***Steps to retrieve instance metadata***

**=====================================**

1. Create an EC2 instance in AWS. In my case I have used ubuntu.
2. ssh into the instance using its private key using below command.
   1. **ssh -i ec2.pem ubuntu@ec2-<DNS name>**
3. Note: The instance metadata is available from running instance
4. To view all categories of instance metadata from within a running instance, use the following URI with curl command.
   1. **curl http://169.254.169.254/latest/meta-data/**

**Output:**

ami-id

ami-launch-index

ami-manifest-path

block-device-mapping/

hostname

iam/

instance-action

instance-id

instance-type

local-hostname

local-ipv4

mac

metrics/

network/

placement/

profile

public-hostname

public-ipv4

public-keys/

reservation-id

security-groups

services/

**Note: The IP address 169.254.169.254 is a link-local address and is valid only from the instance.**

1. Navigate to the categories further to get the metadata.
   1. Example: To retrieve metadata for ami-id
   2. curl <http://169.254.169.254/latest/meta-data/ami-id>
   3. ami-0abcdef1234567890
2. Retrieve security credentials for an IAM role named myrole
   1. Example: curl http://169.254.169.254/latest/meta-data/iam/security-credentials/myrole
   2. **Output**:

{

<Output shown below>

}

**End to End Steps:**

login as: ubuntu

Authenticating with public key "imported-openssh-key"

Welcome to Ubuntu 16.04.7 LTS (GNU/Linux 4.4.0-1128-aws x86\_64)

\* Documentation: https://help.ubuntu.com

\* Management: https://landscape.canonical.com

\* Support: https://ubuntu.com/advantage

14 packages can be updated.

2 of these updates are security updates.

To see these additional updates run: apt list --upgradable

New release '18.04.5 LTS' available.

Run 'do-release-upgrade' to upgrade to it.

\*\*\* System restart required \*\*\*

Last login: Sun May 16 14:46:19 2021 from 40.120.60.151

To run a command as administrator (user "root"), use "sudo <command>".

See "man sudo\_root" for details.

ubuntu@ip-172-31-23-116:~$ ***curl http://169.254.169.254/latest/meta-data/***

ami-id

ami-launch-index

ami-manifest-path

block-device-mapping/

events/

hibernation/

hostname

iam/

identity-credentials/

instance-action

instance-id

instance-life-cycle

instance-type

local-hostname

local-ipv4

mac

metrics/

network/

placement/

profile

public-hostname

public-ipv4

public-keys/

reservation-id

security-groups

ubuntu@ip-172-31-23-116:~$ **curl http://169.254.169.254/latest/meta-data/iam**

**info**

security-credentials/ubuntu@ip-172-31-23-116:~$ ***curl http://169.254.169.254/latest/meta-data/iam/security-credentials***

MyRoleubuntu@ip-172-31-23-116:~$ ***curl http://169.254.169.254/latest/meta-data/iam/security-credentials/MyRole***

{

"Code" : "Success",

"LastUpdated" : "2021-05-16T14:55:12Z",

"Type" : "AWS-HMAC",

"AccessKeyId" : "ASIAWDMCWERWDDHLJET",

"SecretAccessKey" : "4U8r07KUSMrxEuSOhS3TL1rEDM/UTtkGUa8PqtHK",

"Token" : "",

"Expiration" : "2021-05-16T21:30:29Z"

}ubuntu@ip-172-31-23-116:~$