AMAZON WEB SERVICES

CERTIFIED SOLUTION ARCHITECT ASSOCIATE

By Mr. R N RAJU

(Red Hat & AWS Certified)

AWS CLI

(COMMAND LINE INTERFACE)

MAIL ID: Rnraju4u@gmail.com; PHNO: +91 9848363431; CHANNEL: SUNCLOUD TECHNOLOGIES

COMMAND LINE INTERFACE (CLI)

- The AWS Command Line Interface (CLI) is a unified tool to manage your AWS services. With just one tool to download and configure, you can control multiple AWS services from the command line and automate them through scripts.
- The AWS CLI is an open-source tool that enables you to interact with AWS services using commands in your command-line shell.

AWS-SHELL:

- **aws-shell** is a command-line shell program that provides convenience and productivity features to help both new and advanced users of the AWS Command Line Interface.
- Key features include the following.

Fuzzy auto-completion for

- Commands (e.g. ec2, describe-instances, sqs, create-queue)
- Options (e.g. --instance-ids, --queue-url)
- Resource identifiers (e.g. Amazon EC2 instance IDs, Amazon SQS queue URLs, Amazon SNS topic names)

Dynamic in-line documentation

- Documentation for commands and options are displayed as you type

Execution of OS shell commands

- Use common OS commands such as cat, ls, and cp and pipe inputs and outputs without leaving the shell

Export executed commands to a text editor

LINUX SHELLS: Use common shell programs such as **bash, zsh,** and **tcsh** to run commands in Linux or macOS.

WINDOWS COMMAND LINE: On Windows, run commands at the Windows command prompt or in PowerShell.

REMOTELY: Run commands on Amazon Elastic Compute Cloud (Amazon EC2) instances through a remote terminal program such as PuTTY or SSH, or with AWS Systems Manager.

THE FORMATTING STYLE FOR COMMAND OUTPUT:

- json
- text
- table
- yaml
- yaml-stream

SYNTAX:

$aws [options] <command> <subcommand> [parameters]

AWS CLI SUPPORTED OPERATING SYSTEMS:

- WINDOWS
- LINUX
- MACOS

AWS CLI INSTALLATION ON WINDOWS

INSTALLATION REQUIREMENTS:

- A 64-bit version of Windows XP or later.
- Admin rights to install software

STEP1: Download and Install Python
https://www.python.org/downloads/windows/

STEP2: Download and run the AWS CLI MSI installer for Windows (64-bit)
https://awscli.amazonaws.com/AWSCLIV2.msi

STEP3: To confirm the installation, open a command prompt or PowerShell
aws –version

CONFIGURATION:

- The aws configure command is the fastest way to set up your AWS CLI installation.
  $aws configure
  AWS Access Key ID [None]: AKIAIOSFODNN7EXAMPLE
  AWS Secret Access Key [None]: wJalrXUtnFEMI/K7MDENG/bPx
  Default region name [None]: us-east-1
  Default output format [None]: json

AWS CLI INSTALLATION ON LINUX

INSTALLATION REQUIREMENTS:

- We support the AWS CLI on 64-bit versions of recent distributions of CentOS, Fedora, Ubuntu, Amazon Linux 1, Amazon Linux 2 and Linux ARM.
- Because AWS doesn't maintain third-party repositories, we can't guarantee that they contain the latest version of the AWS CLI.

STEP1: Use the CURL command to download zip file

$curl "https://awscli.amazonaws.com/awscli-exe-linux-x86_64.zip" -o "awscliv2.zip"

STEP2: Unzip the installer

$unzip awscliv2.zip

STEP3: Run the install program

$sudo ./aws/install

STEP4: Confirm the installation

$aws –version

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CONFIG AND CREDENTIALS FILE'S LOCATION:

- The shared AWS config and credentials files are plaintext files that reside by default in a folder named **.aws** that is placed in the "home" folder on your computer.

  $cd ~/.aws
  $ls
  $cat config & $cat credentials

COMMAND COMPLETION:

- The AWS CLI includes a bash-compatible command-completion feature that enables you to use the Tab key to complete a partially entered command. On most systems you need to configure this manually.

STEP1: Locate the AWS completer
$which aws_completer

STEP2: Identify your shell
$echo $SHELL

STEP3: Enable command completion:
$complete -C '/usr/local/bin/aws_completer' aws

STEP4: STEP4: Verify command completion
$aws sTAB

- You can get help on the command line to see the supported services,
  $aws help

- the operations for a service,
  $aws ec2 help

- The parameters for a service operation.
  $aws ec2 describe-instances help

- To get a current region
  $ aws configure get region

- To get aws regions
  $aws ec2 describe-regions
  $aws ec2 describe-regions –output=text
  $aws ec2 describe-regions –output=table

- To display a key pair
  $aws ec2 describe-key-pairs
  $aws ec2 describe-key-pairs --key-name mykey

- Listing all user owned buckets
  $aws s3 ls

- Listing all prefixes and objects in a bucket
  $aws s3 ls s3://mybucket

- Recursively listing all prefixes and objects in a bucket
  $aws s3 ls s3://mybucket --recursive

- Creating a new bucket
  $aws s3 mb s3://mybucket
  $aws s3 mb s3://mybucket --region us-west-1

- List Objects in a bucket
  $aws s3api list-objects –bucket <bucket-name>

- Remove bucket
  $aws s3 rb s3://mybucket
  $aws s3 rb s3://mybucket --force