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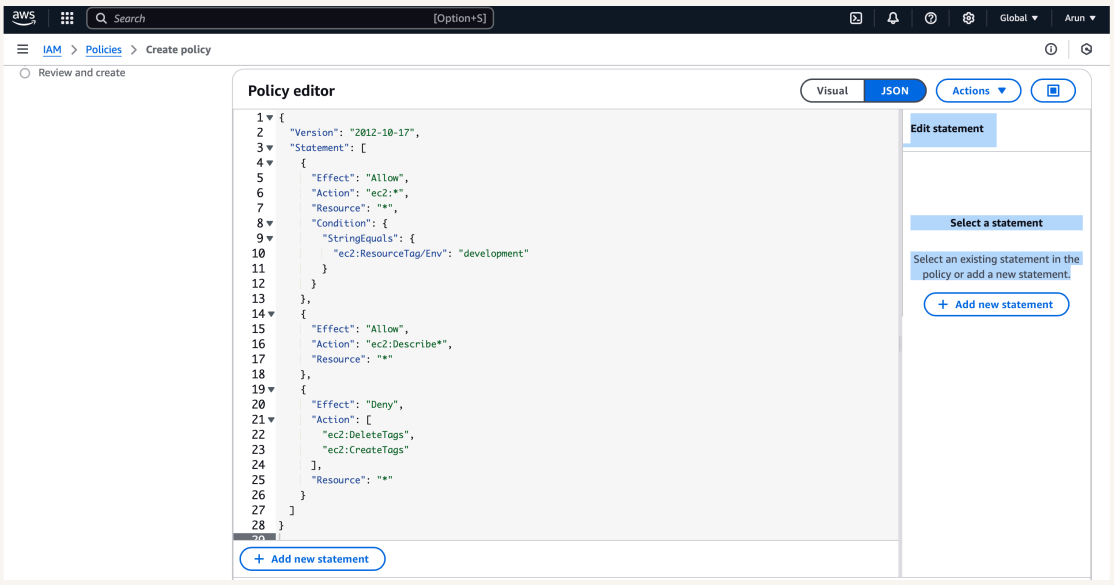
Cloud Security with AWS IAM

Arun Kumar



Arun Kumar
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Introducing today's project!

What is AWS IAM?

IAM users (Identity and Access Management users) are individual identities created within AWS IAM (Identity and Access Management) that represent a person or service interacting with your AWS resources.

How I'm using AWS IAM in this project

creatd the iam user and created group policy and add new user to the user group

One thing I didn't expect...

the sudden paid sumilator

This project took me...

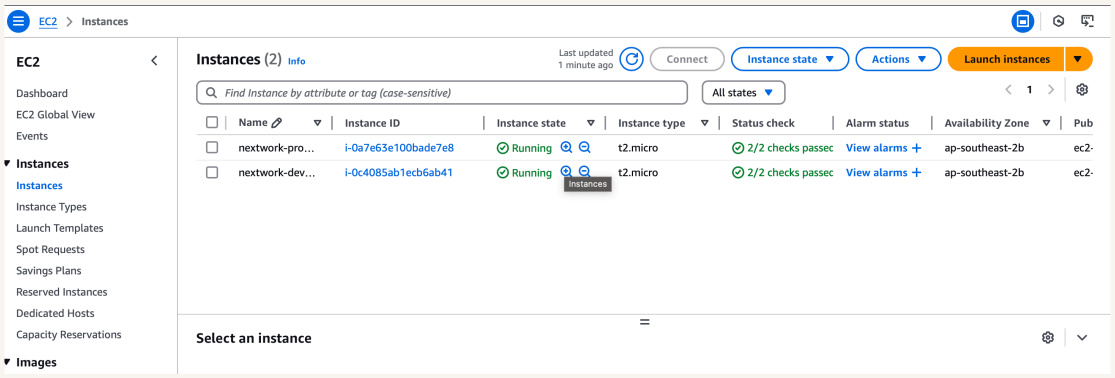
i wasted because i felt bore so i take like 50mins

Arun Kumar
NextWork Student

Tags

tag are the shortcuts to the resources where they make things easer to access them when we needed in this the tages are Env production and Env development so these can tag to the file

In this case, we're creating a tag called "Env" with a value of "production" or "development" to label the instances used in production vs development environments.



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IAM Policies

An IAM policy is a rule for who can do what with your AWS resources. It's all about giving permissions to IAM users, groups, or roles, saying what they can or can't do on certain resources, and when those rules kick in.

The policy I set up

I've set up a policy using'... json

This policy allows some actions (like starting, stopping, and describing EC2 instances) for instances tagged with "Env = development" while denying the ability to create or delete tags for all instances.

When creating a JSON policy, you have to define its Effect, Action and Resource.

effect it means it can have two actions either allow or deny action this give list of options to allow or deny in this "ec2:*" means all actions that you could possibly take on EC2 instances are allowed Resource '*' means all resource in the scope

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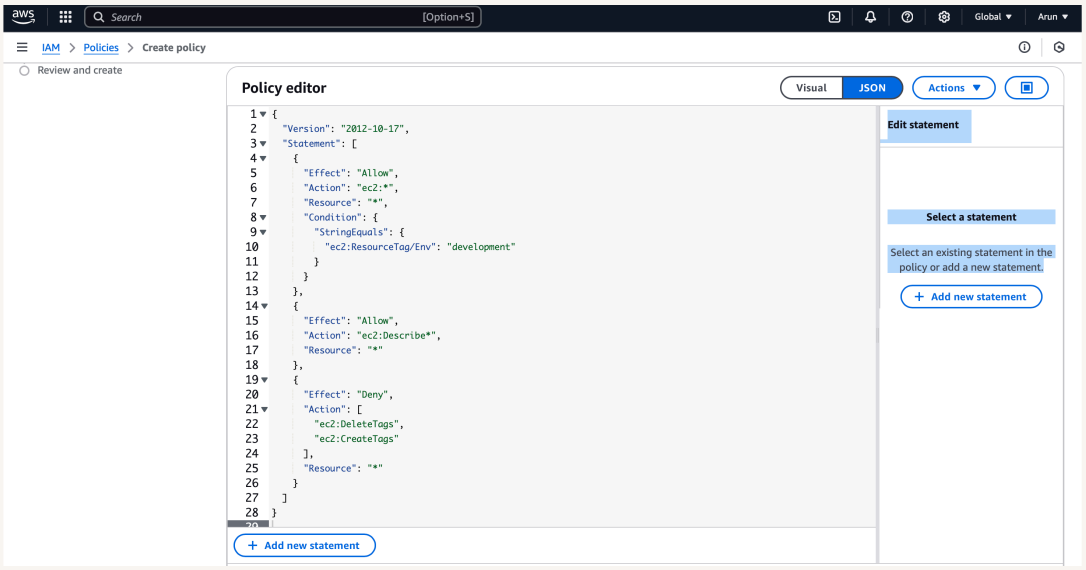
My JSON Policy



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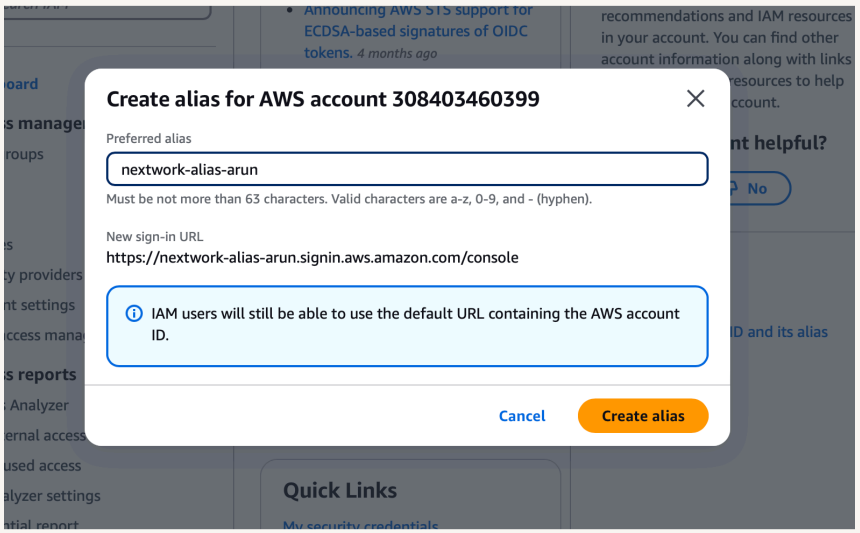
Account Alias

An Account Alias is a friendly name for your AWS account that you can use instead of your account ID (which is usually a bunch of digits) to sign in to the AWS Management Console.

'Creating an account alias took me less then 30 seconds ... Now, my new AWS console sign-in URL is'...nextwork-alias-arun



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IAM Users and User Groups

Users

IAM users (Identity and Access Management users) are individual identities created within AWS IAM (Identity and Access Management) that represent a person or service interacting with your AWS resources.

User Groups

An IAM user group is a collection/folder of IAM users. It allows you to manage permissions for all the users in your group at the same time by attaching policies to the group rather than individual users.

i attached the policy i created to the user group it make easer to update allows you to manage permissions for all the users in your group at the same time by attaching policies to th

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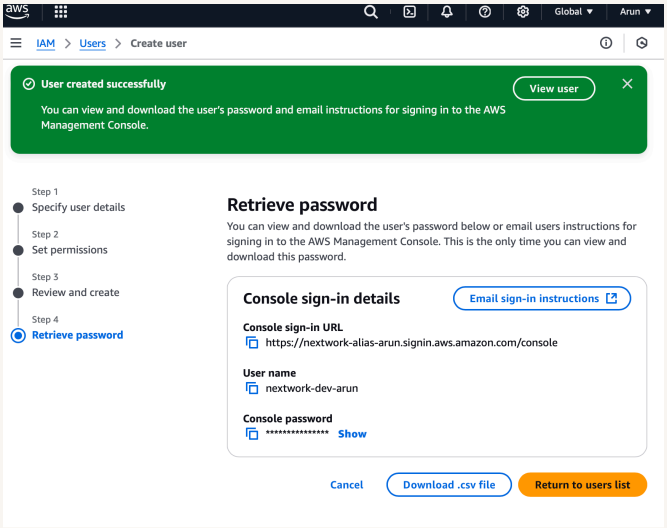
Logging in as an IAM User

1. Email or Secure Messaging the Credentials Manually 2. Download the .csv File

As a new user, you'll notice that some of your dashboard panels are showing Access denied already. As a new user, the AWS console will treat you as someone that is starting from 0 again.



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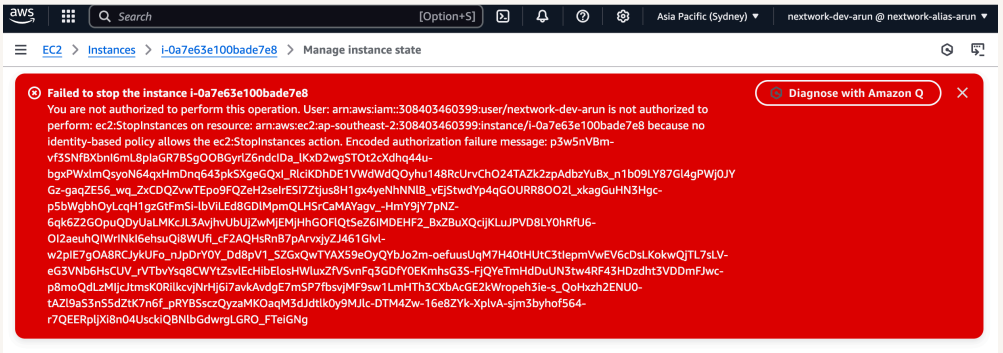
Testing IAM Policies

'I tested my JSON IAM policy by trying to stop the production and development instances so i have no access to stop the production instances

Stopping the production instance

'When I tried to stop the production instance... it pops up a warning bannewr This was because i dont have access to it



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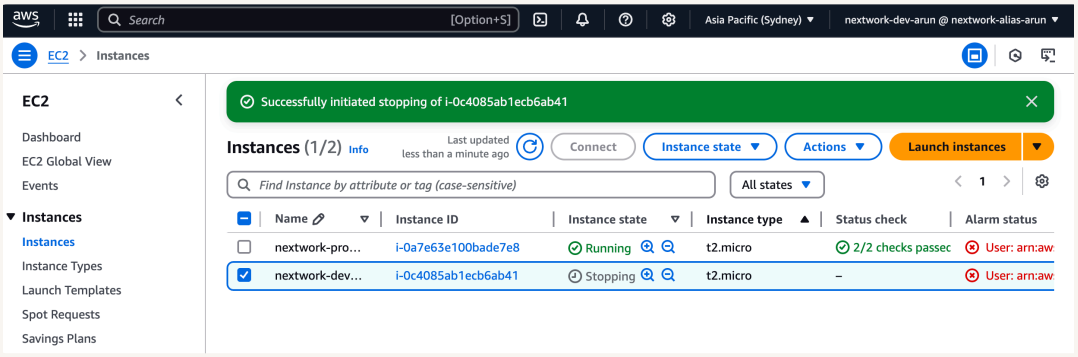
Testing IAM Policies

Stopping the development instance

when I tried to stop the development instance itwas successfully deployed This was because i have the complete access to the development instance



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