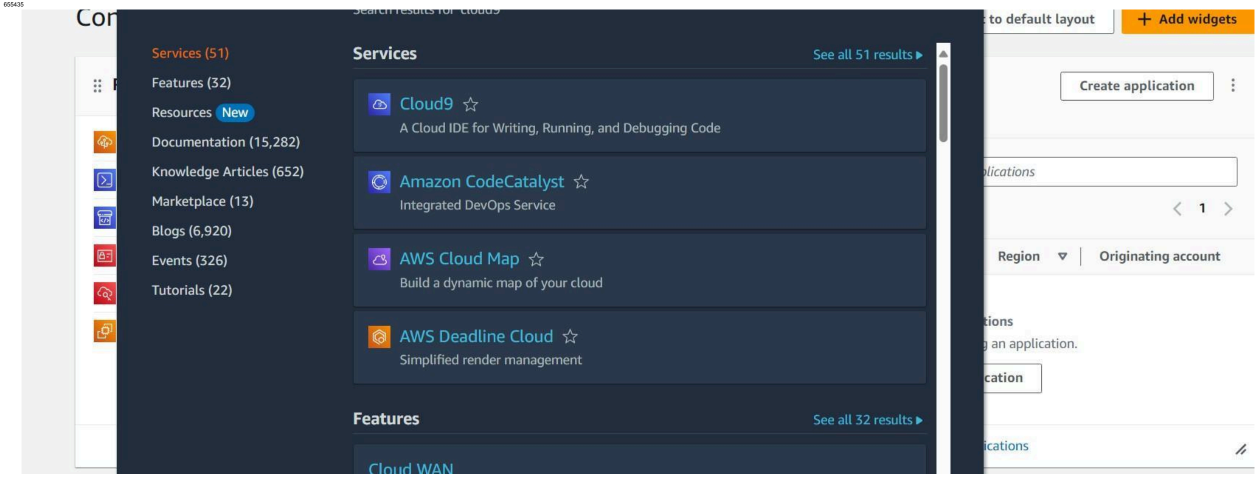
Step 1: Set up Cloud9 environment.

1) Search Cloud9 in the services tab and open it



Services (51)
Features (32)
Resources New
Documentation (15,282)
Knowledge Articles (652)
Marketplace (13)
Blogs (6,920)
Events (326)
Tutorials (22)

Services — See all 51 results ▸

Cloud9 ☆
A Cloud IDE for Writing, Running, and Debugging Code

Amazon CodeCatalyst ☆
Integrated DevOps Service

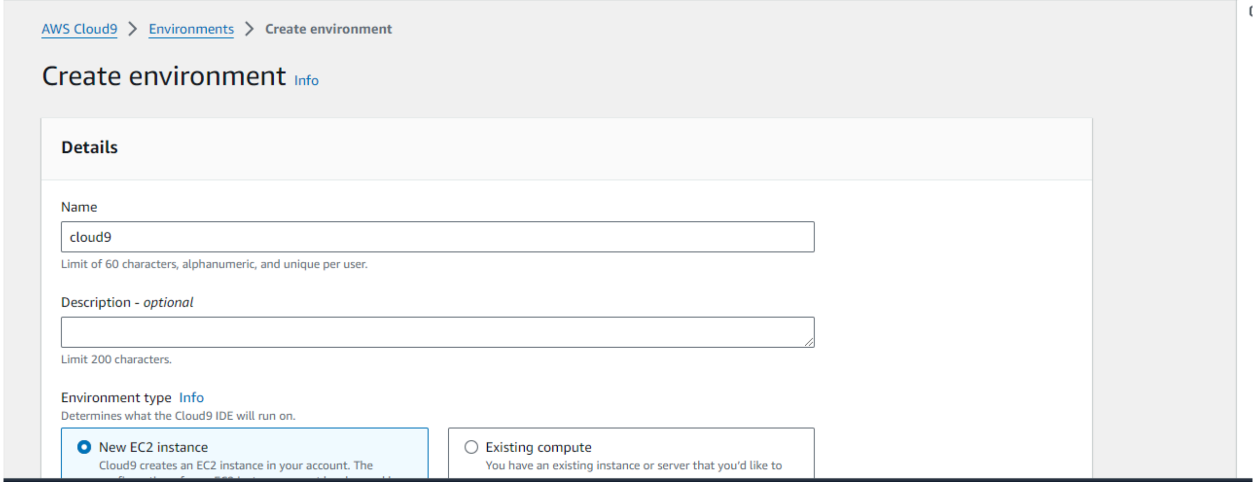
AWS Cloud Map ☆
Build a dynamic map of your cloud

AWS Deadline Cloud ☆
Simplified render management

Features — See all 32 results ▸

Cloud WAN

2) Click on Create Environment.
→Give a name to your Cloud9 Environment. You can add a description if needed.
→Select the option new EC2 instance if you do not have one ready for the environment. Give the specifications of that EC2 instance ahead
→On the AWS Academy account, if we select AWS System Manager(SSM) in Network settings, it gives and error as the account does not have permissions to use the setting. So we select Secure Shell (SSH). After that click on Create



AWS Cloud9 > Environments > Create environment

Create environment Info

Details

Name
cloud9
Limit of 60 characters, alphanumeric, and unique per user.

Description - *optional*

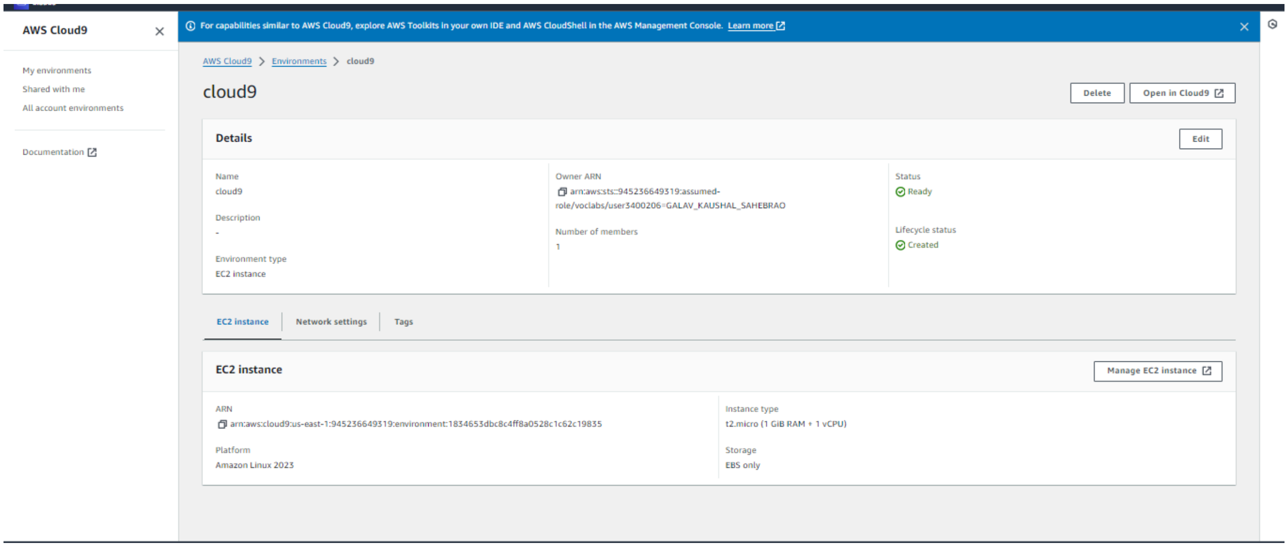
Limit 200 characters.

Environment type Info
Determines what the Cloud9 IDE will run on.

● New EC2 instance
Cloud9 creates an EC2 instance in your account. The

○ Existing compute
You have an existing instance or server that you'd like to

.



For capabilities similar to AWS Cloud9, explore AWS Toolkits in your own IDE and AWS CloudShell in the AWS Management Console. Learn more

cloud9

Details

Name
cloud9

Description
-

Environment type
EC2 instance

Owner ARN
arn:aws:sts::945236649319:assumed-role/voclabs/user3400206=GALAV_KAUSHAL_SAHEBRAO

Number of members
1

Status
Ready

Lifecycle status
Created

EC2 instance

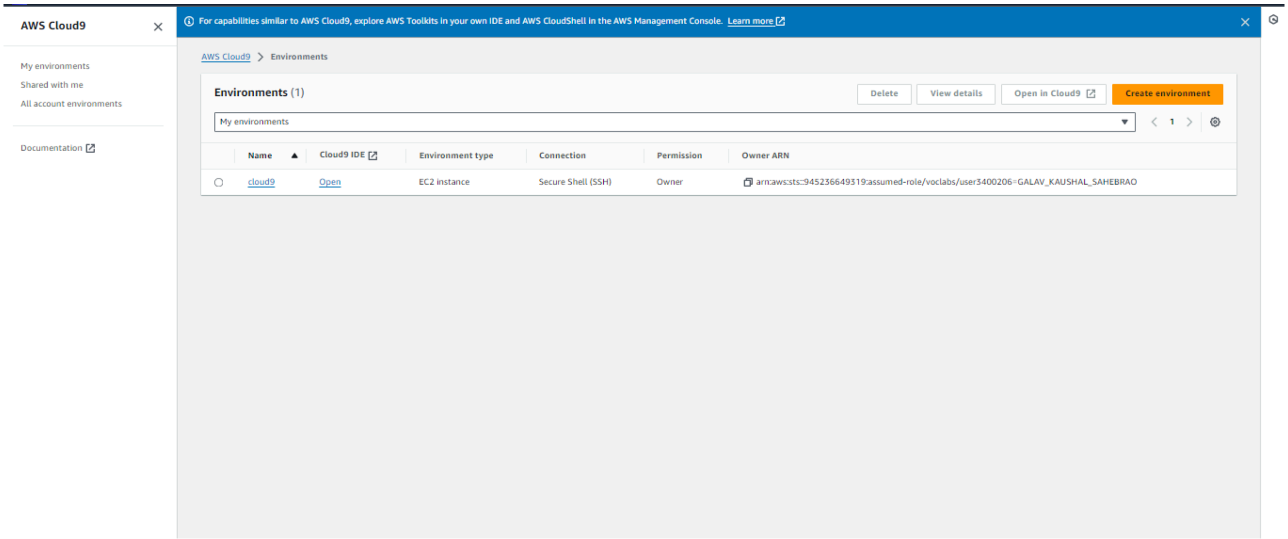
ARN
arn:aws:cloud9:us-east-1:945236649319:environment:1834653dbc8c4ff8a0528c1c62c19835

Platform
Amazon Linux 2023

Instance type
t2.micro (1 GiB RAM + 1 vCPU)

Storage
EBS only

6) The environment is being created.



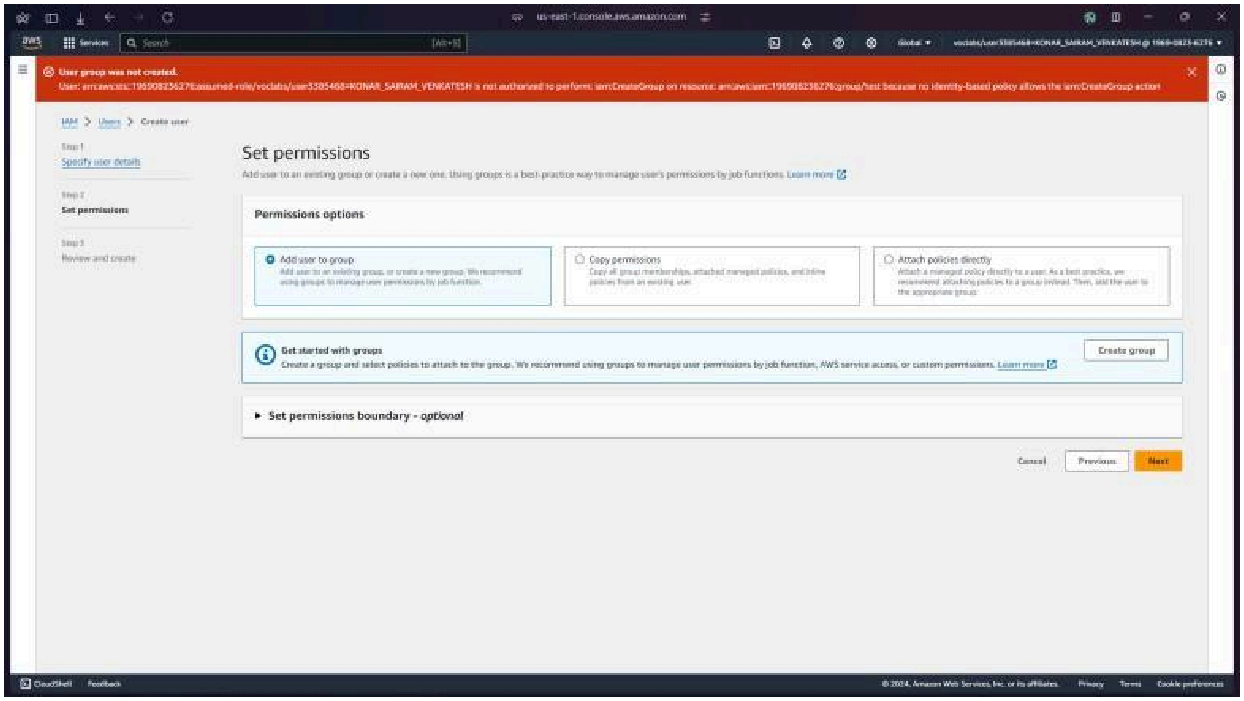
For capabilities similar to AWS Cloud9, explore AWS Toolkits in your own IDE and AWS CloudShell in the AWS Management Console. Learn more

Environments (1)

	Name ▲	Cloud9 IDE	Environment type	Connection	Permission	Owner ARN
○	cloud9	Open	EC2 instance	Secure Shell (SSH)	Owner	arn:aws:sts::945236649319:assumed-role/voclabs/user3400206=GALAV_KAUSHAL_SAHEBRAO

Step 2: Creating IAM user.

When we go to add user to a group, the AWS Academy account throws an error as we do not have the permissions to create a group. So we have to use our personal AWS account for this part. ‘



User group was not created.
User: arn:aws:sts::196908236276:assumed-role/voclabs/user3385468=KONAR_SAIRAM_VENKATESH is not authorised to perform: iam:CreateGroup on resource: arn:aws:iam::196908236276:group/test because no identity-based policy allows the iam:CreateGroup action

IAM > Users > Create user

Step 1
Specify user details

Step 2
Set permissions

Step 3
Review and create

Set permissions

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

Permissions options

● Add user to group
Add user to an existing group, or create a new group. We recommend using groups to manage user permissions by job function.

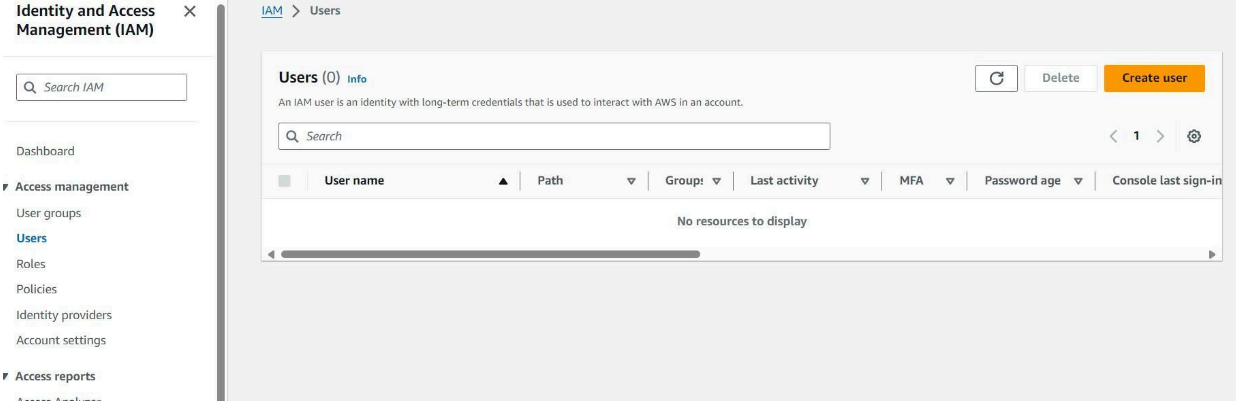
○ Copy permissions
Copy all group memberships, attached managed policies, and inline policies from an existing user.

○ Attach policies directly
Attach a managed policy directly to a user. As a best practice, we recommend attaching policies to a group instead. Then, add the user to the appropriate group.

Get started with groups
Create a group and select policies to attach to the group. We recommend using groups to manage user permissions by job function, AWS service access, or custom permissions. Learn more

Create group
▸ Set permissions boundary - optional
Cancel
Previous
Next
us-east-1.console.aws.amazon.com
Services
Search
[Alt+S]
Global
voclabs/user3385468=KONAR_SAIRAM_VENKATESH @ 1969-0823-6276
CloudShell
Feedback
© 2024, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences

1) Search IAM on the services search bar and open it. Click on Create User.

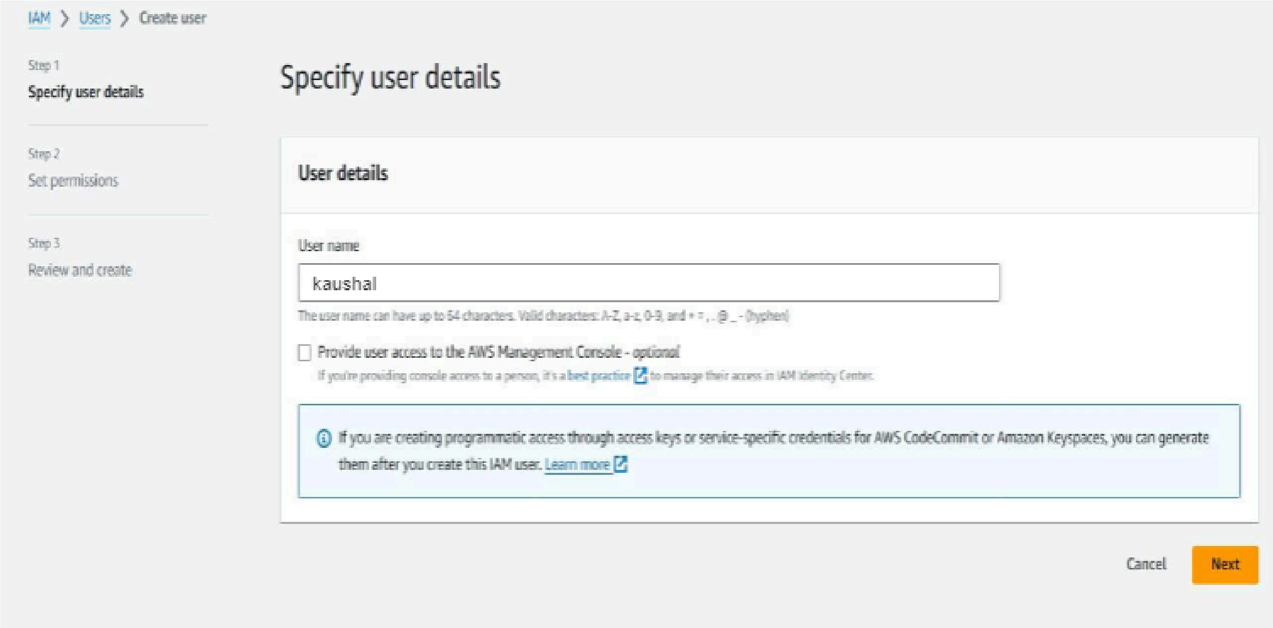


Users (0) Info

An IAM user is an identity with long-term credentials that is used to interact with AWS in an account.

	User name	Path	Groups	Last activity	MFA	Password age	Console last sign-in
No resources to display							

2) Give a username to your user and click Next.



Specify user details

User details

User name

kaushal

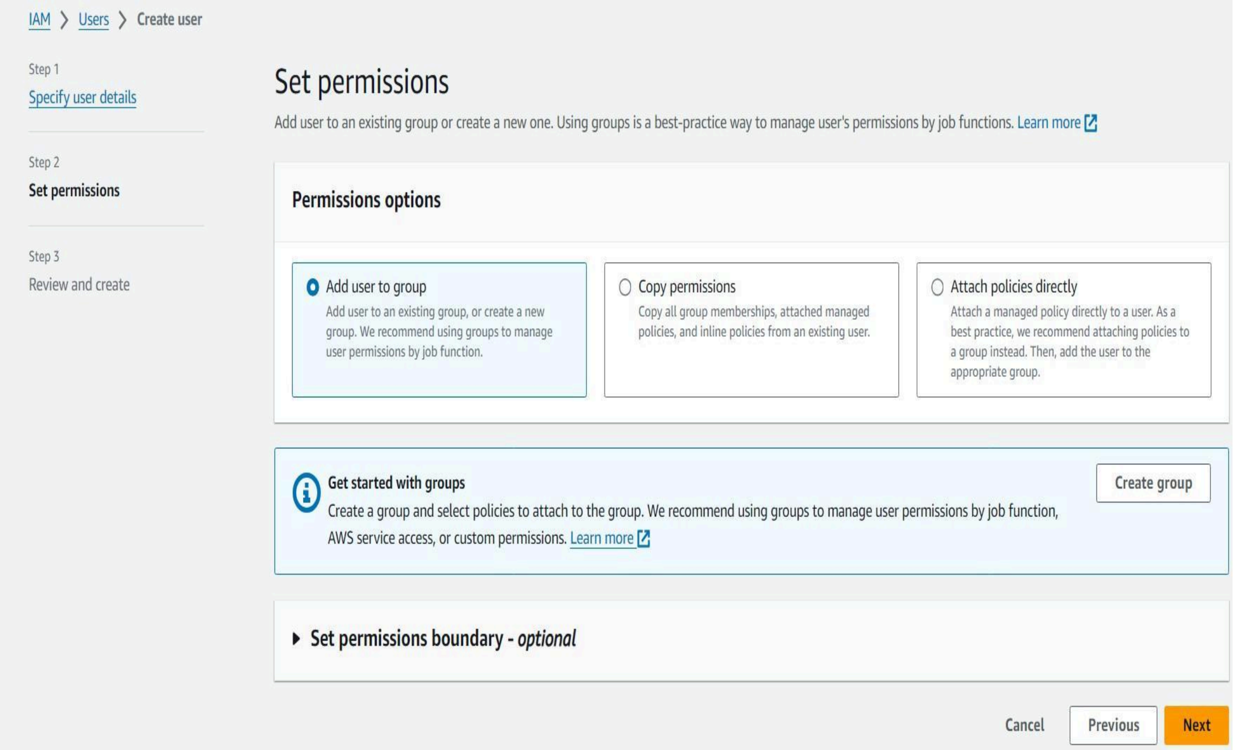
The user name can have up to 64 characters. Valid characters: A-Z, a-z, 0-9, and + = , . @ _ - (hyphen)

□ Provide user access to the AWS Management Console - *optional*

If you're providing console access to a person, it's a best practice to manage their access in IAM Identity Center.

If you are creating programmatic access through access keys or service-specific credentials for AWS CodeCommit or Amazon Keyspaces, you can generate them after you create this IAM user. Learn more

3) Select add User to Group. If there are no user groups on your accounts, you will have to create one. Click on Create Group.



Set permissions

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

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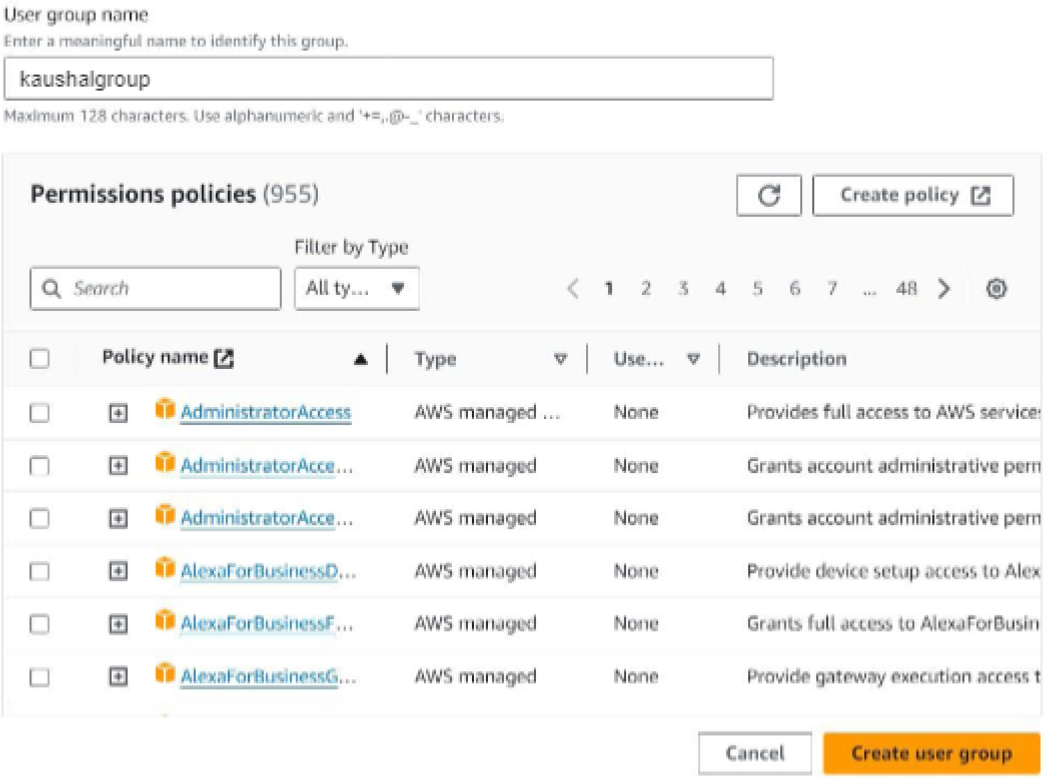
Get started with groups
Create a group and select policies to attach to the group. We recommend using groups to manage user permissions by job function, AWS service access, or custom permissions. Learn more

▸ Set permissions boundary - *optional*

4) Give a name to your user group. Then click on Create User Group.



User group name

Enter a meaningful name to identify this group.

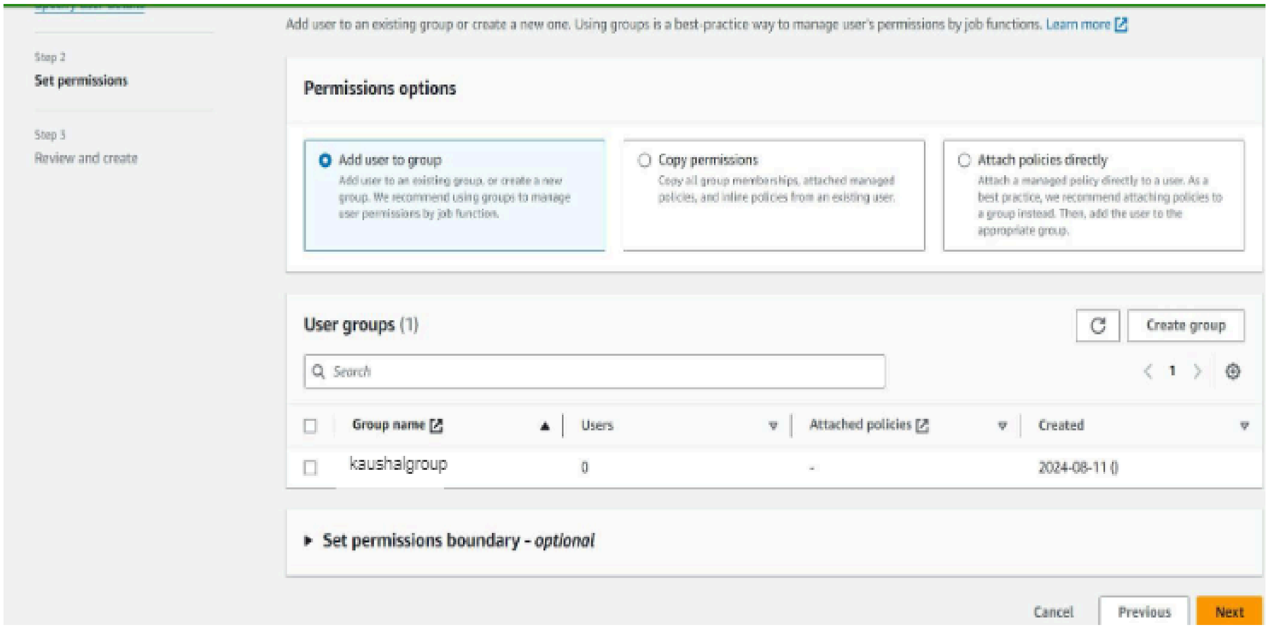
kaushalgroup

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

Permissions policies (955)

□	Policy name	Type	Use...	Description
□	AdministratorAccess	AWS managed ...	None	Provides full access to AWS service
□	AdministratorAcce...	AWS managed	None	Grants account administrative perm
□	AdministratorAcce...	AWS managed	None	Grants account administrative perm
□	AlexaForBusinessD...	AWS managed	None	Provide device setup access to Alex
□	AlexaForBusinessF...	AWS managed	None	Grants full access to AlexaForBusin
□	AlexaForBusinessG...	AWS managed	None	Provide gateway execution access t

5) The group is created and shown under the groups area, select the group by clicking on the checkbox. Then click Next.



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

Permissions options

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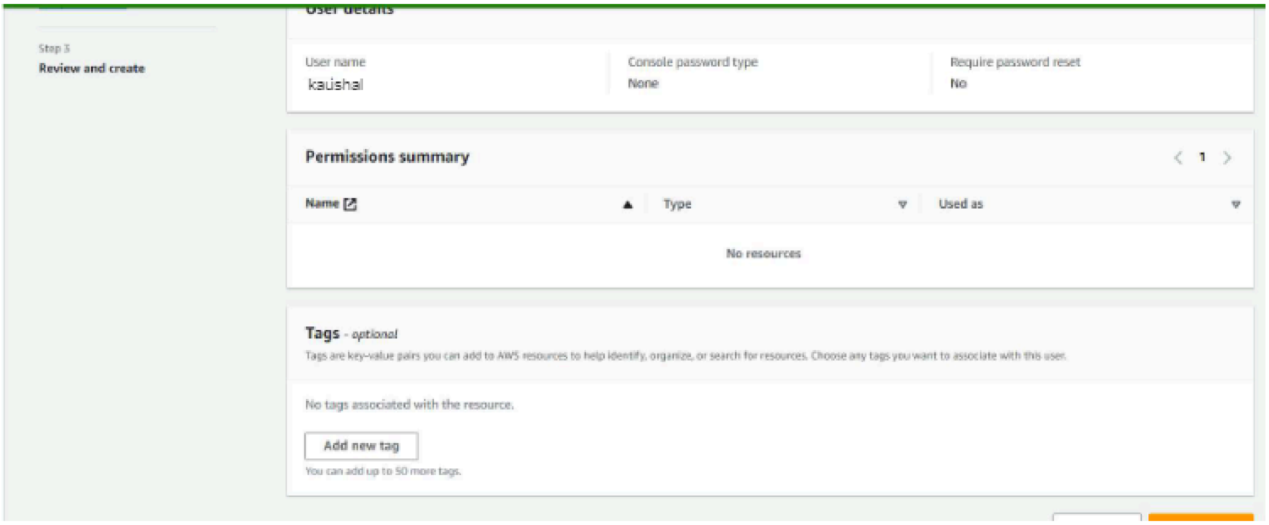
User groups (1)

□	Group name	Users	Attached policies	Created
□	kaushalgroup	0	-	2024-08-11 ()

6) Review all the Information, then click on Create user.



User details

Step 3
Review and create

User name	Console password type	Require password reset
kaushal	None	No

Permissions summary

Name	Type	Used as
No resources		

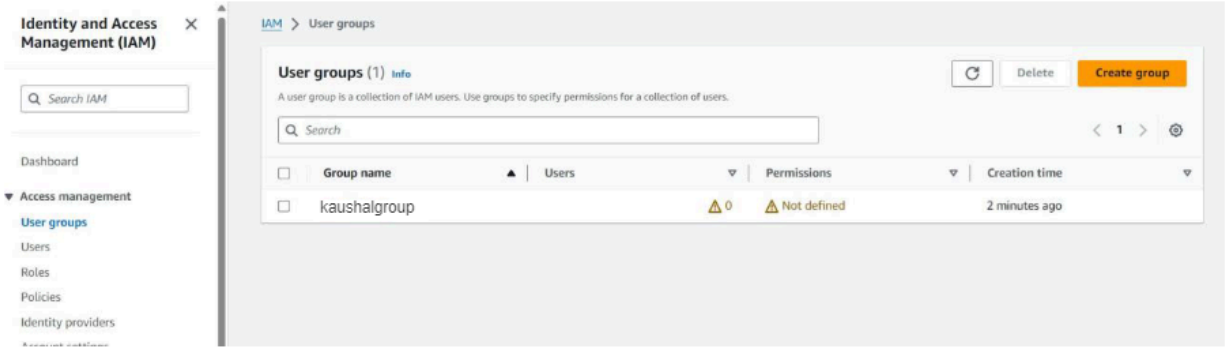
Tags - *optional*

Tags are key-value pairs you can add to AWS resources to help identify, organize, or search for resources. Choose any tags you want to associate with this user.

No tags associated with the resource.

You can add up to 50 more tags.

7) Open User Groups tab from the left side option. Click on the name of your group.

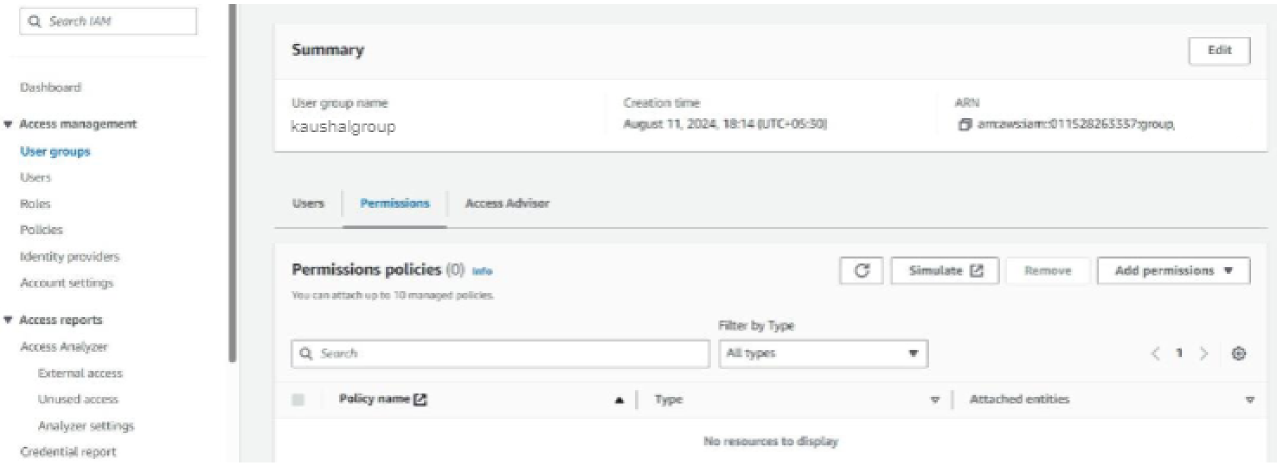


User groups (1) Info

A user group is a collection of IAM users. Use groups to specify permissions for a collection of users.

Group name	Users	Permissions	Creation time
kaushalgroup	⚠ 0	⚠ Not defined	2 minutes ago

8) Go to permissions and click on Add permissions. Click on Attach Policies.



Summary

User group name	Creation time	ARN
kaushalgroup	August 11, 2024, 18:14 (UTC+05:30)	arn:aws:iam::011528263357:group

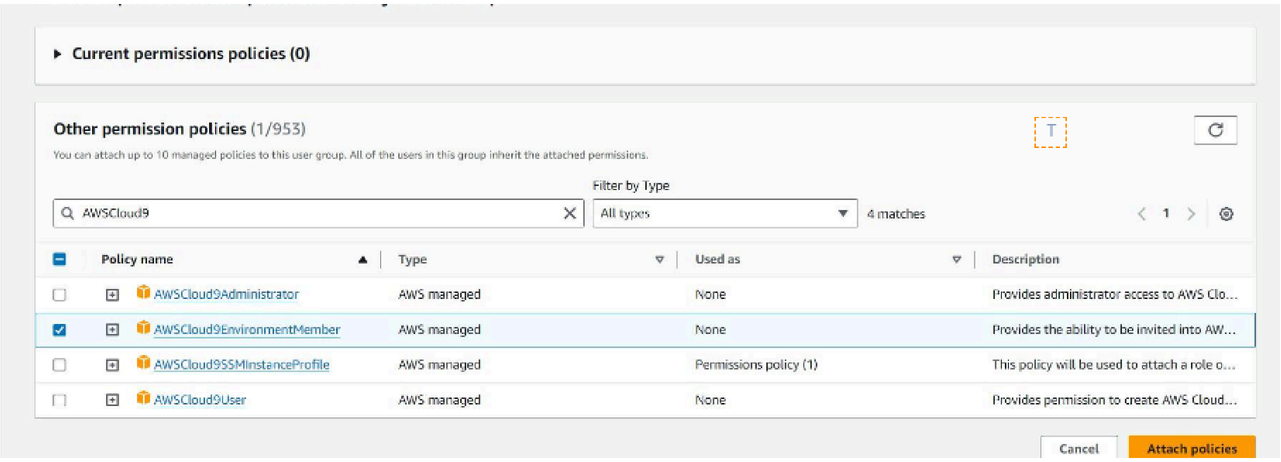
Permissions policies (0) Info

You can attach up to 10 managed policies.

Filter by Type: All types

Policy name	Type	Attached entities
No resources to display		

9) Search for AWSCloud9EnvironmentMember, select it and click on Attach policies



▸ Current permissions policies (0)

Other permission policies (1/953)

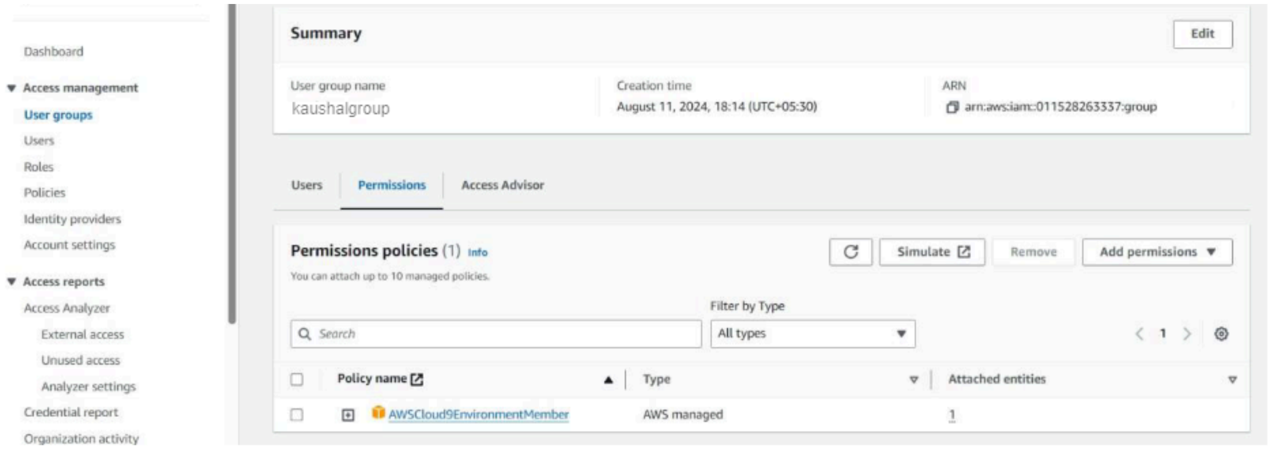
You can attach up to 10 managed policies to this user group. All of the users in this group inherit the attached permissions.

Filter by Type

AWSCloud9 | All types | 4 matches

	Policy name	Type	Used as	Description
□	AWSCloud9Administrator	AWS managed	None	Provides administrator access to AWS Clo…
☑	AWSCloud9EnvironmentMember	AWS managed	None	Provides the ability to be invited into AW…
□	AWSCloud9SSMInstanceProfile	AWS managed	Permissions policy (1)	This policy will be used to attach a role o…
□	AWSCloud9User	AWS managed	None	Provides permission to create AWS Cloud…

10) The policies have been attached



Summary

User group name: kaushalgroup

Creation time: August 11, 2024, 18:14 (UTC+05:30)

ARN: arn:aws:iam::011528263337:group

Permissions policies (1) Info

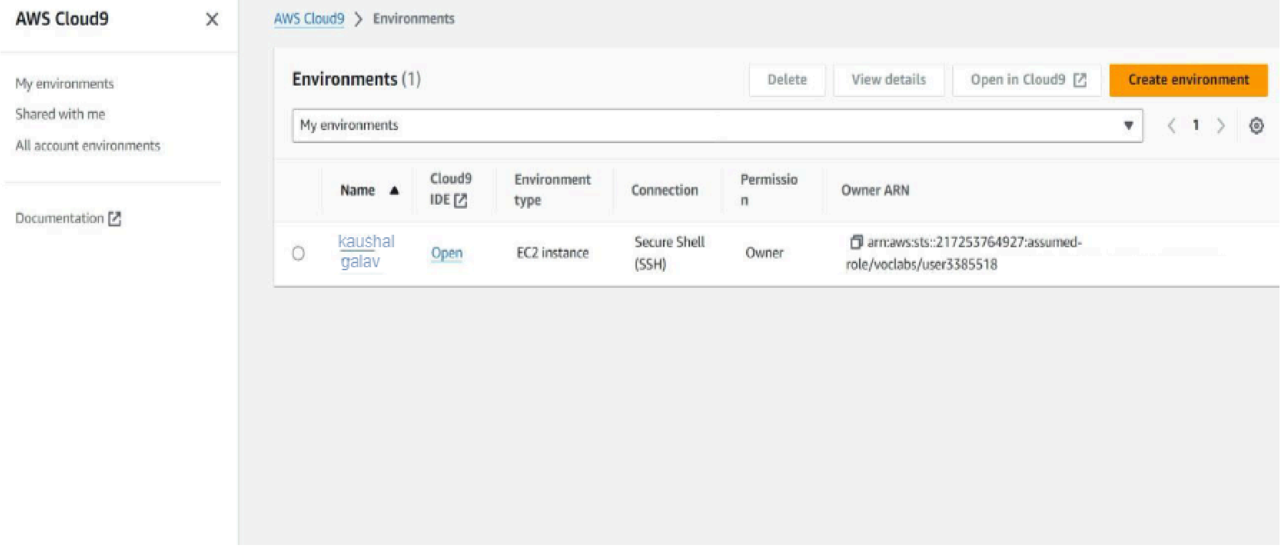
You can attach up to 10 managed policies.

Filter by Type: All types

	Policy name	Type	Attached entities
□	AWSCloud9EnvironmentMember	AWS managed	1

Step 3: Working on Cloud9 IDE

1) Go to Cloud9 services. Click on Open under Cloud9 IDE.



AWS Cloud9 ✕

My environments
Shared with me
All account environments

Documentation

AWS Cloud9 > Environments

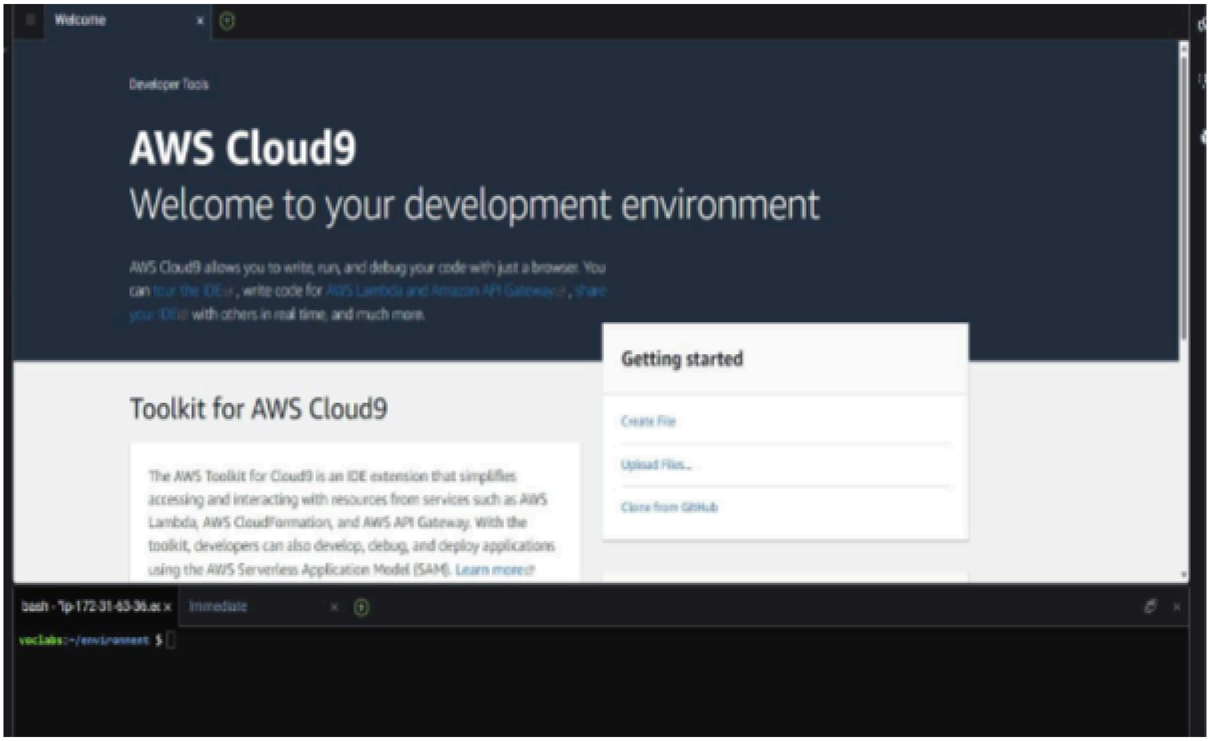
Environments (1)

Delete | View details | Open in Cloud9 | Create environment

My environments ▾

	Name ▲	Cloud9 IDE	Environment type	Connection	Permission	Owner ARN
○	kaushal galav	Open	EC2 instance	Secure Shell (SSH)	Owner	arn:aws:sts::217253764927:assumed-role/voclabs/user3385518

2) This is the Cloud9 IDE interface. The major part of the screen is the coding IDE. There is a command console just below it. For example, the command git --version is run



Developer Tools

AWS Cloud9

Welcome to your development environment

AWS Cloud9 allows you to write, run, and debug your code with just a browser. You can tour the IDE, write code for AWS Lambda and Amazon API Gateway, share your IDE with others in real time, and much more.

Getting started

Create File
Upload Files...
Clone from GitHub

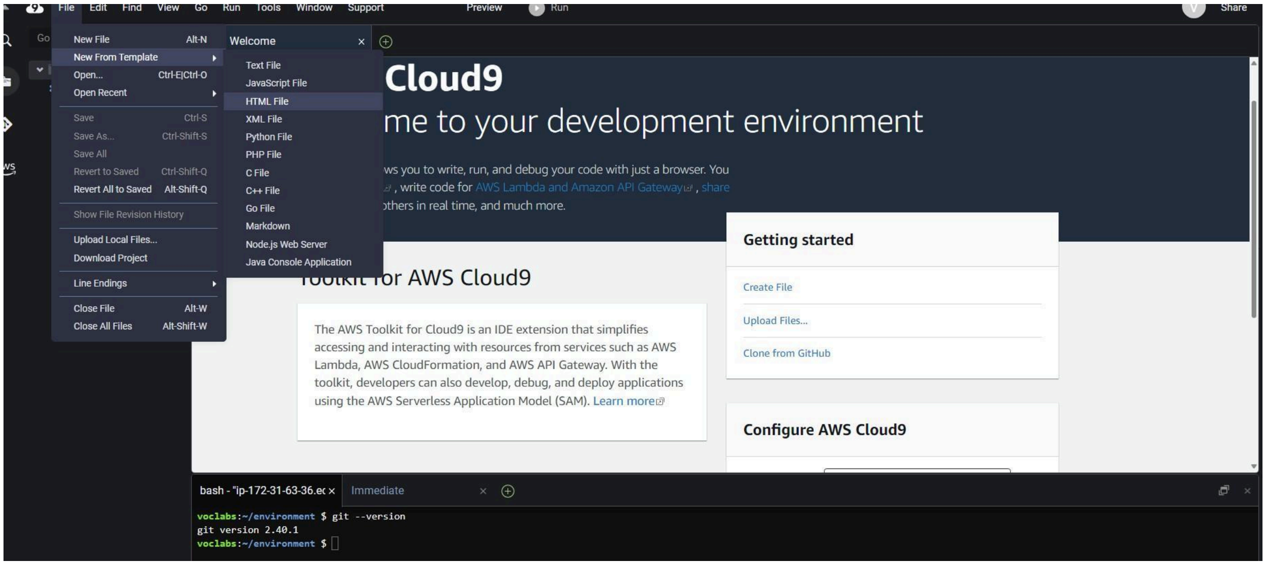
Toolkit for AWS Cloud9

The AWS Toolkit for Cloud9 is an IDE extension that simplifies accessing and interacting with resources from services such as AWS Lambda, AWS CloudFormation, and AWS API Gateway. With the toolkit, developers can also develop, debug, and deploy applications using the AWS Serverless Application Model (SAM). Learn more

```
voclabs:~/environment $
```

.

3) To add a file, click on file. For this experiment, we are to add an HTML file. So go to File → New From Template → HTML file. This gives a basic HTML template on the coding



Cloud9

me to your development environment

ws you to write, run, and debug your code with just a browser. You , write code for AWS Lambda and Amazon API Gateway , share others in real time, and much more.

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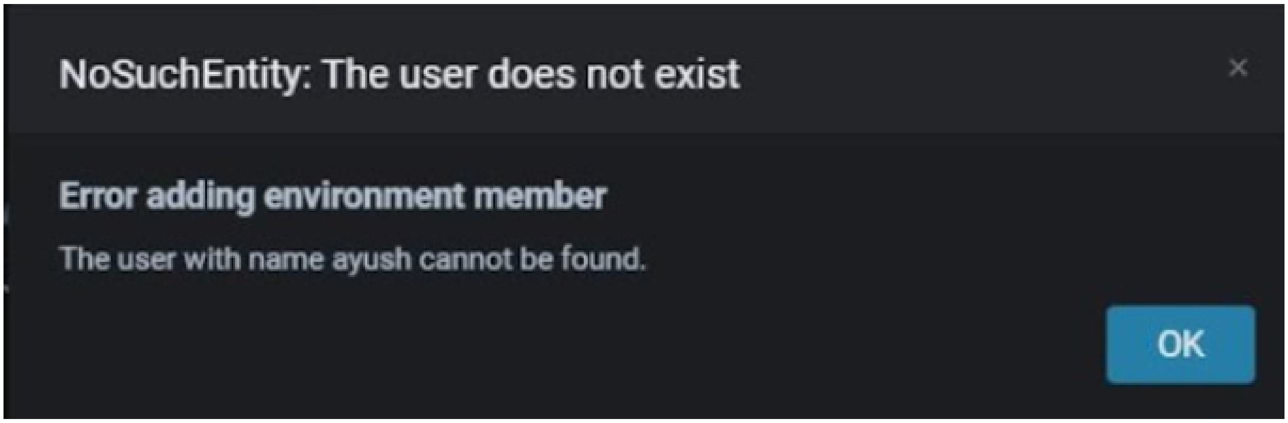
```
voclabs:~/environment $ git --version
git version 2.40.1
voclabs:~/environment $ 
```

Make a basic website on the HTML template and save it.After saving, on the toolbar towards the far right, click on Share. Then put the username that you had put during creating IAM user. Here, it gives an error as Cloud9 was created on the academy account where creating an IAM group is not available, meanwhile on the personal account, the services of Cloud9 have been deprecated. So currently, it is not possible to integrate the cloud9 and IAM parts of the experiment.



NoSuchEntity: The user does not exist

Error adding environment member

The user with name ayush cannot be found.