_region=$1
41  aws_service=$2
42
43  # Check if the AWS CLI is installed
```

```bash
44  if ! command -v aws &> /dev/null; then
45      echo "AWS CLI is not installed. Please install the AWS CLI and try again."
46      exit 1
47  fi
48
49  # Check if the AWS CLI is configured
50  if [ ! -d ~/.aws ]; then
51      echo "AWS CLI is not configured. Please configure the AWS CLI and try again."
52      exit 1
53  fi
54
55  # List the resources based on the service
56  case $aws_service in
57      ec2)
58          echo "Listing EC2 Instances in $aws_region"
59          aws ec2 describe-instances --region $aws_region
60          ;;
61      rds)
62          echo "Listing RDS Instances in $aws_region"
63          aws rds describe-db-instances --region $aws_region
64          ;;
65      s3)
66          echo "Listing S3 Buckets in $aws_region"
67          aws s3api list-buckets --region $aws_region
68          ;;
69      cloudfront)
70          echo "Listing CloudFront Distributions in $aws_region"
71          aws cloudfront list-distributions --region $aws_region
72          ;;
73      vpc)
74          echo "Listing VPCs in $aws_region"
75          aws ec2 describe-vpcs --region $aws_region
76          ;;
77      iam)
78          echo "Listing IAM Users in $aws_region"
79          aws iam list-users --region $aws_region
80          ;;
81      route5)
82          echo "Listing Route53 Hosted Zones in $aws_region"
83          aws route53 list-hosted-zones --region $aws_region
84          ;;

85      cloudwatch)
86          echo "Listing CloudWatch Alarms in $aws_region"
87          aws cloudwatch describe-alarms --region $aws_region
88          ;;
89      cloudformation)
90          echo "Listing CloudFormation Stacks in $aws_region"
91          aws cloudformation describe-stacks --region $aws_region
92          ;;
93      lambda)
94          echo "Listing Lambda Functions in $aws_region"
95          aws lambda list-functions --region $aws_region
96          ;;
97      sns)
98          echo "Listing SNS Topics in $aws_region"
99          aws sns list-topics --region $aws_region
100         ;;
101     sqs)
102         echo "Listing SQS Queues in $aws_region"
103         aws sqs list-queues --region $aws_region
104         ;;
```

we will take it Form AWS CLI doc.

```
104            ;;
105        dynamodb)
106            echo "Listing DynamoDB Tables in $aws_region"
107            aws dynamodb list-tables --region $aws_region
108            ;;
109        ebs)
110            echo "Listing EBS Volumes in $aws_region"
111            aws ec2 describe-volumes --region $aws_region
112            ;;
113        *)
114            echo "Invalid service. Please enter a valid service."
115            exit 1
116            ;;
117    esac
```

dhruva9103 commented on Aug 15, 2024 · · ·

line 41: Aws_service is not converted to lower case .
aws_service=$(echo "$2" | tr '[:upper:]' '[:lower:]')
this should solve the issue

To install AWS CLI:

→ sudo apt install unzip

→ Go AWS CLI → user guide → Get started → Install
   and updates → Go to linux → copy curl command

→ aws --version

To configure AWS

→ create new IAM user copy Access key and
   secret access key

→ aws configure

Now run the script file.