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Manikanta Suru

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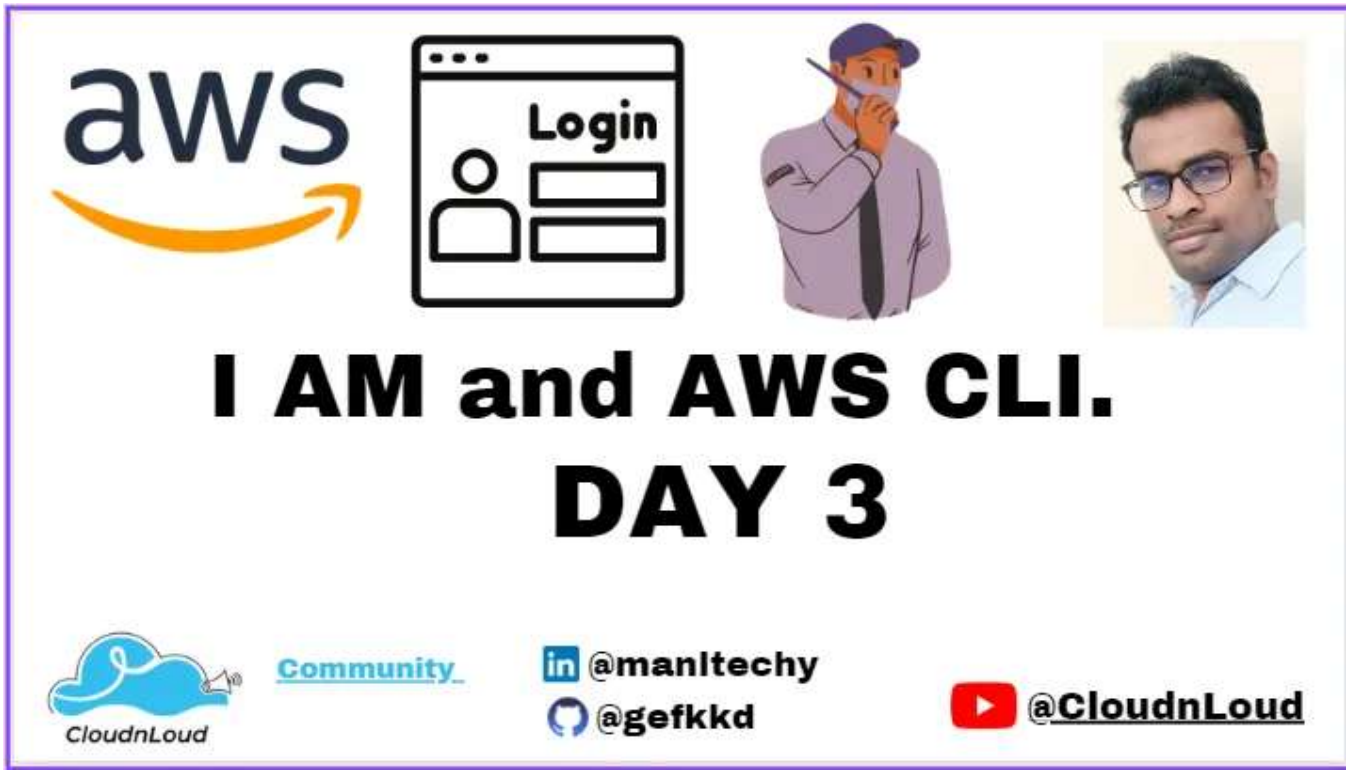
📍"From Zero to Cloud Hero: Day 1 of the 100-Day Journey to Mastering Cloud Computing"

I AM and AWS CLI.



IAM Section :

Users & Groups

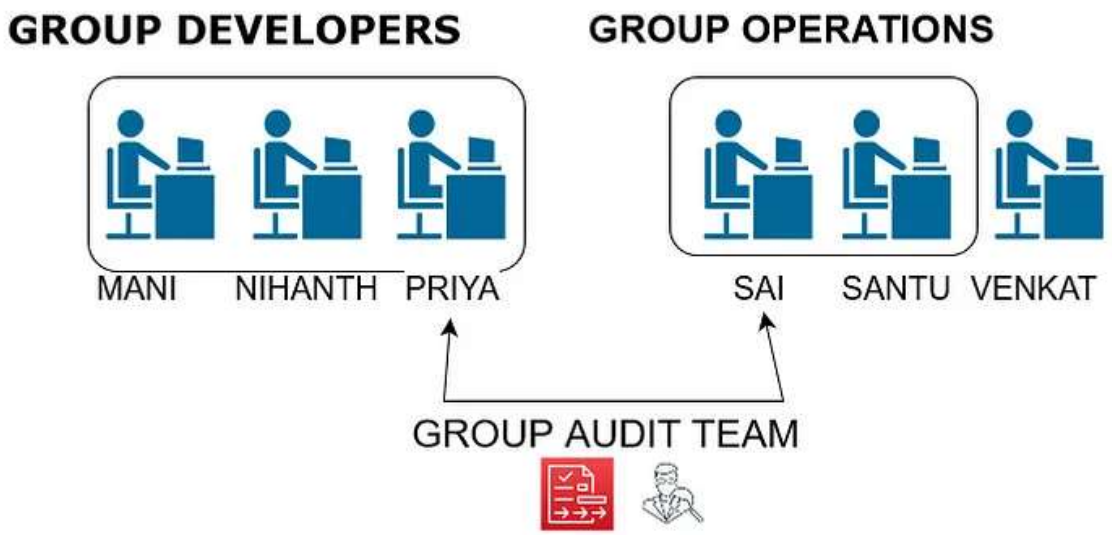
• IAM = Identity and Access Management. Global service

• Root account created by default, shouldn't be used or shared

• Users are people within your organization and can be grouped

• Groups only contain users, not other groups

- Users don't have to belong to a group, and users can belong to multiple groups.



IAM: Permissions :

Users or Groups can be assigned JSON documents called policies
• These policies define the permissions of the users
• In AWS you apply the least privilege principle: don't give more permissions than a user needs

IAM Policies inheritance :

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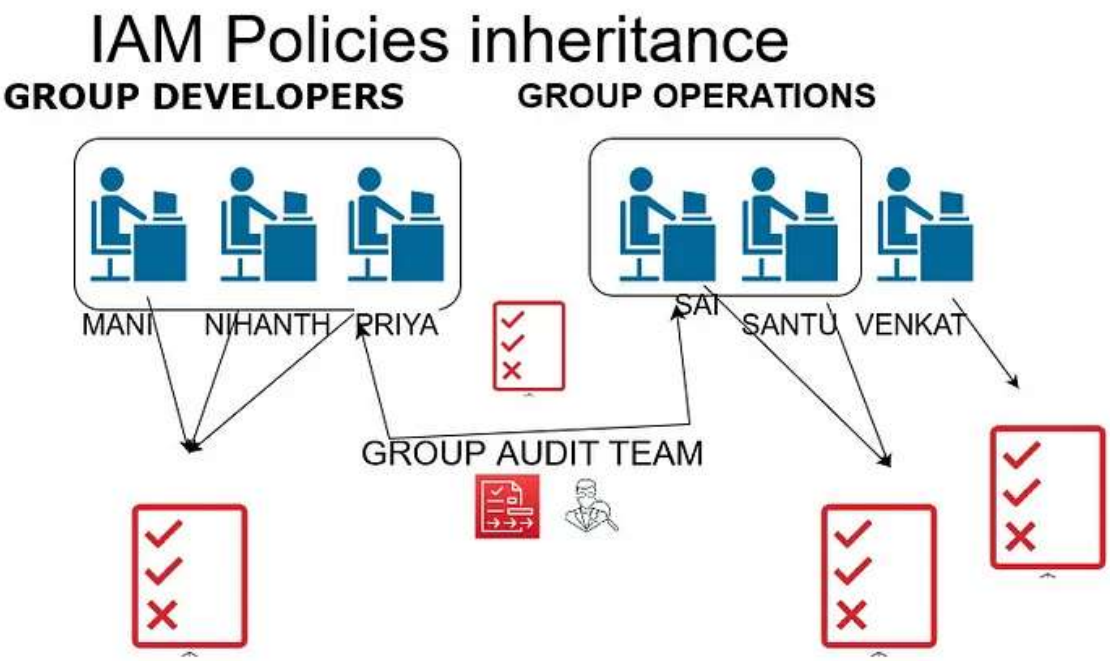
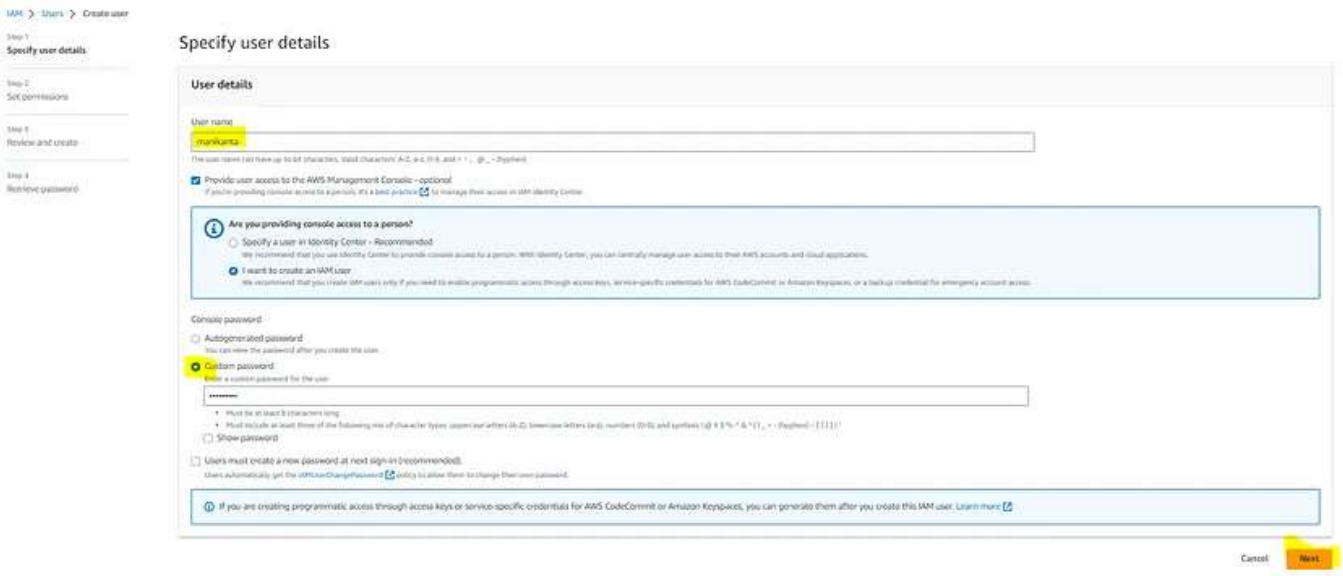
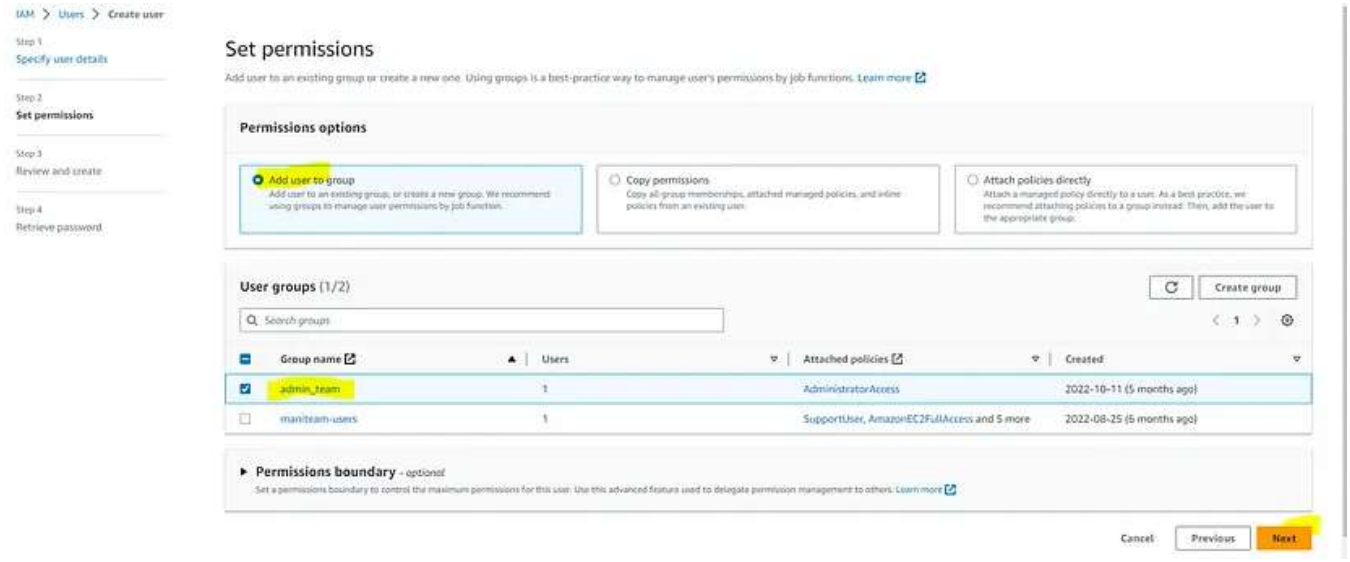


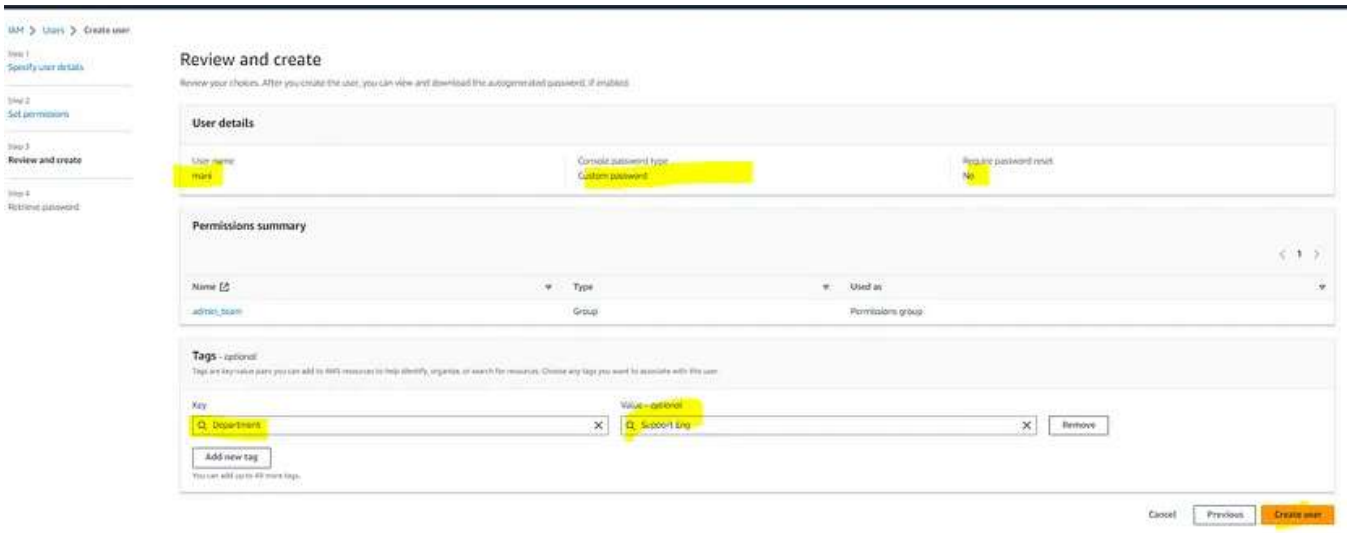
IAM Users & Groups Hands-On :

Go to https://us-east-1.console.aws.amazon.com/iamv2/home#/home

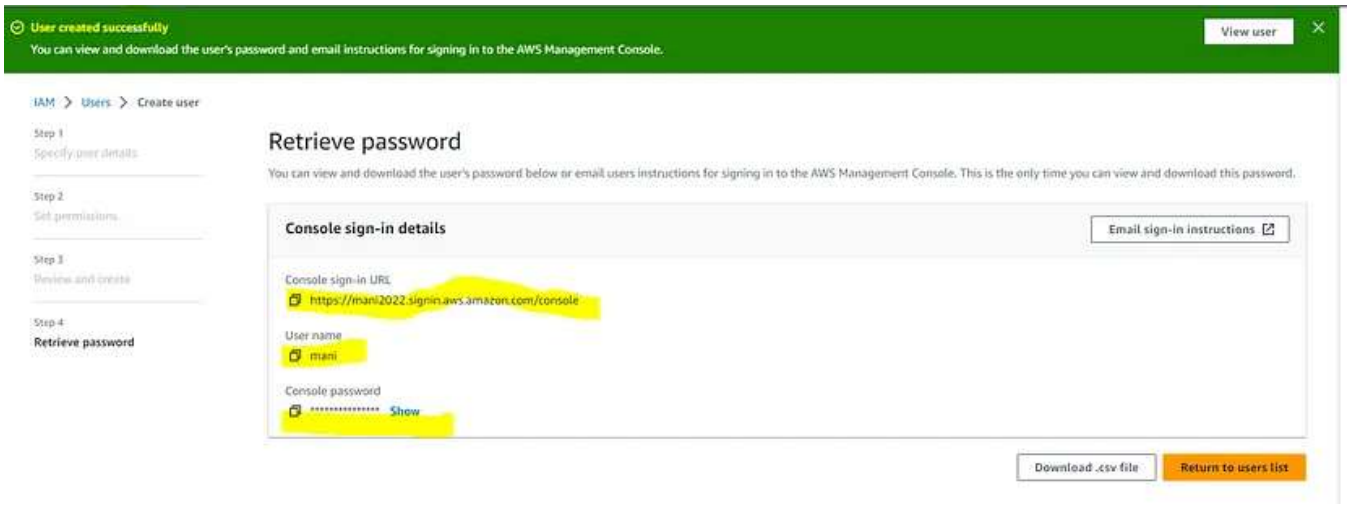
Add new I am a user



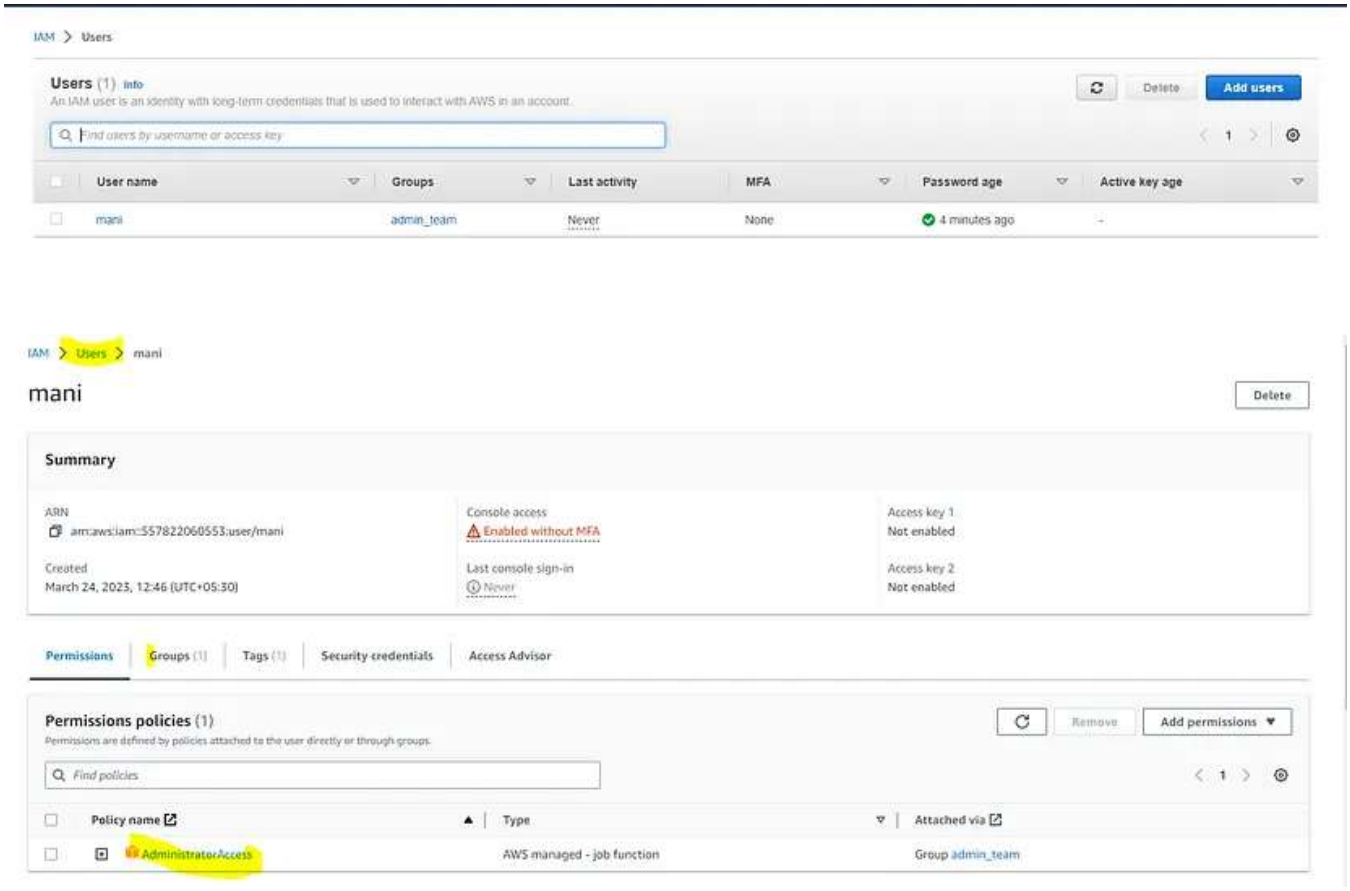




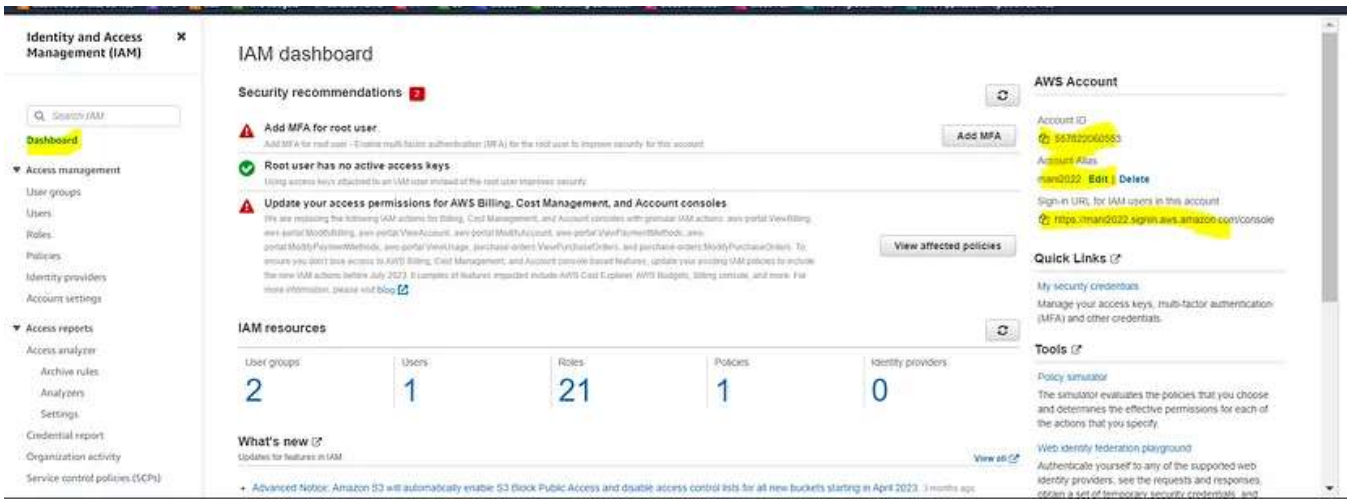
Click Create user



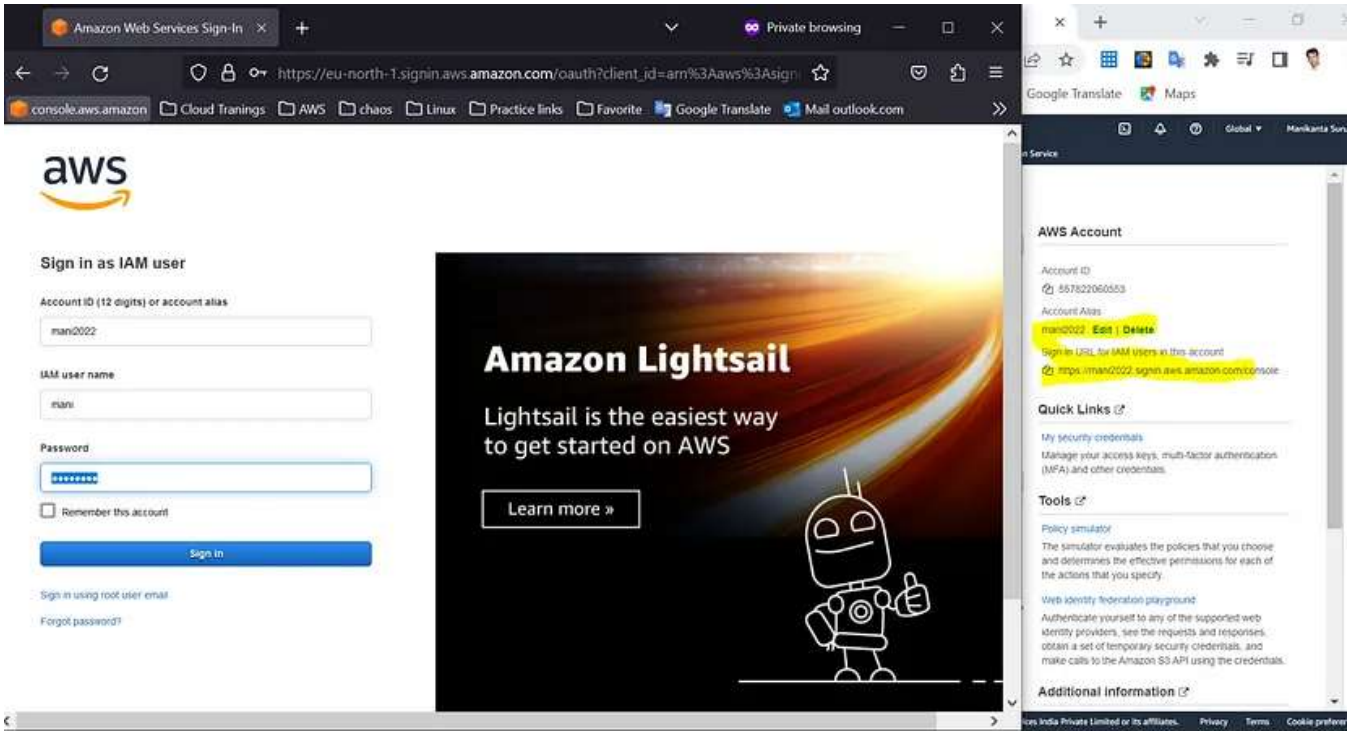
Click the user name will see permission policies added :



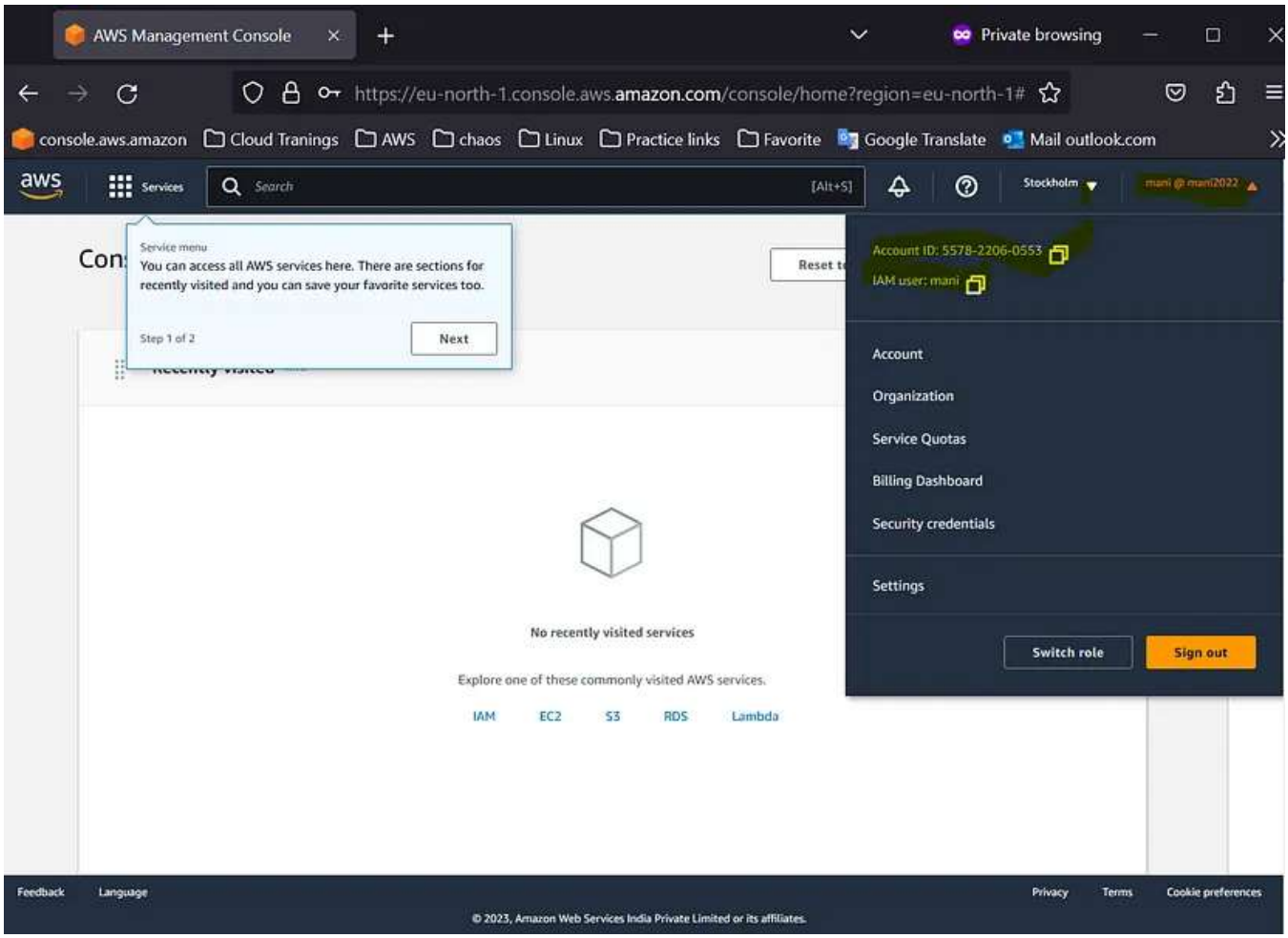
Now we can log in with the newly created mani user



Go with https://mani2022.signin.aws.amazon.com/console

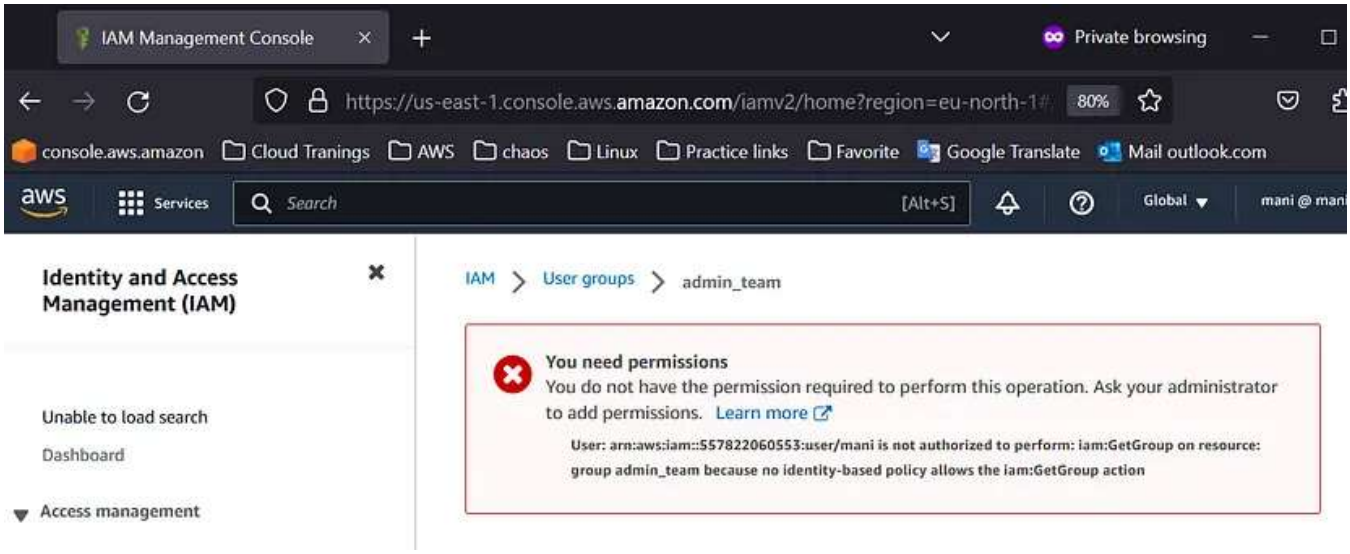


Login successfully with https://mani2022.signin.aws.amazon.com/console

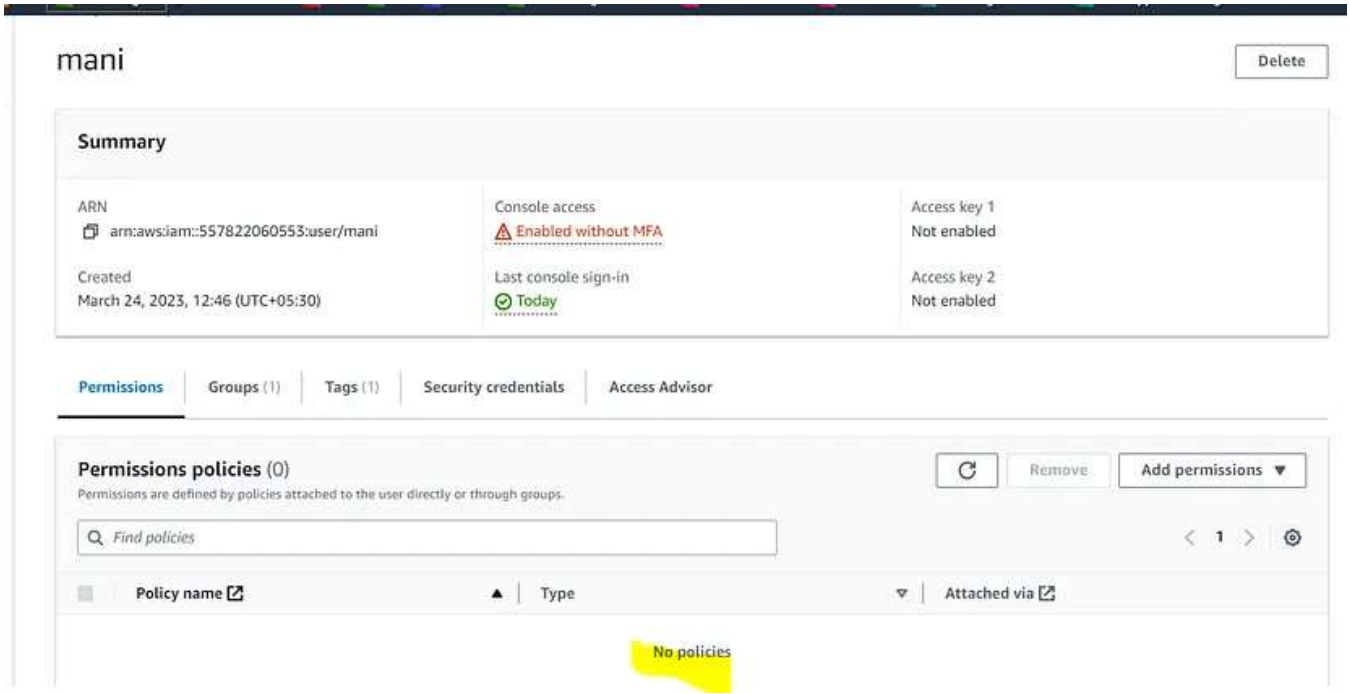


These policies define the permissions of the users :

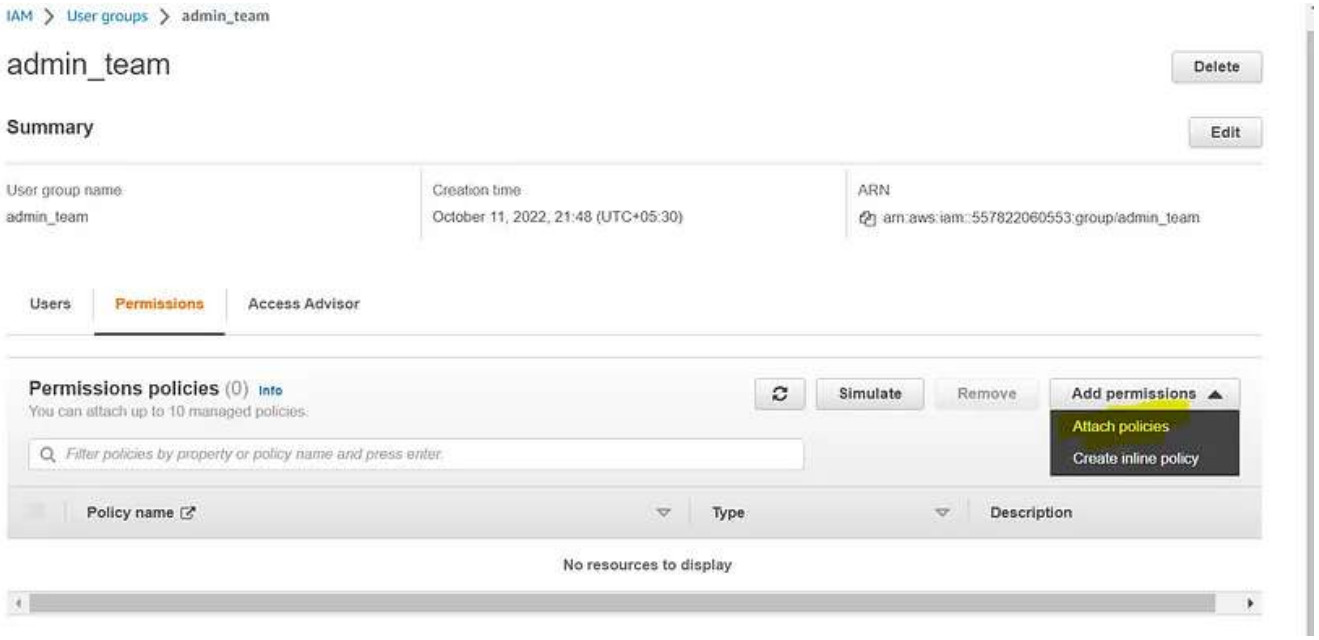
Example :



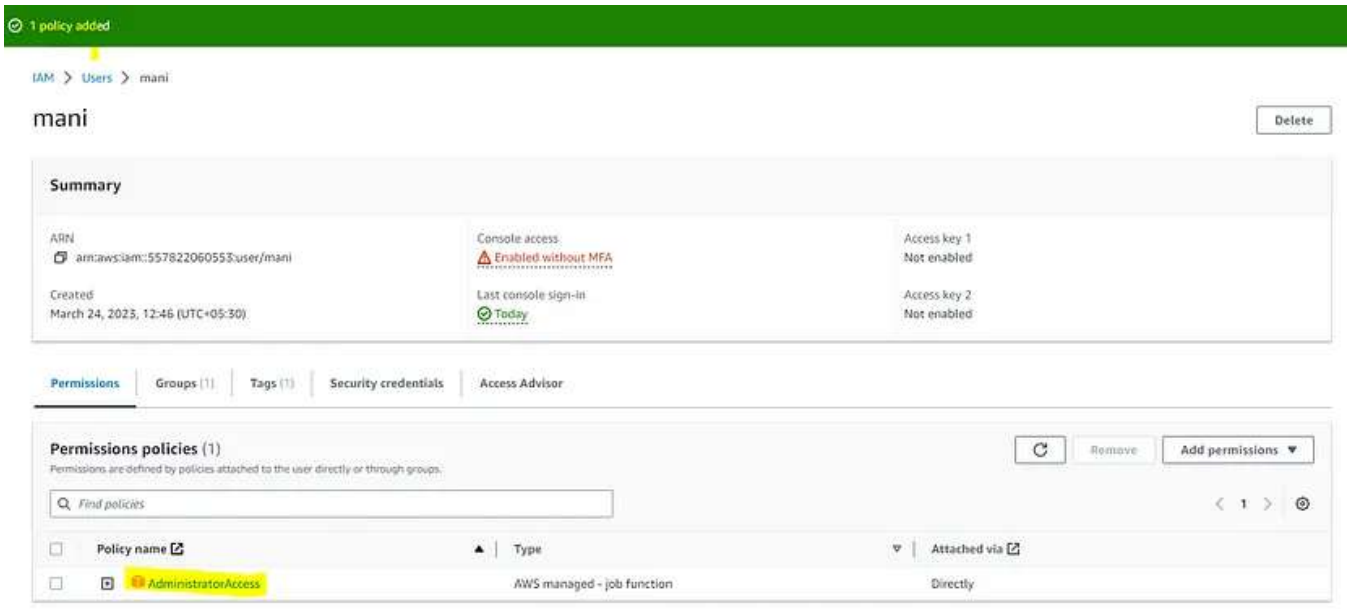
users don't have permission and please find below checking with a root user account.

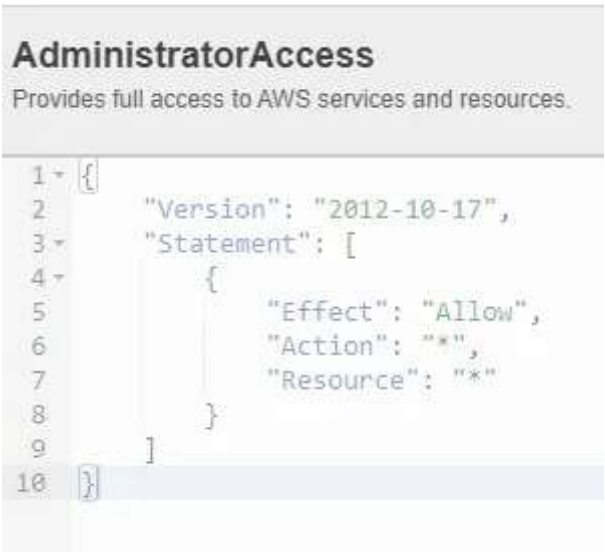


Now we need to attach the policy or create inline policy permissions

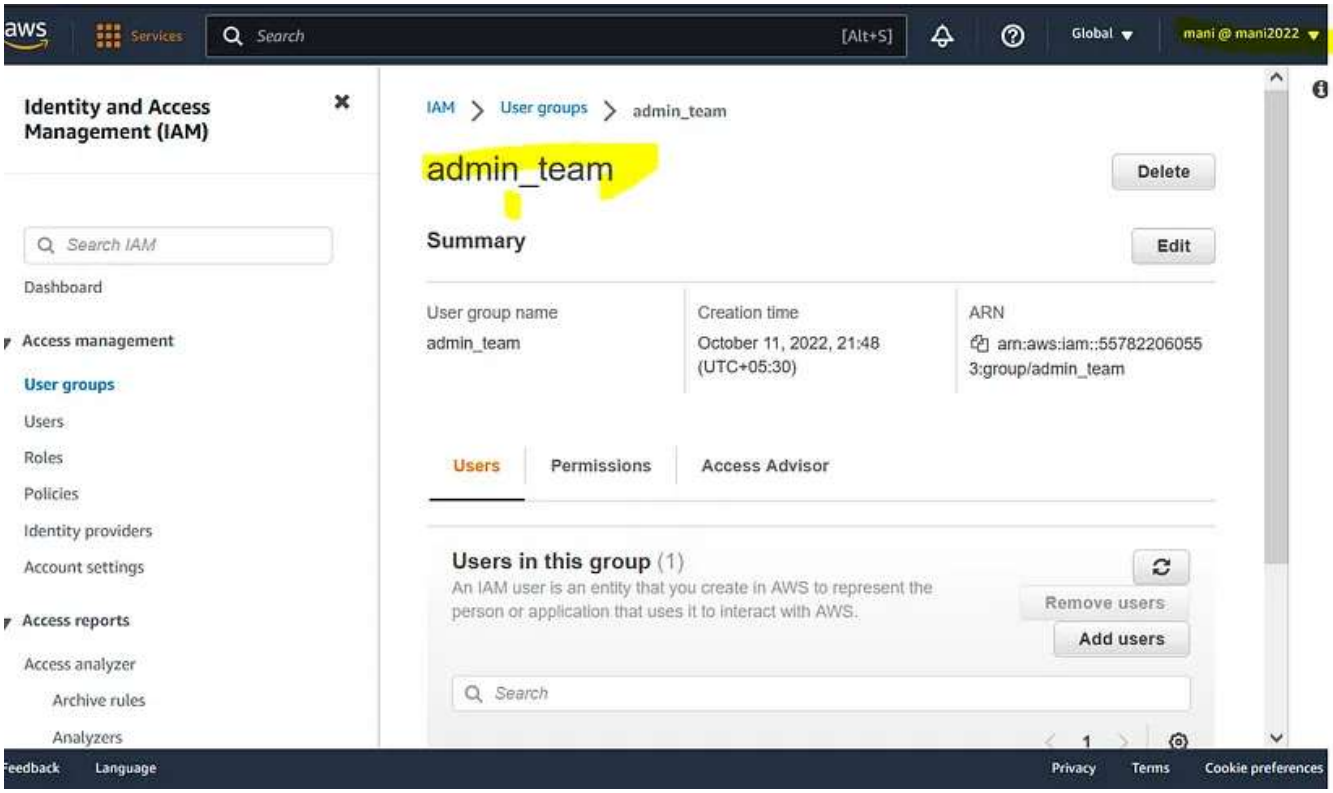


one policy was added to the user-added group with AdministratorAccess





Login with mani I am a user Reference the page able to see the page without permission issue



IAM — Password Policy

• Strong passwords = higher security for your account

• In AWS, you can setup a password policy:

• Set a minimum password length

• Require specific character types:

• including uppercase letters

• lowercase letters

• numbers

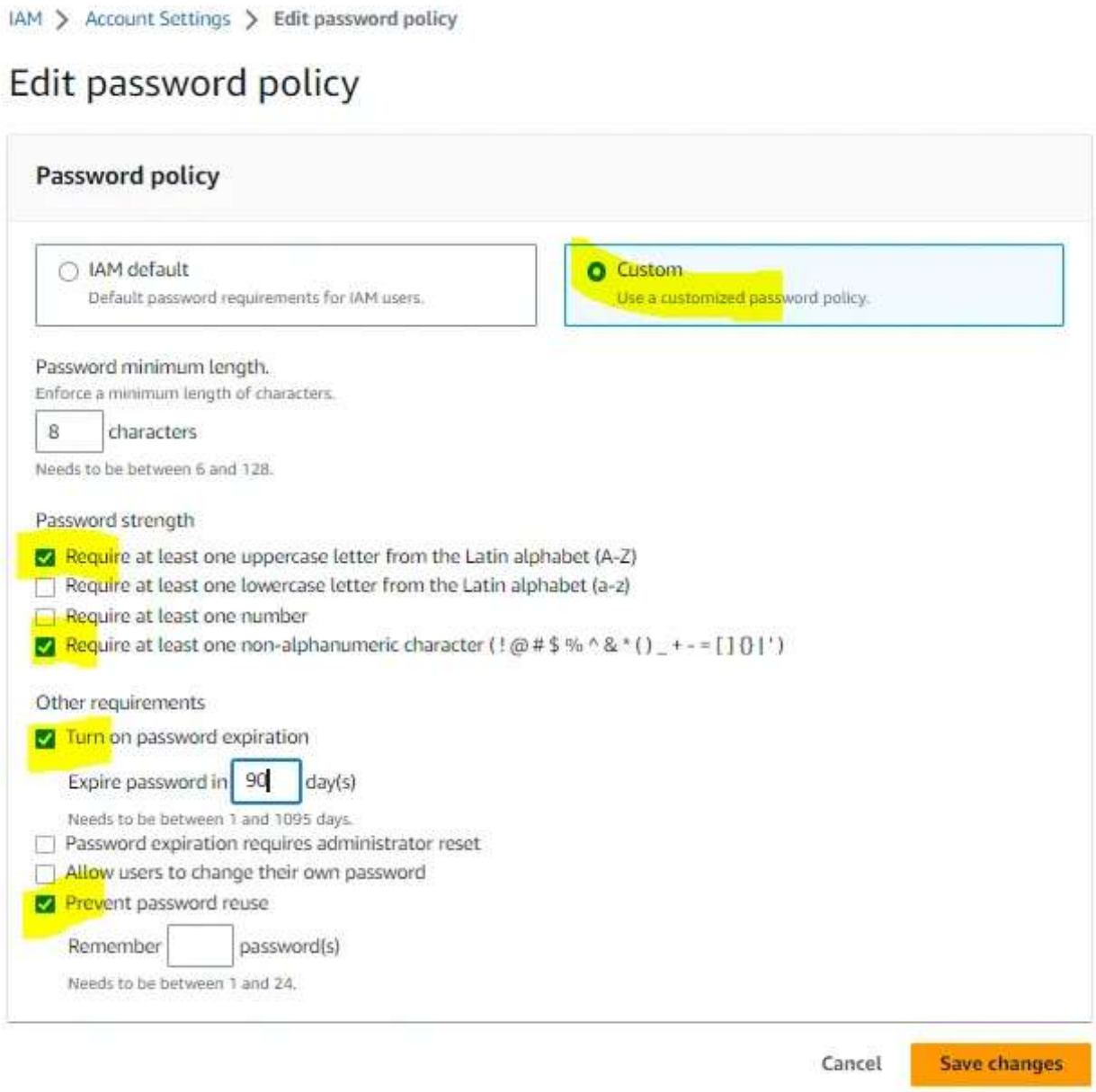
• non-alphanumeric characters

• Allow all IAM users to change their own passwords

• Require users to change their password after some time (password expiration)

- Prevent password re-use.

goto IAM >Account Settings> **Edit password policy** >



Multi-Factor Authentication — MFA

• Users have access to your account and can possibly change

configurations or delete resources in your AWS account

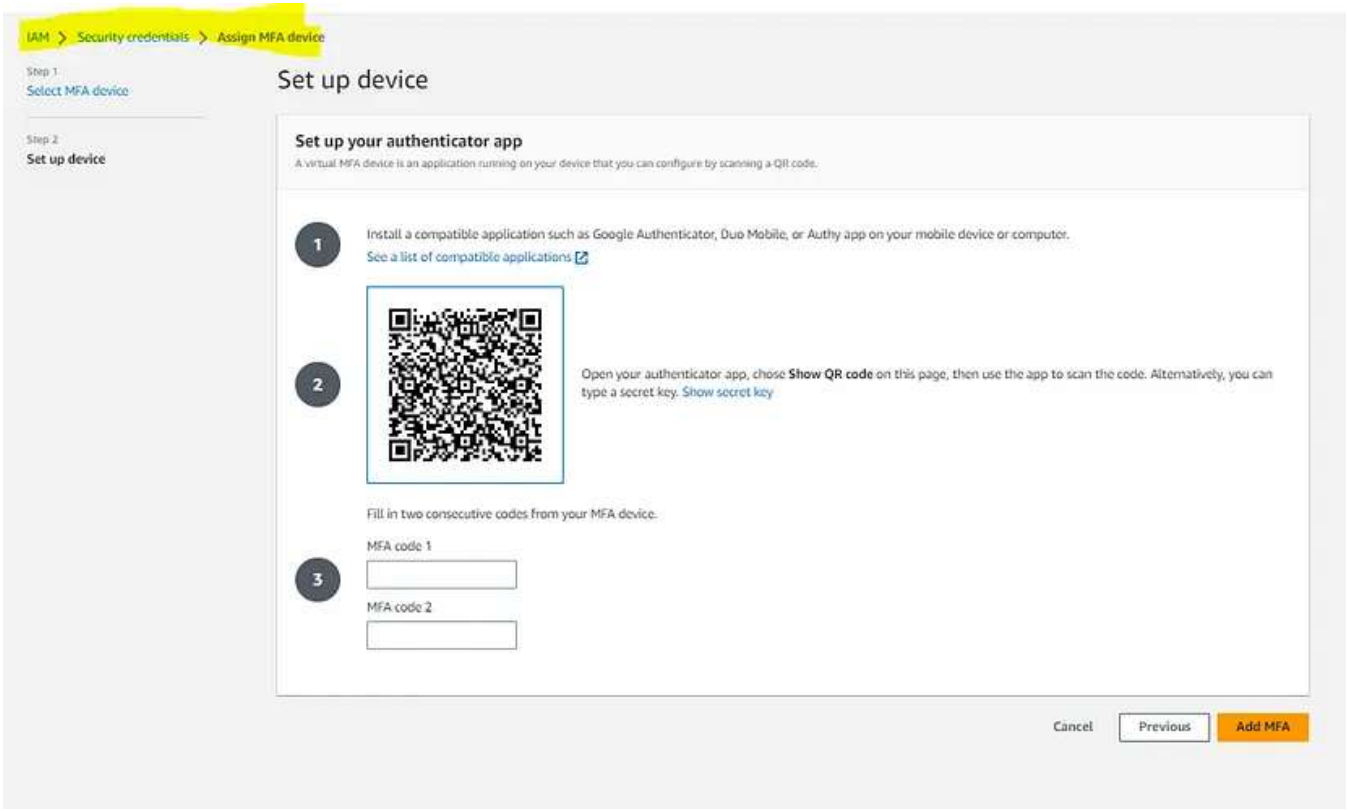
• You want to protect your Root Accounts and IAM users

• MFA = password you know + security device you own

- The main benefit of MFA:

if a password is stolen or hacked, the account is not compromised

goto I am **Dashboard** > **Add MFA>select assign MFA** >



How can users access AWS?

• To access AWS, you have three options:

• AWS Management Console (protected by password + MFA)

• AWS Command Line Interface (CLI): protected by access keys

• AWS Software Developer Kit (SDK) — for code: protected by access keys

• Access Keys are generated through the AWS Console

• Users manage their own access keys

• Access Keys are secret, just like a password. Don't share them

• Access Key ID ~= username

• Secret Access Key ~= password

What's the AWS CLI?

• A tool that enables you to interact with AWS services using commands in

your command-line shell

• Direct access to the public APIs of AWS services

• You can develop scripts to manage your resources

• It's open-source https://github.com/aws/aws-cli

- Alternative to using AWS Management Console

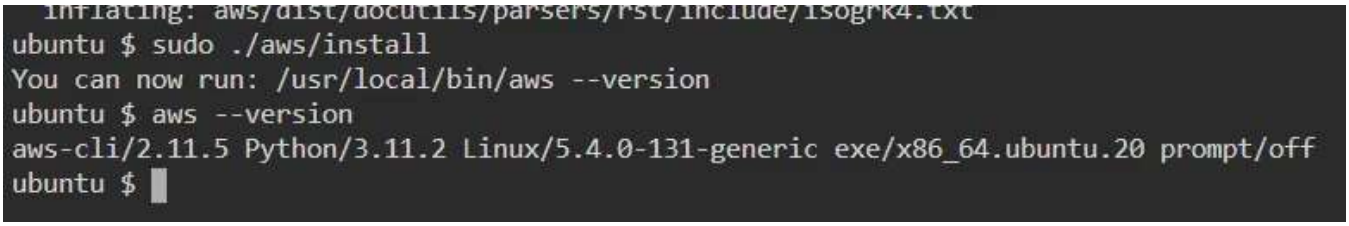
Installing or updating the latest version of the AWS CLI

This topic describes how to install or update the latest release of the AWS Command Line Interface (AWS CLI) on...

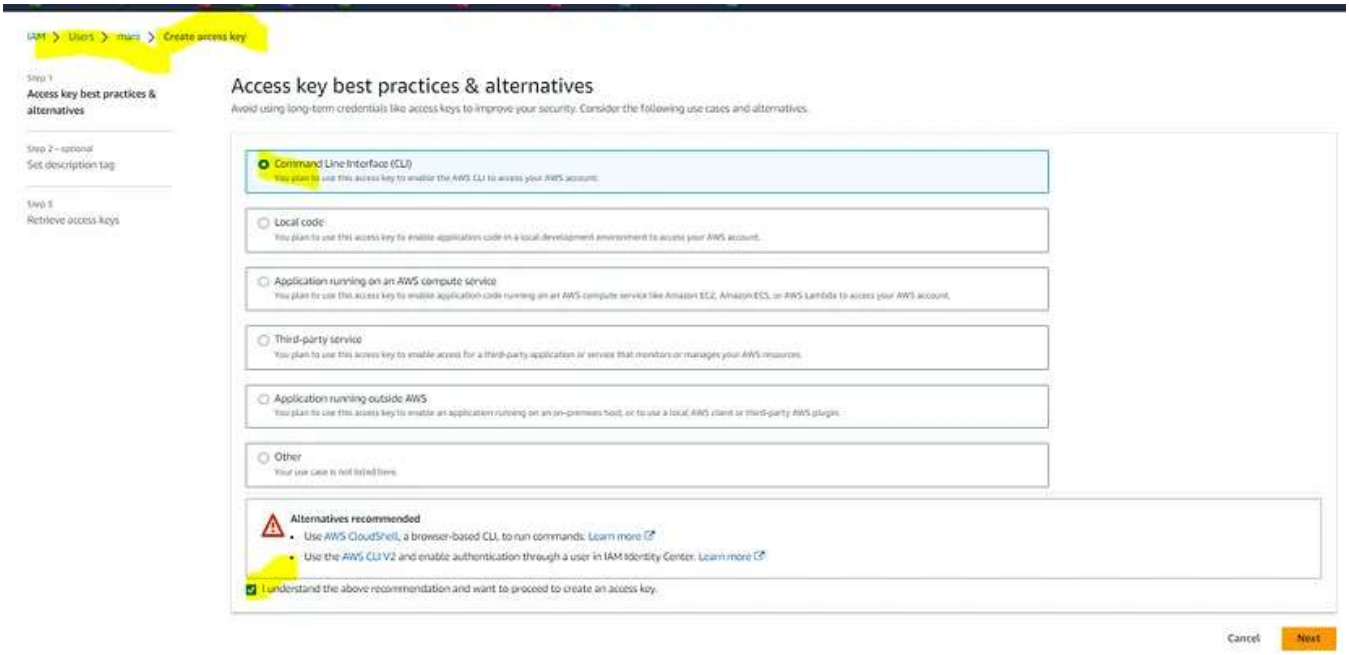
docs.aws.amazon.com

AWS CLI Hands-on and please follow the above link to which type of os use like windows or linux.

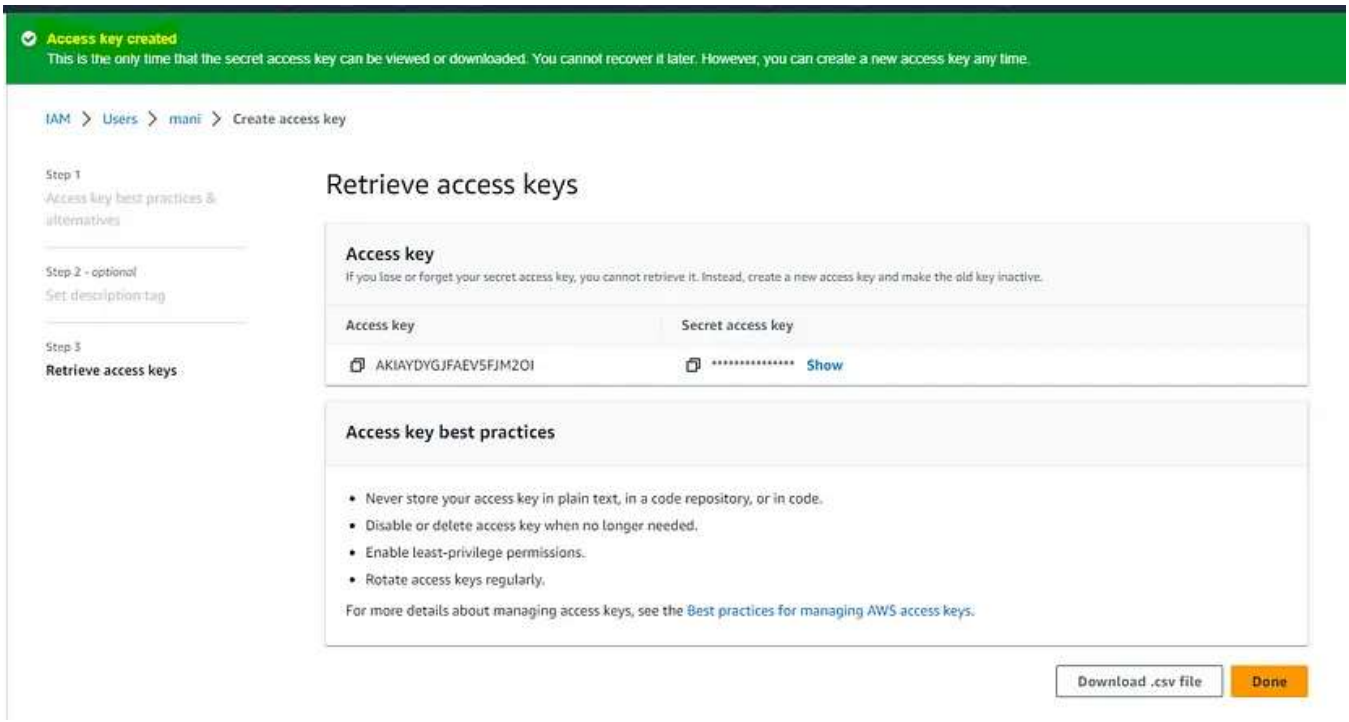
i am using Linux vm



IAM > Users >**ani >Access keys >Create access key**

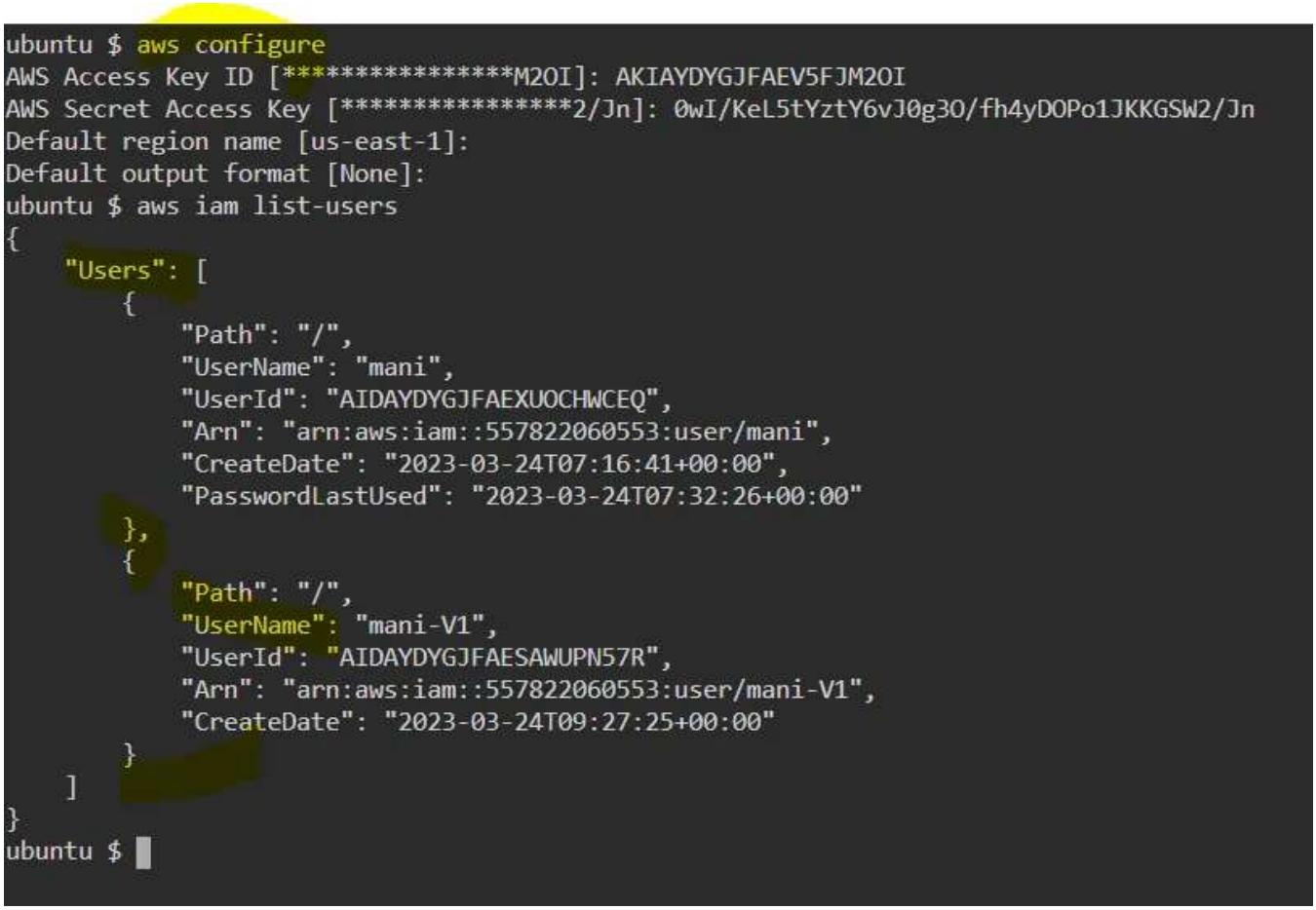


Access key created and download



So now my AWS CLI is configured so we can have a look at how it works.

We can do aws iam list-users and press Enter and this will list all the users in my accounts. And as we can see.



Sources: AWS.

That's it, thank you for reading.

https://github.com/gefkkd/AWS_100-Days_Challenge.git

👉 In case you would like to continue the discussion, you can always reach out to me on Twitter or on LinkedIn for professional networking, if you feel like following me on GitHub you can also do that.

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AWS Cloud Computing Learning Security Careers