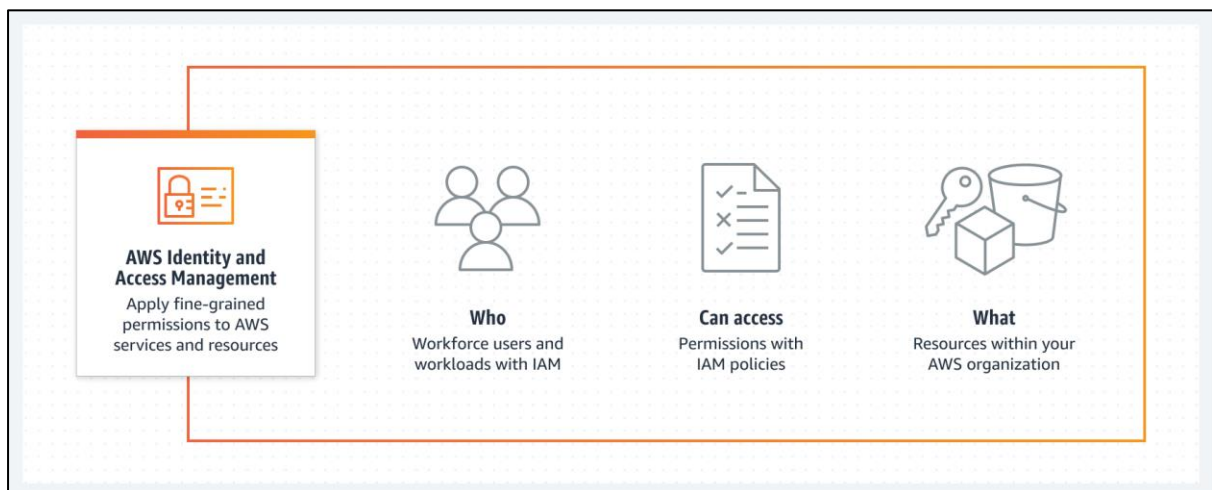


IAM:

IDENTIFY AND ACCESS MANAGEMENT

you can specify who or what can access services and resources in AWS, centrally manage fine-grained permissions, and analyze access to refine permissions across AWS.



WHY USE IAM:

Use IAM to manage and scale workload and workforce access securely supporting your agility and innovation in AWS.

- ALIAS URL
- USER
- GROUP
- HOW TO ACCESS AWS VIA CLI(command line interface)
- ACCESS KEY
- SECRET ACCESS KEY
- MFA
- POLICY
- ROLES
- USER TO SERVICE COMMUNICATION
- SERVICE TO SERVICE COMMUNICATION

ALIAS URL:

The AWS account root user and AWS Identity and Access Management (IAM) users in the account sign in using a web URL.

If you want the URL for your IAM users to contain your company name (or another easy-to-remember identifier) instead of the AWS account ID, you can create an account alias.

MFA:

AWS Identity and Access Management (IAM) best practice that requires a second authentication factor in addition to user name and password sign-in credentials.

You can enable MFA at the AWS account level and for root and IAM users you have created in your account.

- Two types:
1. Physical mfa (manual password)
 2. Virtual mfa (fingerprint)

USER TO SERVICE COMMUNICATION:

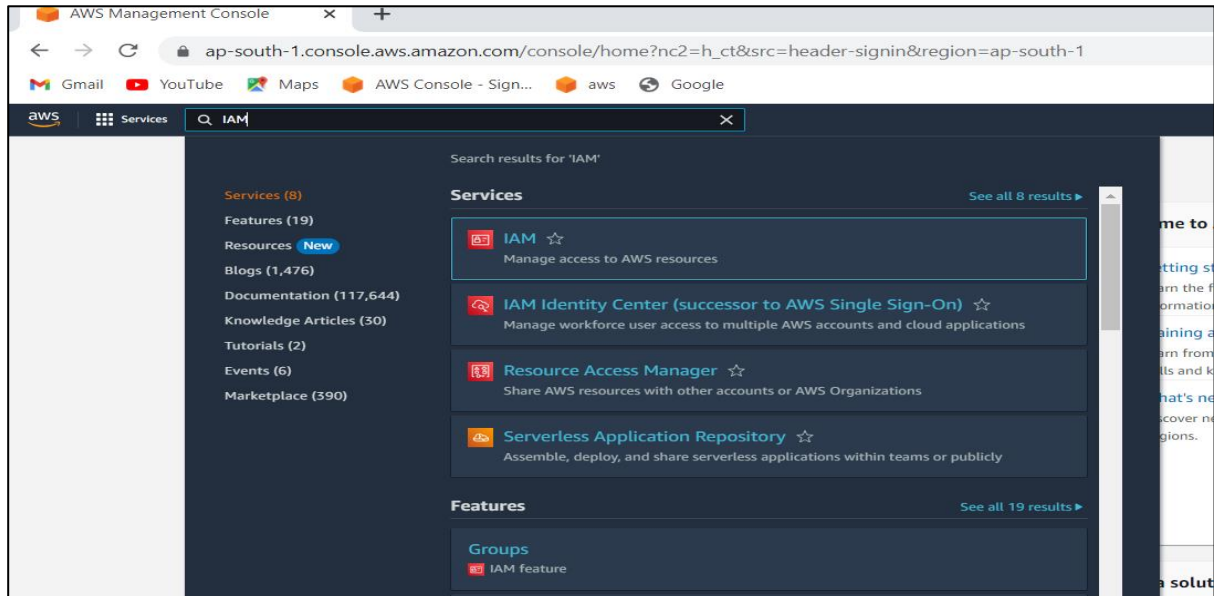
It working purpose for Root user create one instance now saw this instance for user

SERVICE TO SERVICE COMMUNICATION:

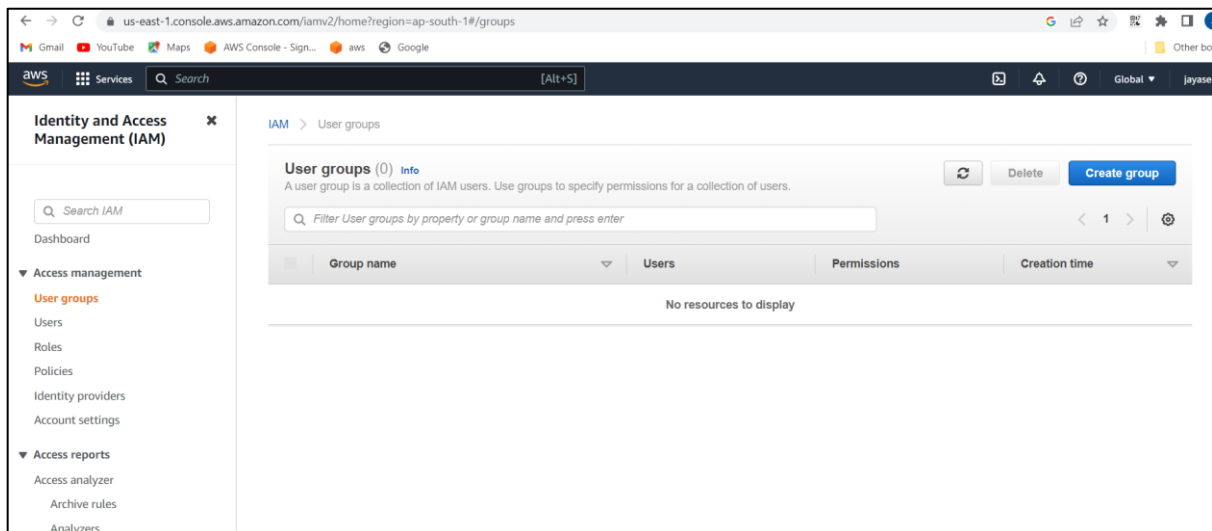
It is communicate between one service to another service same server.

USER TO SERVICE COMMUNICATION:

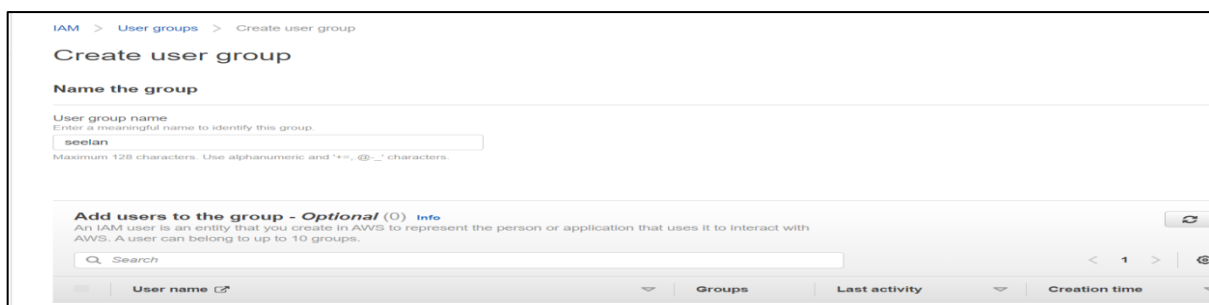
STEP1:Aws search bar--->IAM---->select



STEP2:Acces management ---->create group

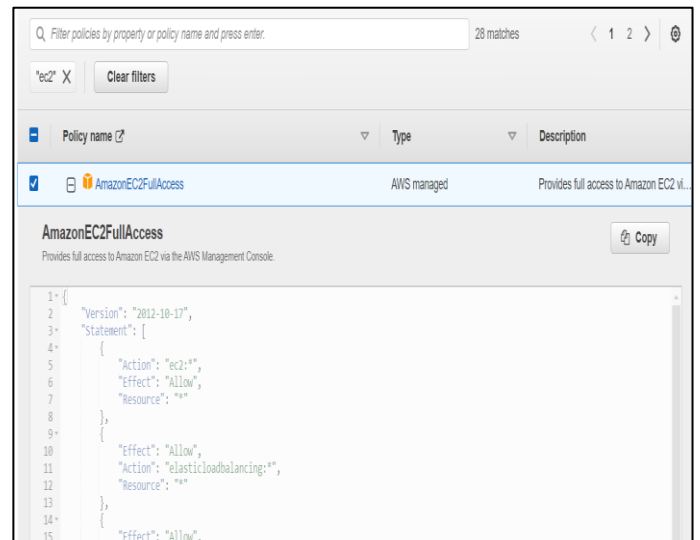
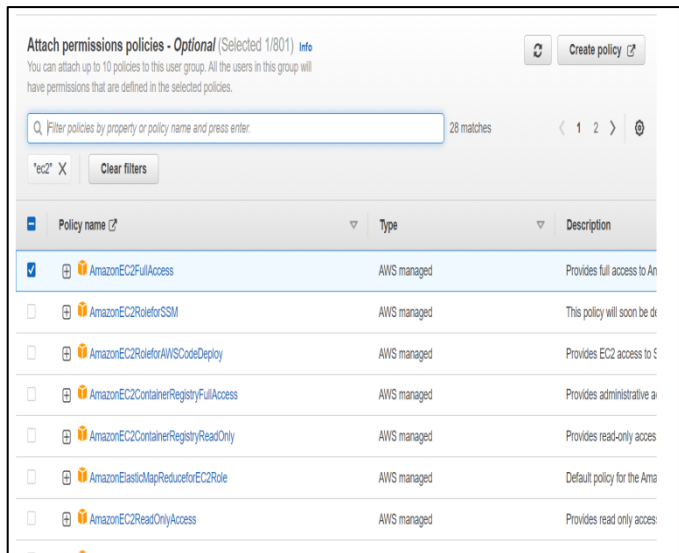


STEP2.1:create user group---->name of the group (any name)



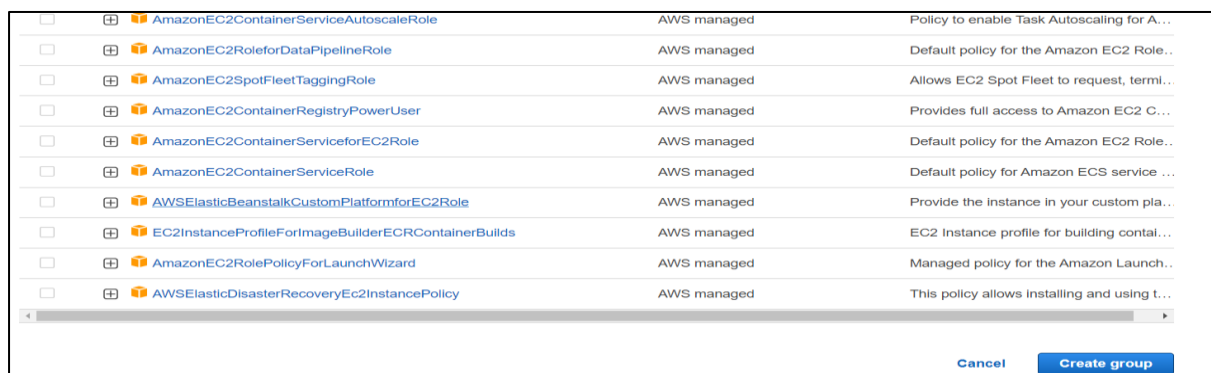
STEP2.2:Attach permission polices--->search bar(1.ec2 enter)--->click amazon ec2 full acces ----->(2.s3 enter---> amazon ec2 full acces)

----->(3.IAM enter --> amazon ec2 full acces)

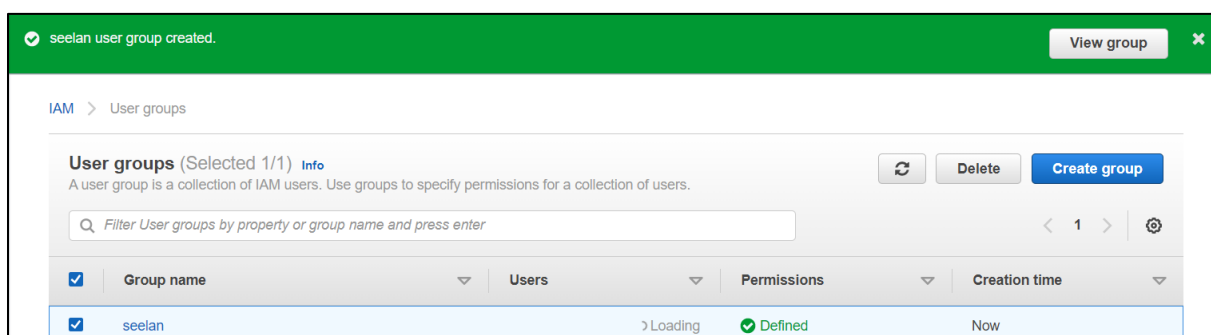


After select policies --->ec2 tag remove

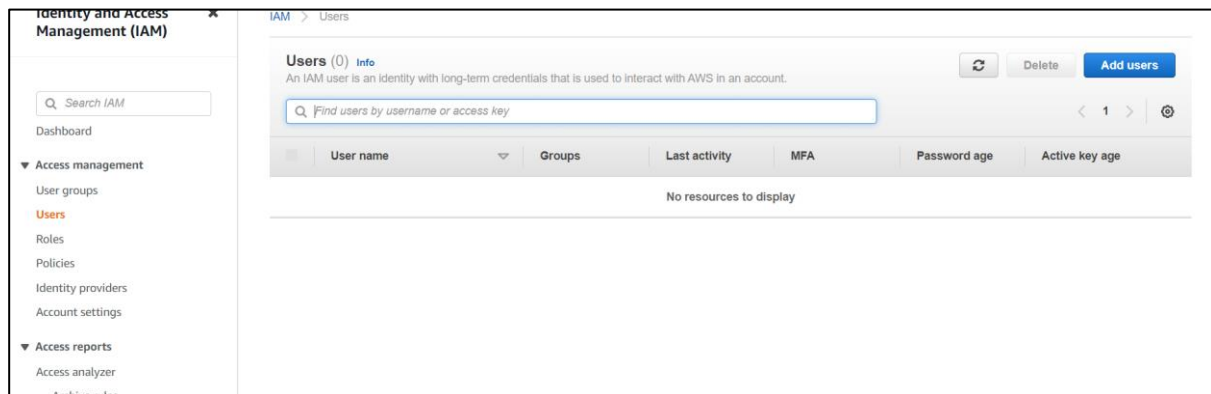
STEP2.3:create group



Group will created..



Step3:Access management--->users--->add users



Step3.1:set user details--->user name(any name)--->click select aws credential type two boxes---->console password(any)--->next

Set user details

You can add multiple users at once with the same access type and permissions. [Learn more](#)

User name* [Add another user](#)

Select AWS access type

Select how these users will primarily access AWS. If you choose only programmatic access, it does NOT prevent users from accessing the console using an assumed role. Access keys and autogenerated passwords are provided in the last step. [Learn more](#)

Select AWS credential type* ☒ **Access key - Programmatic access**
Enables an **access key ID** and **secret access key** for the AWS API, CLI, SDK, and other development tools.

☒ **Password - AWS Management Console access**
Enables a **password** that allows users to sign-in to the AWS Management Console.

Console password* ☐ Autogenerated password
☒ Custom password

☒ Show password

Require password reset ☒ User must create a new password at next sign-in

* Required [Cancel](#) [Next: Permissions](#)

Step3.1:set permissions--->add user group --->select group--->next

Add user

1 2 3 4 5

Set permissions

[Add user to group](#) [Copy permissions from existing user](#) [Attach existing policies directly](#)

Add user to an existing group or create a new one. Using groups is a best-practice way to manage user's permissions by job functions. [Learn more](#)

Add user to group

[Create group](#) [Refresh](#)

Search Showing 1 result

Group	Attached policies
<input checked="" type="checkbox"/> seelan	AmazonEC2FullAccess and 2 more

Set permissions boundary

[Cancel](#) [Previous](#) [Next: Tags](#)

Step3.2: Add user--->add tags--->next

Add user

12345

Add tags (optional)

IAM tags are key-value pairs you can add to your user. Tags can include user information, such as an email address, or can be descriptive, such as a job title. You can use the tags to organize, track, or control access for this user. [Learn more](#)

Key	Value (optional)	Remove
<input type="text" value="Add new key"/>	<input type="text"/>	

You can add 50 more tags.

Cancel

Previous

Next: Review

Step3.3:review--->create user

Add user

12345

Review

Review your choices. After you create the user, you can view and download the autogenerated password and access key.

User details

User name	jaya
AWS access type	Programmatic access and AWS Management Console access
Console password type	Custom
Require password reset	Yes
Permissions boundary	Permissions boundary is not set

Permissions summary

The user shown above will be added to the following groups.

Type	Name
Group	seelan
Managed policy	IAMUserChangePassword

Tags

Cancel

Previous

Create user

Step3.3:user attached group completed--->success--->download.csv

Add user

12345

Success

You successfully created the users shown below. You can view and download user security credentials. You can also email users instructions for signing in to the AWS Management Console. This is the last time these credentials will be available to download. However, you can create new credentials at any time.

Users with AWS Management Console access can sign-in at: <https://795071115491.signin.aws.amazon.com/console>

Download .csv

	User	Access key ID	Secret access key	Email login instructions
▶	✓ jaya	AKIA3SHPOODR4ZTTF74B	***** Show	Send email

Step3.4:open excel sheet--->user name,password,acces key id,secret acces key ... --->shown

A	B	C	D	E	F
User name	Password	Access key ID	Secret access key	Console login link	
jaya	jaya@123	AKIA3SHPOODR4ZTTF74B	O2yTh5bzQZwcilbuDUtOePlxHLsCNy9O9D1jQkqD	https://795071115491.signin.aws.amazon.com/console	

Step3.5: install CLI--->Chrome(aws cli install on windows)--->select first link

aws cli install on windows

All

Videos

Images

Shopping

Books

More

Tools

About 2,38,00,000 results (0.40 seconds)

https://docs.aws.amazon.com > cli > getting-started-install

Installing or updating the latest version of the AWS CLI

Install or update the **AWS CLI** · Unzip the installer. If your Linux distribution doesn't have a built-in unzip command, use an equivalent to unzip it. · Run the ...

Past releases · Configuring the · Prerequisites to use the AWS... · Quick setup

You visited this page on 28/12/22.

People also search for

aws cli install on windows version 2

aws cli install windows version 3

aws cli install windows, download

aws cli download

aws cli windows

aws cli version

Select--->windows--->download link--->download

AWS CLI install and update instructions

For installation instructions, expand the section for your operating system.

Linux

macOS

Windows

Troubleshooting AWS CLI install and uninstall errors

If you come across issues after installing or uninstalling the AWS CLI, see [Troubleshooting AWS CLI errors](#) for troubleshooting steps. For the most relevant troubleshooting steps, see [Command not found errors](#),

Windows

Install and update requirements

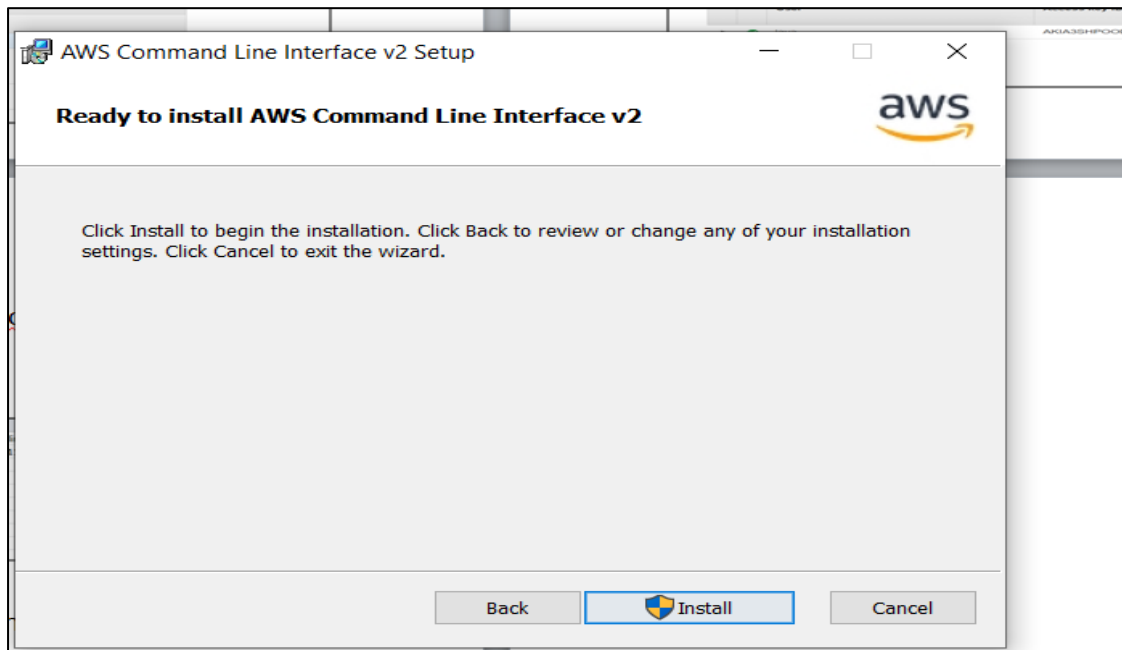
- We support the AWS CLI on Microsoft-supported versions of 64-bit Windows.
- Admin rights to install software

Install or update the AWS CLI

To update your current installation of AWS CLI on Windows, download a new installer each time you update to overwrite previous versions. AWS CLI is updated regularly. To see when the latest version was released, see the [AWS CLI version 2 Changelog](#) on [GitHub](#).

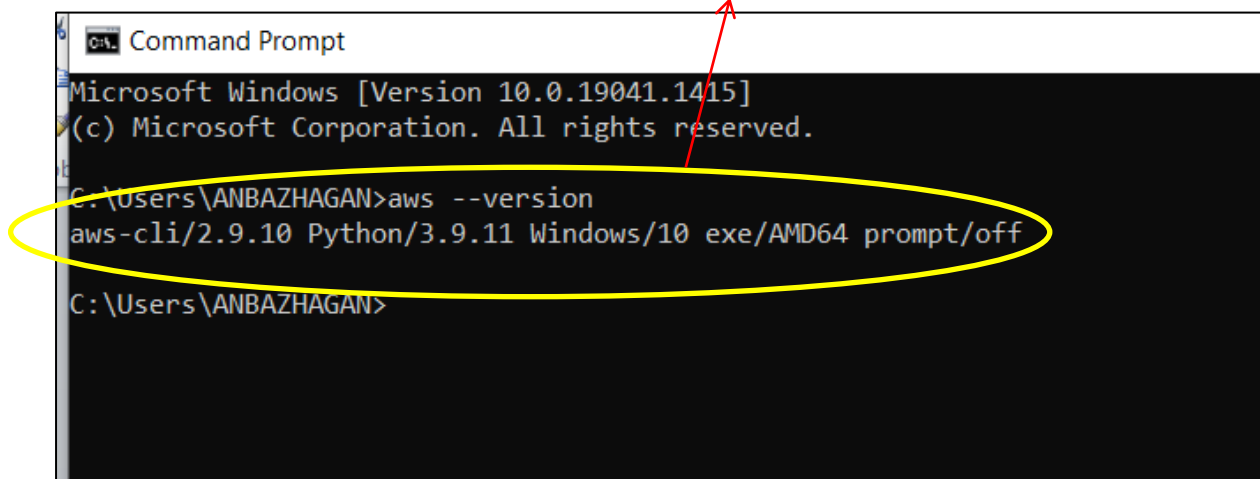
1. Download and run the AWS CLI MSI installer for Windows (64-bit):
<https://awscli.amazonaws.com/AWSCLIV2.msi>
Alternatively, you can run the `msiexec` command to run the MSI installer.

Open cli--->install



Step3.6:now configure aws in cmd prompt

Step3.6.1:check aws --version ----->this is come aws configure succes



```
Microsoft Windows [Version 10.0.19041.1415]
(c) Microsoft Corporation. All rights reserved.

C:\Users\ANBAZHAGAN>aws --version
aws-cli/2.9.10 Python/3.9.11 Windows/10 exe/AMD64 prompt/off

C:\Users\ANBAZHAGAN>
```

Step3.6.2:login(aws configure)---->put aws acces key--->put secret access key--->put default region--->put default output format(json)
----->login completed..


```
Command Prompt
Microsoft Windows [Version 10.0.19041.1415]
(c) Microsoft Corporation. All rights reserved.

C:\Users\ANBAZHAGAN>aws --version
aws-cli/2.9.10 Python/3.9.11 Windows/10 exe/AMD64 prompt/off

C:\Users\ANBAZHAGAN>aws configure
AWS Access Key ID [*****DMH2]: AKIA3SHP00DR4ZTTF74B
AWS Secret Access Key [*****GJ0o]: 02yTh5bzQZwciIbuDUt0ePlxHLsCNy909D1jQkqD
Default region name [ap-south-1]: ap-south-1
Default output format [json]: json

C:\Users\ANBAZHAGAN>
```

Step3.6.3:now check ec2 ls--->s3 ls--->iam ls---(eg:aws iam ls)--->all files will be listed

```
C:\Users\ANBAZHAGAN>aws iam ls

usage: aws [options] <command> <subcommand> [<subcommand> ...] [parameters]
To see help text, you can run:

    aws help
    aws <command> help
    aws <command> <subcommand> help

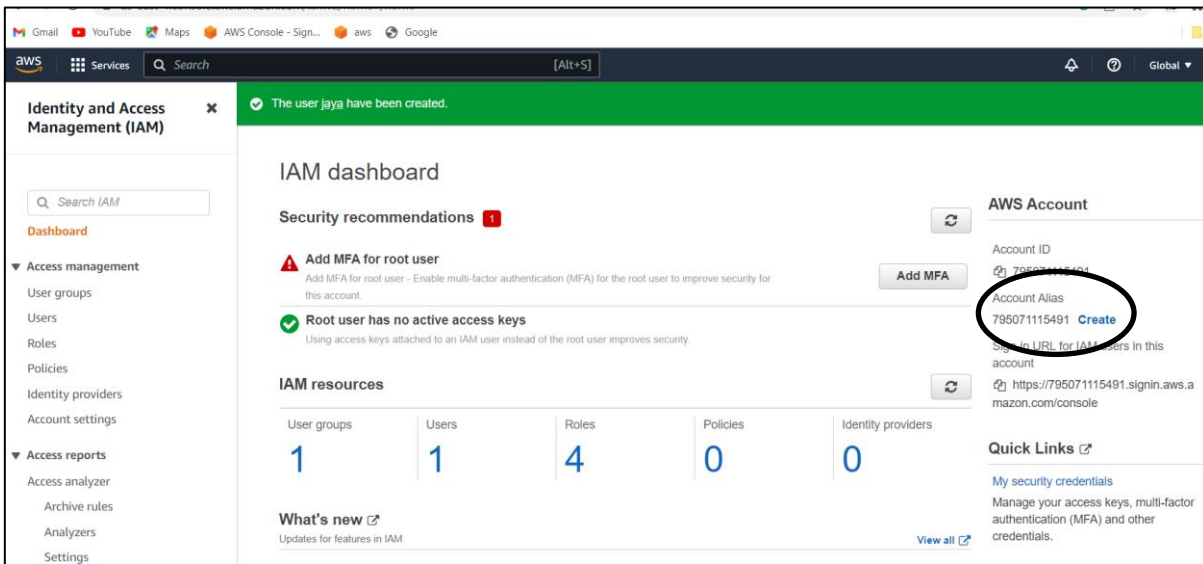
aws: error: argument operation: Invalid choice, valid choices are:

add-client-id-to-open-id-connect-provider | add-role-to-instance-profile
add-user-to-group                         | attach-group-policy
attach-role-policy                       | attach-user-policy
change-password                          | create-access-key
create-account-alias                     | create-group
create-instance-profile                   | create-login-profile
create-open-id-connect-provider          | create-policy
create-policy-version                     | create-role
create-saml-provider                     | create-service-linked-role
create-service-specific-credential        | create-user
create-virtual-mfa-device                 | deactivate-mfa-device
delete-access-key                         | delete-account-alias
delete-account-password-policy            | delete-group
delete-group-policy                       | delete-instance-profile
delete-login-profile                      | delete-open-id-connect-provider
```

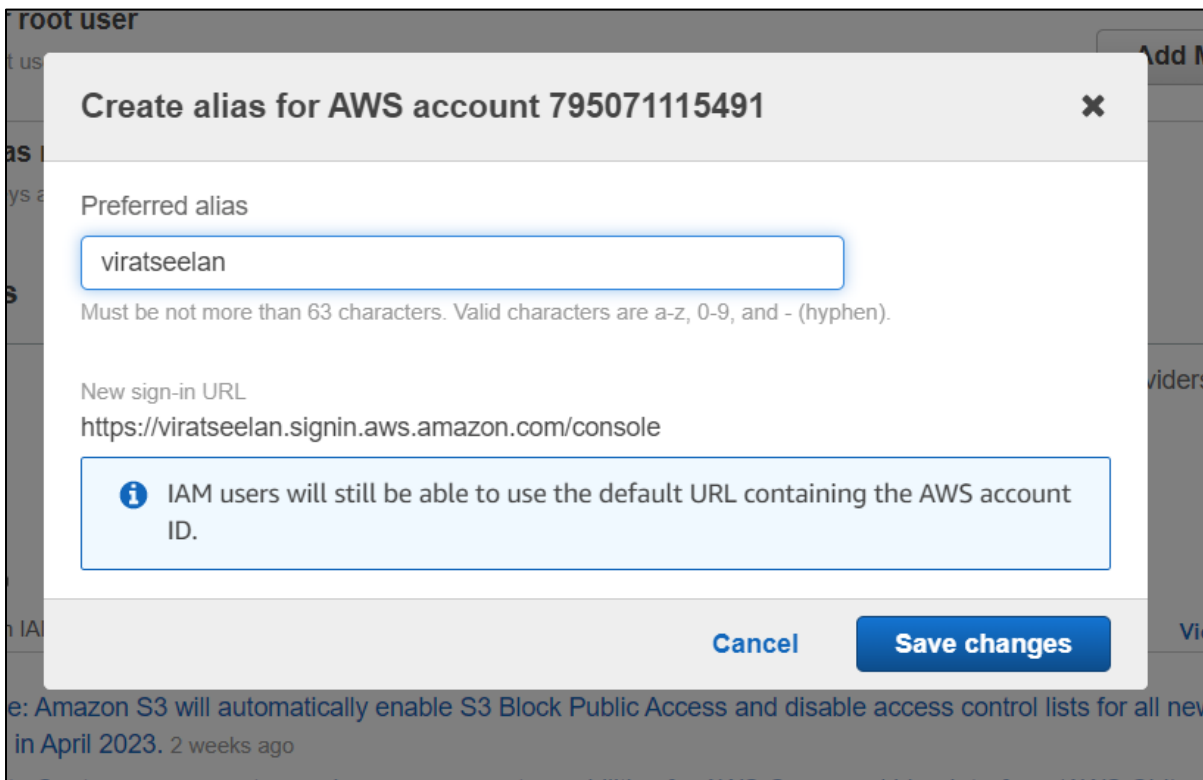
AWS CLI CONFIGURED SUCCES..

STEP4:DOWNLOAD ALLIAS URL

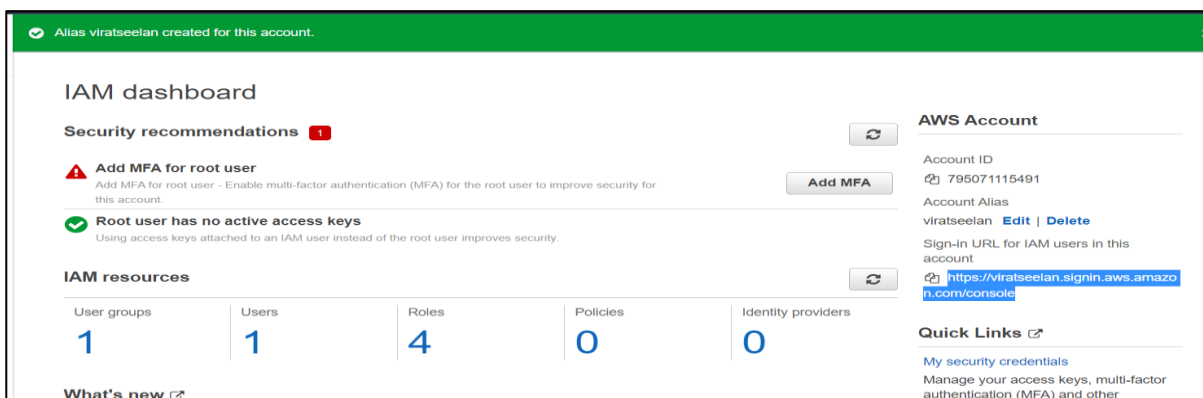
STEP4.1: Dashboard ---->aws account--->account alias ---->create



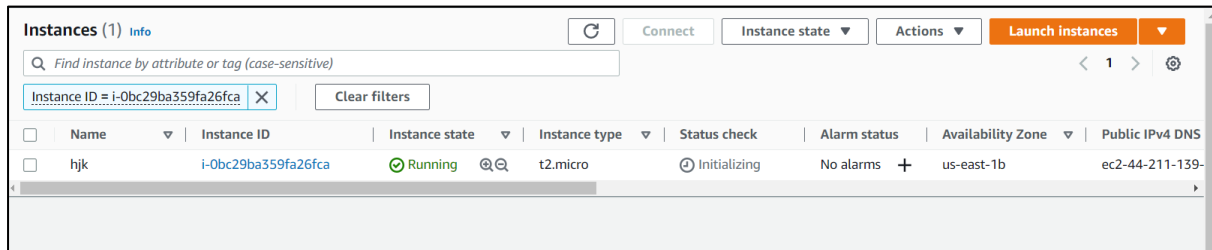
STEP4.2: Preferred alias (any name) ---> save changes ---> alias created



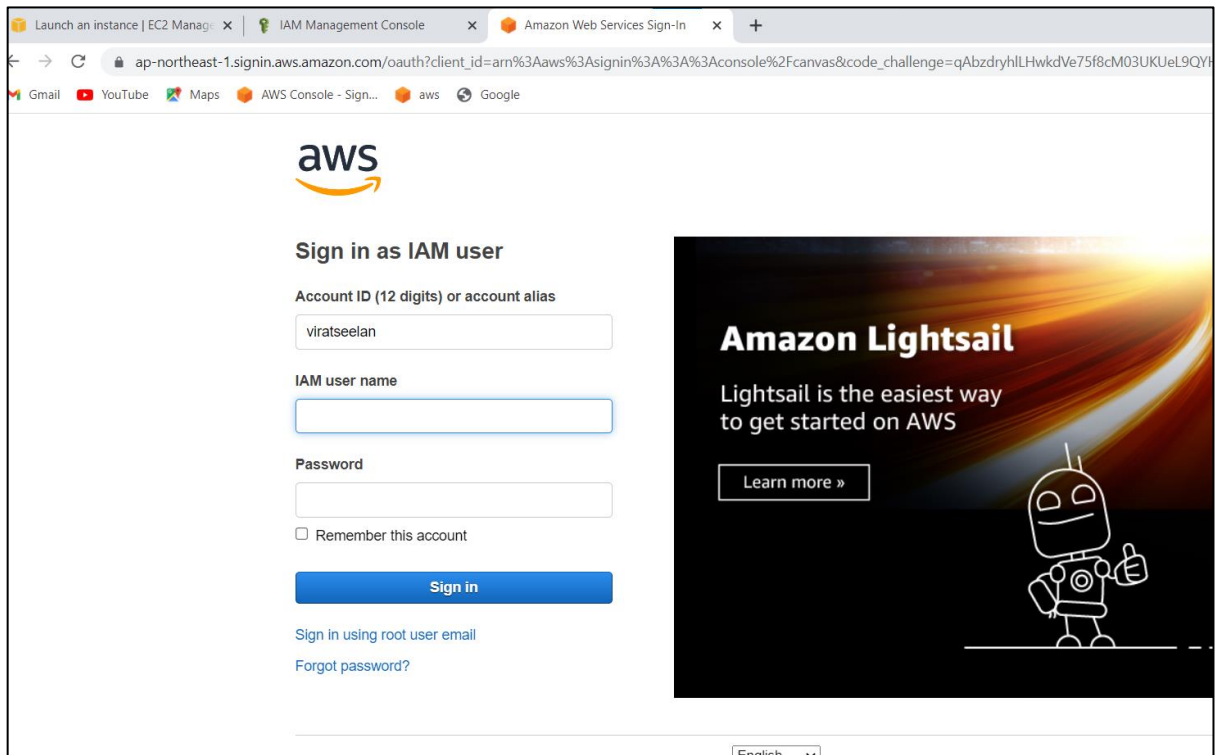
Alias created..



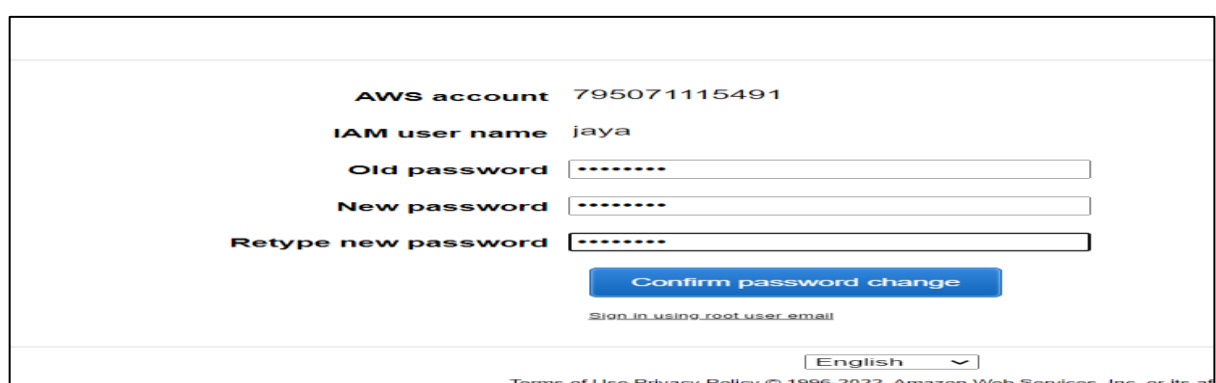
STEP5:instance create in root account



STEP6:copy alias url ---put chrome(open user aws account)

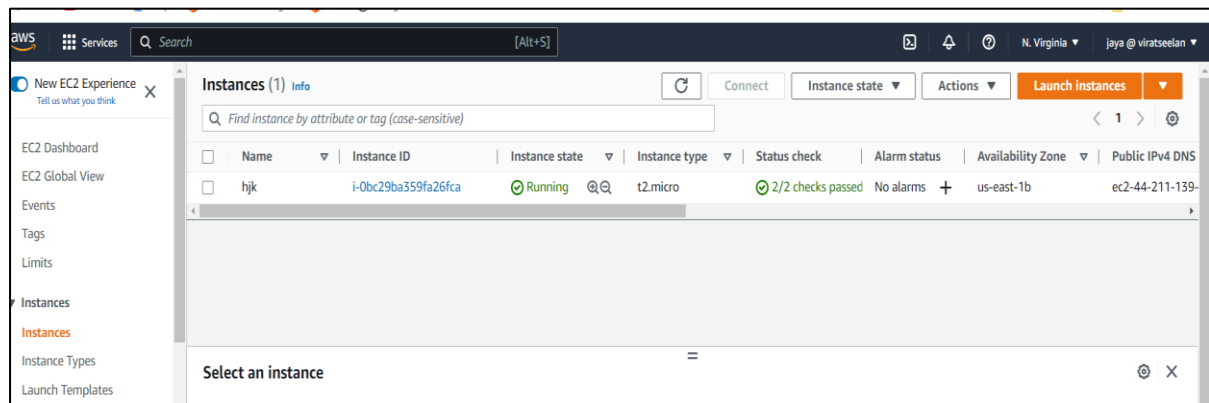


STEP6.1:created user name and password put--->next page --->password change--->login user account



STEP6.2:same zone shown for root account(eg:Mumbai) then only saw root account works..

(suppose root account zone is virgenia and user account zone ismumbai) --->cant saw root account works



i.e: I will creat ec2 instance in root account and now shown user account for same instance

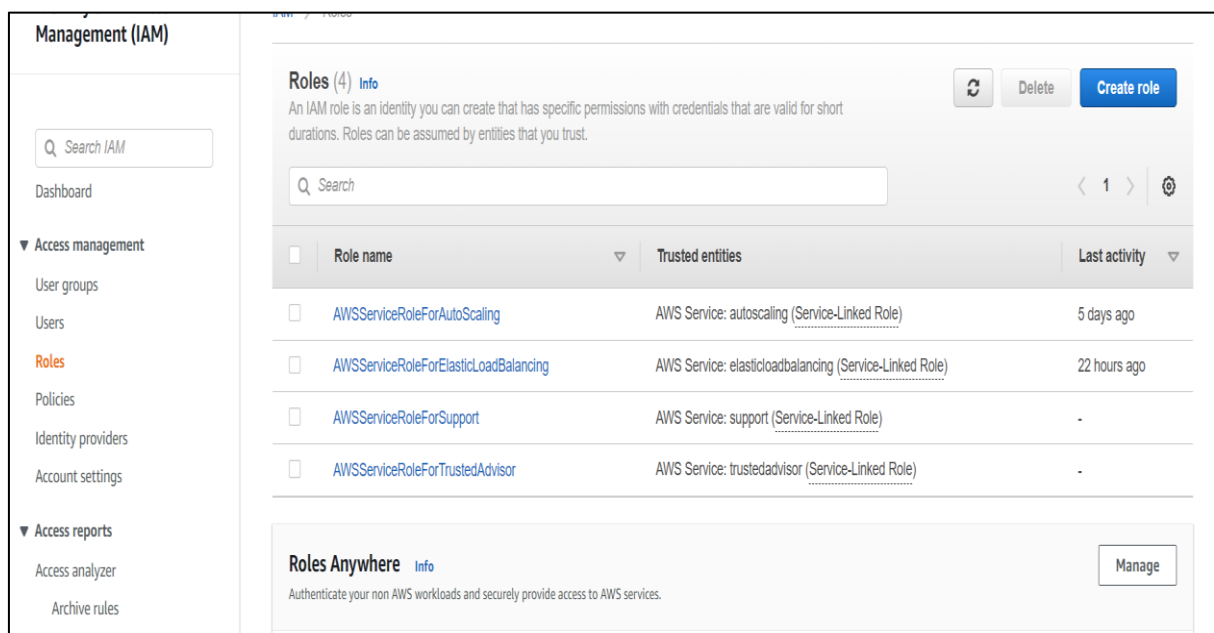
user to service communication will success..

After Root account---> user account group and user will delete and user account will deleted..

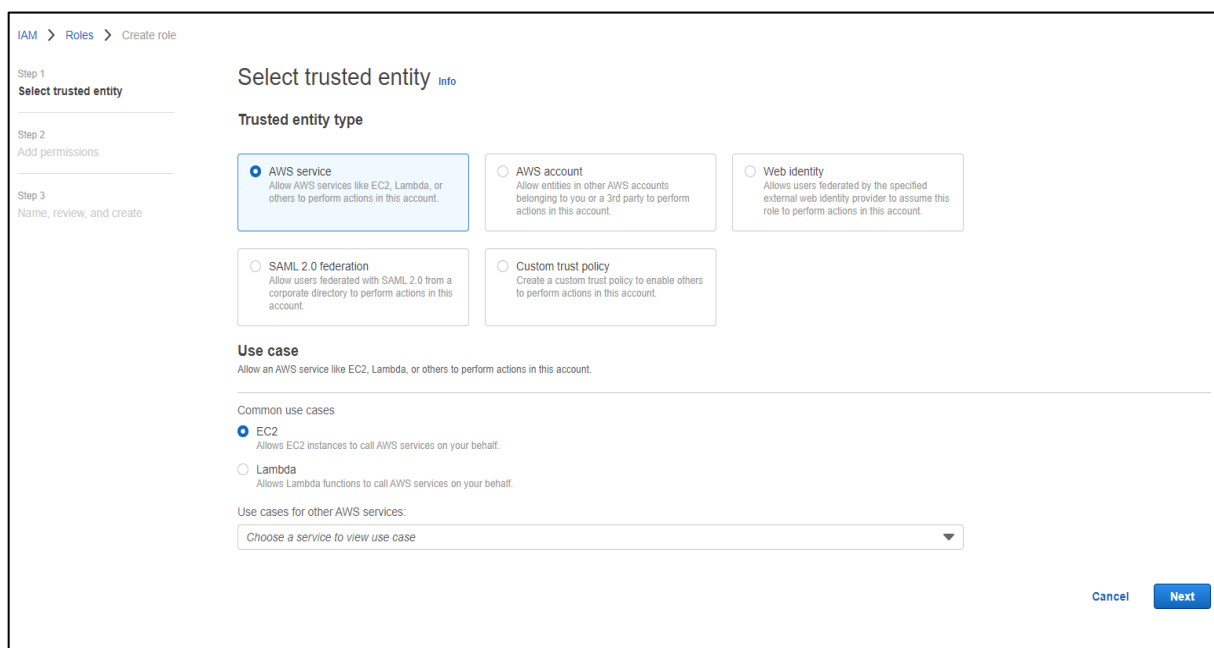
SERVICE TO SERVICE COMMUNICATION:

It is communicate between one service to another service same server.

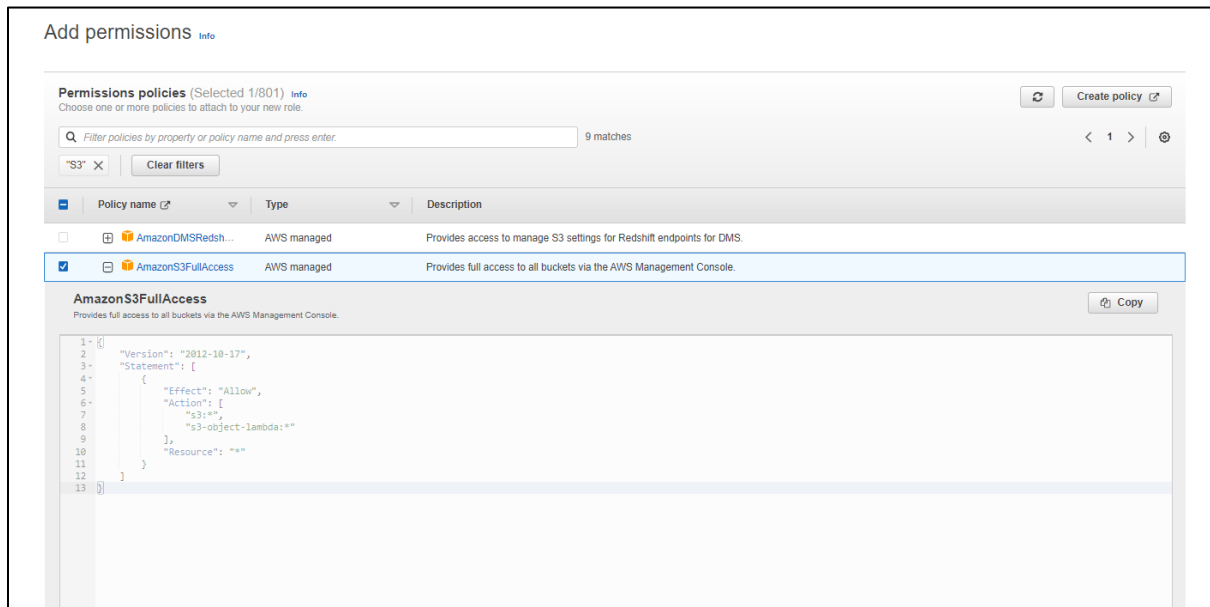
STEP1:IAM--->Roles --->create role



STEP1.1:Aws service---->Ec2--->Next



STEP1.2:Permission policies---->IAM(eg:any service)---->amazon IAM full access--->next



STEP1.3:role details--->role name(any)----->create role

Name, review, and create

Role details

Role name
Enter a meaningful name to identify this role.

server

Maximum 64 characters. Use alphanumeric and '+', '=', '@', '_', '-' characters.

Description
Add a short explanation for this role.

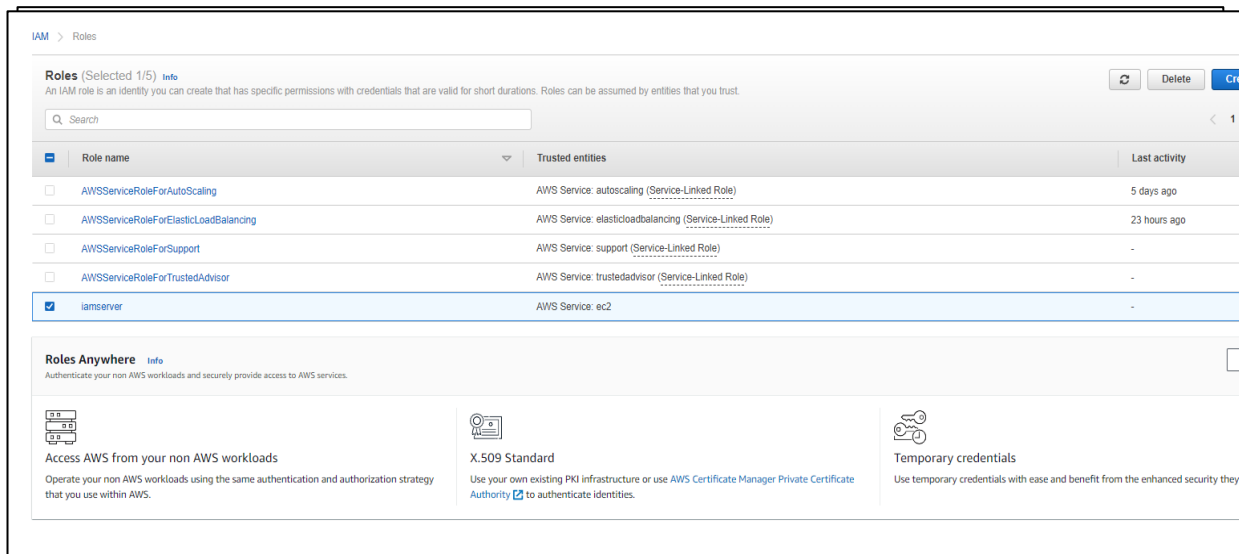
Allows EC2 instances to call AWS services on your behalf.

Maximum 1000 characters. Use alphanumeric and '+', '=', '@', '_', '-' characters.

Step 1: Select trusted entities

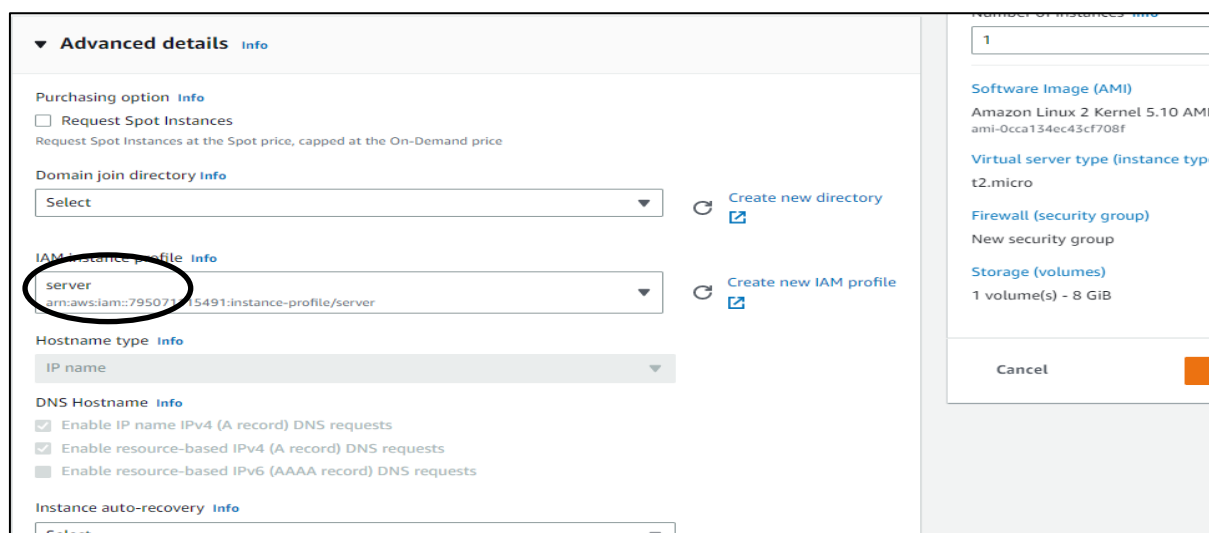
```
1- {
2-   "Version": "2012-10-17",
3-   "Statement": [
4-     {
5-       "Effect": "Allow",
6-       "Action": [
7-         "sts:AssumeRole"
8-       ],
9-       "Principal": {
10-        "Service": [
11-          "ec2.amazonaws.com"
12-        ]
13-      }
14-    }
15-  ]
16- }
```

role created succesfully...



STEP2:Ec2 instance create(normally one instance create)

STEP2.1:advanced details---->IAM instance profile(add)(creating iam role add)



STEP2.2:Launch instance

STEP2.3:AFTER LAUNCH INSTANCE--->CONNECT LINUX

----->check IAM service in linux(because IAM policy will give in roles----->step ref:1.2)

Check command:aws iam ls

```

  _ | _ | _ )
  _ | ( _ | /
  _ | \ _ | _ |
                        Amazon Linux 2 AMI

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-172-31-3-7 ~]$ aws iam ls
Note: AWS CLI version 2, the latest major version of the AWS CLI, is now stable and recommended for general use.
e/install-cliv2.html

usage: aws [options] <command> [<subcommand> [<subcommand> ...] [parameters]]
To see help text, you can run:

    aws help
    aws <command> help
    aws <command> <subcommand> help
aws: error: argument operation: Invalid choice, valid choices are:

add-client-id-to-open-id-connect-provider | add-role-to-instance-profile
add-user-to-group                         | attach-group-policy
attach-role-policy                       | attach-user-policy
change-password                          | create-access-key
create-account-alias                     | create-group
create-instance-profile                   | create-login-profile
create-open-id-connect-provider           | create-policy
create-policy-version                     | create-role
create-saml-provider                      | create-service-linked-role
create-service-specific-credential         | create-user
create-virtual-mfa-device                 | deactivate-mfa-device
delete-access-key                         | delete-account-alias
delete-account-password-policy            | delete-group
delete-group-policy                       | delete-instance-profile
delete-login-profile                      | delete-open-id-connect-provider
delete-policy                             | delete-policy-version
```

After Show List iam Servers It Will Success...

MFA(MULTI FACTOR AUTHENTICATION):

AWS Identity and Access Management (IAM) best practice that requires a second authentication factor in addition to user name and password sign-in credentials.

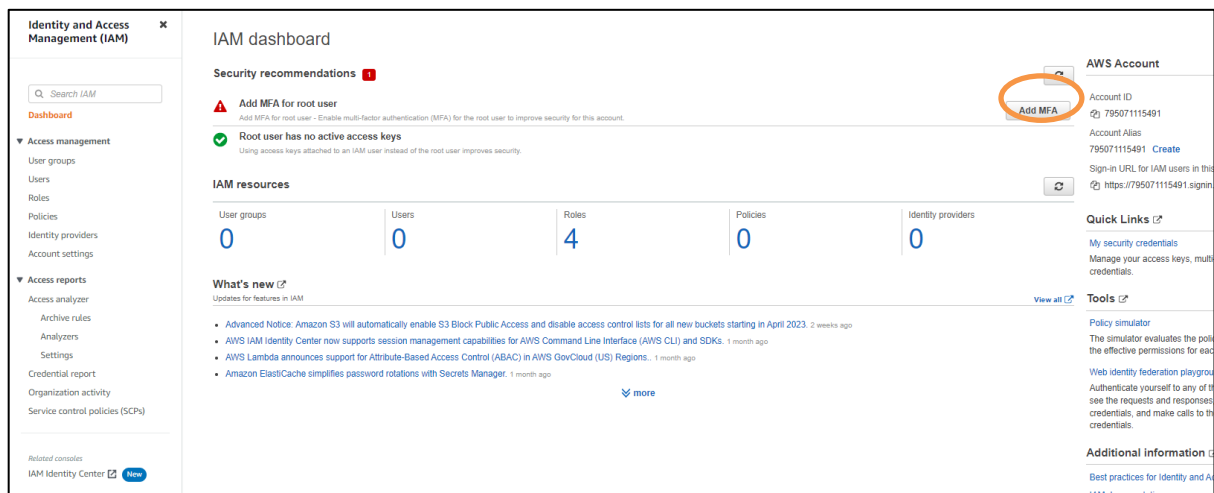
You can enable MFA at the AWS account level and for root and IAM users you have created in your account.

Two types: 1.Physical mfa (manual password)

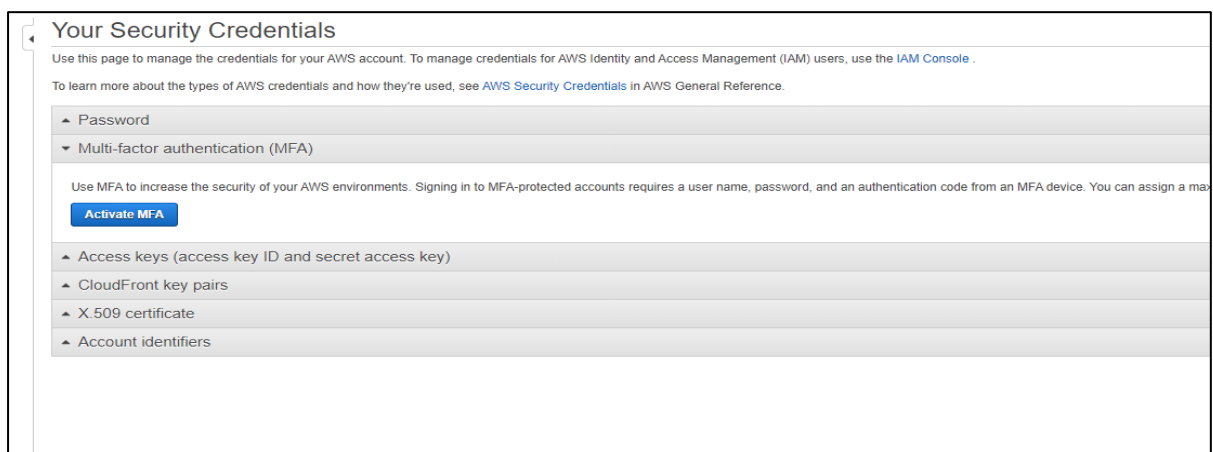
2.Virtual mfa(fingerprint)

Steps to create MFA:

STEP1:IAM Dashboard---->Add MFA



STEP2:Activate MFA



STEP3:Name any--->virtual MFA device --->continue

Manage MFA device

Name*

jayaseelar

Maximum 128 characters. Use alphanumeric and '+ = . . @ - _ ' characters.

Choose the type of MFA device to assign:

☒ **Virtual MFA device**
Authenticator app installed on your mobile device or computer

☐ **Security key**
Authenticate by using a FIDO security key, such as Yubikey

☐ **Other hardware MFA device**
Hardware TOTP token

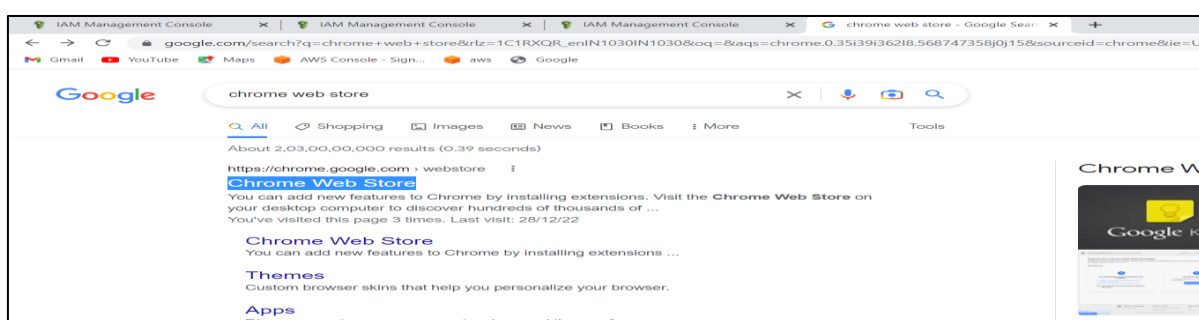
For more information about supported MFA devices, see [AWS Multi-Factor Authentication](#)

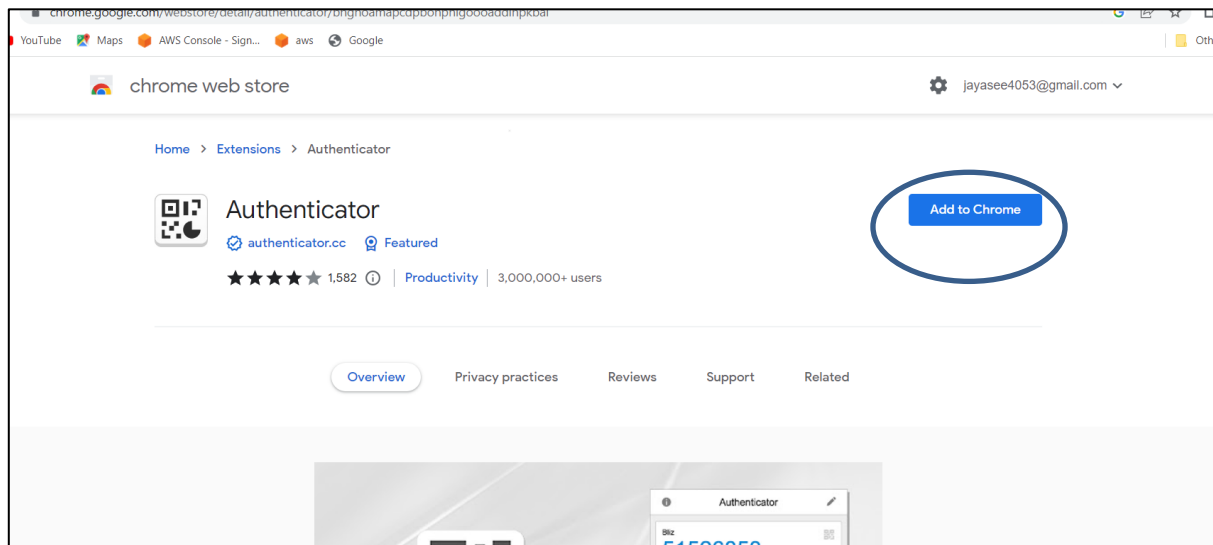
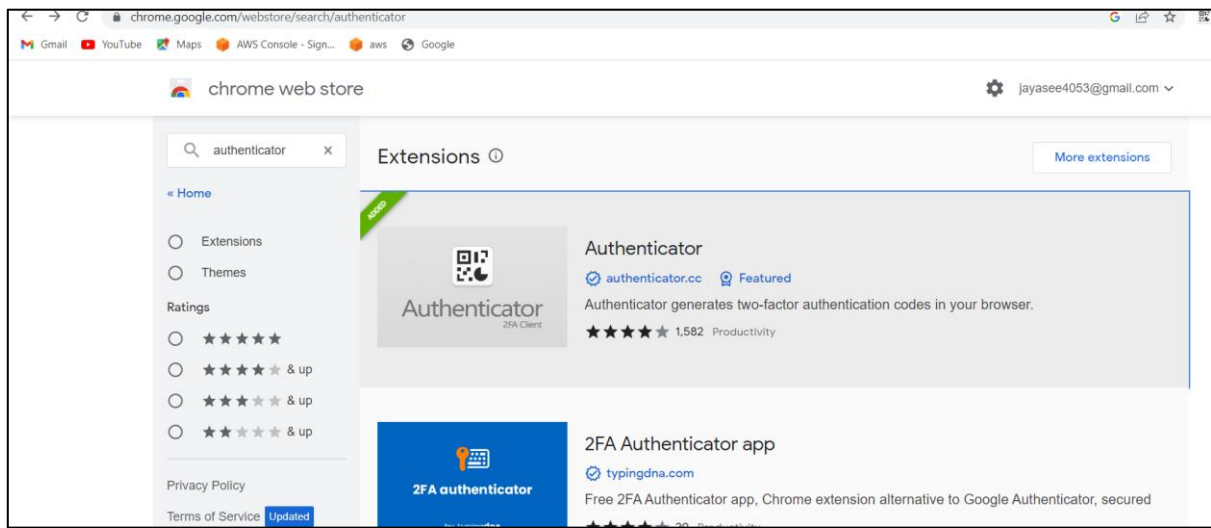
Cancel Continue

STEP4:barcode shown----->scan barcode authenticator--->otp will show--->15 sec otp change two otp put..

How to download authenticator:

Chrome webstore---->search(authenticator)--->shown authenticator application --->click--->add to chrome.





Authenticator download after---->pin to chrome corner..

