

AWS IAM

Identity and Access Management

What is IAM?

- AWS Identity and Access Management (IAM) is a web service that helps you securely control access to AWS resources. You use IAM to control who is authenticated (signed in) and authorized (has permissions) to use resources.
- When you create an AWS account, you begin with one sign-in identity that has complete access to all AWS services and resources in the account. This identity is called the AWS account *root user*.
- When you create an AWS account, you begin with one sign-in identity that has complete access to all AWS services and resources in the account. This identity is called the AWS account *root user* and is accessed by signing in with the email address and password that you used to create the account.

Why use IAM?

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

IAM Service?

- In this service you can create users, we grant them required permissions also revoke when needed.
 - We Access Management:
 - Users
 - Policies
 - Groups
 - Roles

- USERS:

Users are the ones with access to services on our AWS account by team members.

- POLICIES:

Polices are nothing but permissions which grant to the user to access various AWS services.

- GROUPS:

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

- ROLES:

An IAM role is an identity you can create that has specific permissions.

Understanding how IAM works?

AWS Identity & Access Management

[Overview](#)

[Features](#) ▾

[Getting Started](#)

[Resources](#) ▾

[FAQs](#)

[Partners](#)

With AWS Identity and Access Management (IAM), 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.



AWS Identity and Access Management

Apply fine-grained permissions to AWS services and resources



Who

Workforce users and workloads with IAM



Can access

Permissions with IAM policies

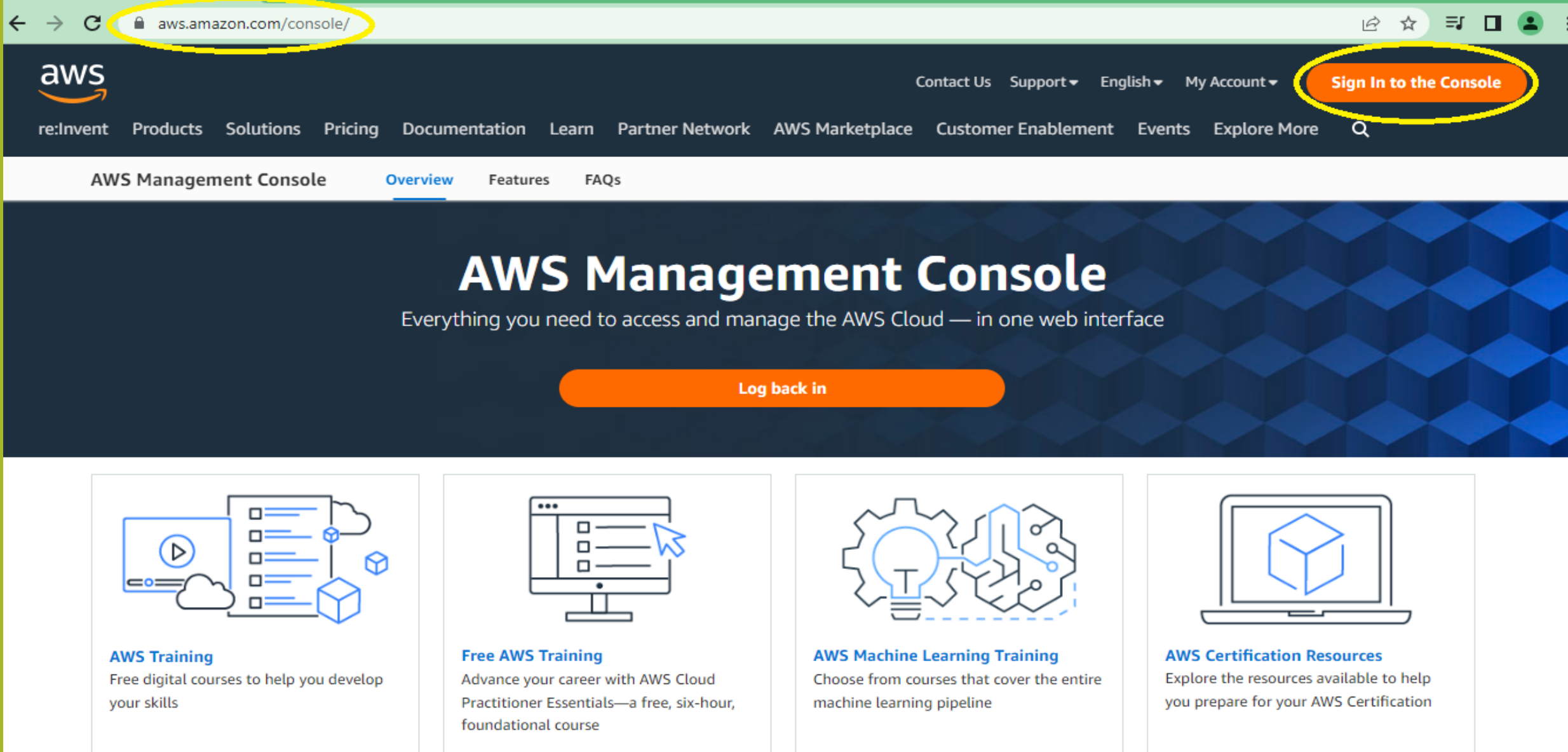


What

Resources within your AWS organization

PRACTICAL

Open AWS Management Console in Google Then Sign In



The screenshot shows the AWS Management Console homepage. The browser's address bar at the top contains the URL `aws.amazon.com/console/`, which is circled in yellow. The AWS logo is in the top left corner. In the top right corner, the text "Sign In to the Console" is circled in yellow. Below the navigation bar, the page title "AWS Management Console" is followed by tabs for "Overview", "Features", and "FAQs". The main heading "AWS Management Console" is displayed in large white text on a dark blue background, with the tagline "Everything you need to access and manage the AWS Cloud — in one web interface" below it. A large orange button labeled "Log back in" is centered on the page. At the bottom, there are four white boxes, each containing an icon and a link to AWS training resources.

aws

Contact Us Support English My Account **Sign In to the Console**


re:Invent Products Solutions Pricing Documentation Learn Partner Network AWS Marketplace Customer Enablement Events Explore More

AWS Management Console Overview Features FAQs


AWS Management Console

Everything you need to access and manage the AWS Cloud — in one web interface


Log back in




AWS Training
Free digital courses to help you develop your skills



Free AWS Training
Advance your career with AWS Cloud Practitioner Essentials—a free, six-hour, foundational course




AWS Machine Learning Training
Choose from courses that cover the entire machine learning pipeline



AWS Certification Resources
Explore the resources available to help you prepare for your AWS Certification

Sign in Root User

← → ↻ signin.aws.amazon.com/signin?redirect_uri=https%3A%2F%2Fconsole.aws.amazon.com%2Fconsole%2Fhome%3FhashArgs%3D%2523%26isauthcode%3Dtrue%26... 🔒 ⌵ ☆



Sign in

☒ **Root user**
Account owner that performs tasks requiring unrestricted access. [Learn more](#)

☐ **IAM user**
User within an account that performs daily tasks. [Learn more](#)

Root user email address

Next

By continuing, you agree to the [AWS Customer Agreement](#) or other agreement for AWS services, and the [Privacy Notice](#). This site uses essential cookies. See our [Cookie Notice](#) for more information.

— New to AWS? —

Create a new AWS account



AWS re:Invent

What's New in AWS Analytics

Introducing Amazon DataZone and Amazon OpenSearch Serverless, as well as new features for Amazon QuickSight, Amazon Redshift, and more.

Explore the announcements



Services

🔍 Search

[Alt+S]



Mumbai ▾

sivakumar ▾



EC2

Recently visited

Favorites

All services

- 📊 Analytics
- 🔗 Application Integration
- 🕶️ AR & VR
- 📄 AWS Cost Management
- 🔗 Blockchain
- 🏢 Business Applications
- 🖨️ Compute
- 🏠 Containers
- 👤 Customer Enablement
- 🗄️ Database
- 🔧 Developer Tools
- 🖨️ End User Computing



Recently visited



Console Home



EC2

Virtual Servers in the Cloud

Lightsail ↗

Launch and Manage Virtual Private Servers

VPC

Isolated Cloud Resources

IAM

Manage access to AWS resources



Route 53

Scalable DNS and Domain Name Registration

Activate for Startups

AWS Activate provides resources to help startups build and grow on AWS.

default layout

+ Add widgets

Welcome to AWS

Getting started with AWS ↗

Learn the fundamentals and find valuable information to get the most out of AWS.

Training and certification ↗

Learn from AWS experts and advance your skills and knowledge.

What's new with AWS? ↗

Discover new AWS services, features, and regions.

We are in IAM dashboard will going to create user

The screenshot shows the AWS IAM dashboard in the us-east-1 region. The browser address bar displays the URL: `us-east-1.console.aws.amazon.com/iamv2/home?region=ap-south-1#/home`. The AWS logo and navigation bar are at the top, with a search bar and a user profile dropdown for 'sivakumar'. The left sidebar contains the 'Identity and Access Management (IAM)' section, with a search bar and a list of navigation items. The 'Access management' item is highlighted with a red box. The main content area shows the 'IAM dashboard' title circled in red, followed by 'Security recommendations' with a red notification badge '1'. Below this, there are two security alerts: 'Add MFA for root user' (with a warning icon) and 'Root user has no active access keys' (with a checkmark icon). The 'IAM resources' section displays a table with counts for User groups (0), Users (0), Roles (3), Policies (0), and Identity providers (0). At the bottom, there is a 'What's new' section with a link to 'View all' updates. The right sidebar contains the 'AWS Account' section with account details (Account ID, Account Alias, Sign-in URL) and 'Quick Links' for security credentials and tools.

us-east-1.console.aws.amazon.com/iamv2/home?region=ap-south-1#/home

Identity and Access Management (IAM)

Search IAM

Dashboard

▼ Access management

- User groups
- Users
- Roles
- Policies
- Identity providers
- Account settings

▼ Access reports

- Access analyzer
- Archive rules
- Analyzers

IAM dashboard

Security recommendations 1

Add MFA for root user
Add MFA for root user - Enable multi-factor authentication (MFA) for the root user to improve security for this account.

Root user has no active access keys
Using access keys attached to an IAM user instead of the root user improves security.

IAM resources

User groups	Users	Roles	Policies	Identity providers
0	0	3	0	0

What's new
Updates for features in IAM

• AWS Lambda announces support for Attribute-Based Access Control (ABAC) in AWS GovCloud (US) Regions..

AWS Account

Account ID
607172824318

Account Alias
607172824318 [Create](#)

Sign-in URL for IAM users in this account
<https://607172824318.signin.aws.amazon.com/console>

Quick Links

[My security credentials](#)
Manage your access keys, multi-factor authentication (MFA) and other credentials.

Tools

Identity and Access Management (IAM)

Search IAM

Dashboard

Access management


- User groups
- Users
- Roles
- Policies
- Identity providers
- Account settings

Access reports


- Access analyzer
 - Archive rules
 - Analyzers

IAM dashboard

Security recommendations 1

 **Add MFA for root user**
Add MFA for root user - Enable multi-factor authentication (MFA) for the root user to improve security for this account.

Add MFA

 **Root user has no active access keys**
Using access keys attached to an IAM user instead of the root user improves security.

IAM resources

User groups	Users	Roles	Policies	Identity providers
0	0	3	0	0

What's new

Updates for features in IAM

- AWS Lambda announces support for Attribute-Based Access Control (ABAC) in AWS GovCloud (US) Regions..

AWS Account

Account ID
607172824318

Account Alias
607172824318 [Create](#)

Sign-in URL for IAM users in this account
<https://607172824318.signin.aws.amazon.com/console>

Quick Links

[My security credentials](#)
Manage your access keys, multi-factor authentication (MFA) and other credentials.

Tools

Identity and Access Management (IAM) ✕

🔍 Search IAM

Dashboard

▼ Access management

User groups

Users

Roles

Policies

Identity providers

Account settings

▼ Access reports

Access analyzer

Archive rules

Analyzers

IAM > Users

Users (0) Info

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



Delete

Add users

🔍 Find users by username or access key

< 1 >



User name ▾

Groups

Last activity

MFA

Password age

Active

No resources to display



Set user details

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

User name vsivakumar

+ 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

.....

* Required

Cancel

Next: Permissions

Add user

1 2 3 4 5

Set permissions



Add user to group



Copy permissions from existing user



Attach existing policies directly

Create policy



Filter policies

S3

Showing 9 results

	Policy name	Type	Used as
<input type="checkbox"/>	AmazonDMSRedshiftS3Role	AWS managed	None
<input checked="" type="checkbox"/>	AmazonS3FullAccess	AWS managed	None
<input type="checkbox"/>	AmazonS3ObjectLambdaExecutionRolePolicy	AWS managed	None
<input type="checkbox"/>	AmazonS3OutpostsFullAccess	AWS managed	None
<input type="checkbox"/>	AmazonS3OutpostsReadOnlyAccess	AWS managed	None

Cancel

Previous

Next: Tags



Add user

1

2

3

4

5

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

Add new key

You can add 50 more tags.

Cancel

Previous

Next: Review



Add user



Review

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

User details

User name	vsivakumar
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 following policies will be attached to the user shown above.

Type	Name
Managed policy	AmazonS3FullAccess

Cancel

Previous

Create user

User created download .CSV file to desktop in that file Access key and Secret Access key are available.

us-east-1.console.aws.amazon.com/iam/home#/users\$new?step=final&accessKey&login&userNames=vsivakumar&passwordReset&passwordType=manual&per...

aws Services Search [Alt+S] Global sivakumar

EC2 Route 53


Add user



1 2 3 4 5

✓ **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://607172824318.signin.aws.amazon.com/console>

 **Download .csv**

	User	Access key ID	Secret access key	Email login instructions
▶ ✓	vsivakumar	AKIAY2XSSBT7K7C2WQ4I 	lqxtlaxOLncVN6ihpZOrqjDK XemHvFKVLbugRDf Hide	Send email 

Close

Identity and Access Management (IAM)

Search IAM

Dashboard

Access management

User groups

Users

Roles

Policies

Identity providers

Account settings

Access reports

Access analyzer

Archive rules

Analyzers

IAM > Users

Users (1) Info

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

Find users by username or access key

<input type="checkbox"/>	User name	Groups	Last activity	MFA
<input type="checkbox"/>	vsivakumar	None	Never	None

Account ID: 6071-7282-4318

Account

Organization

Service Quotas

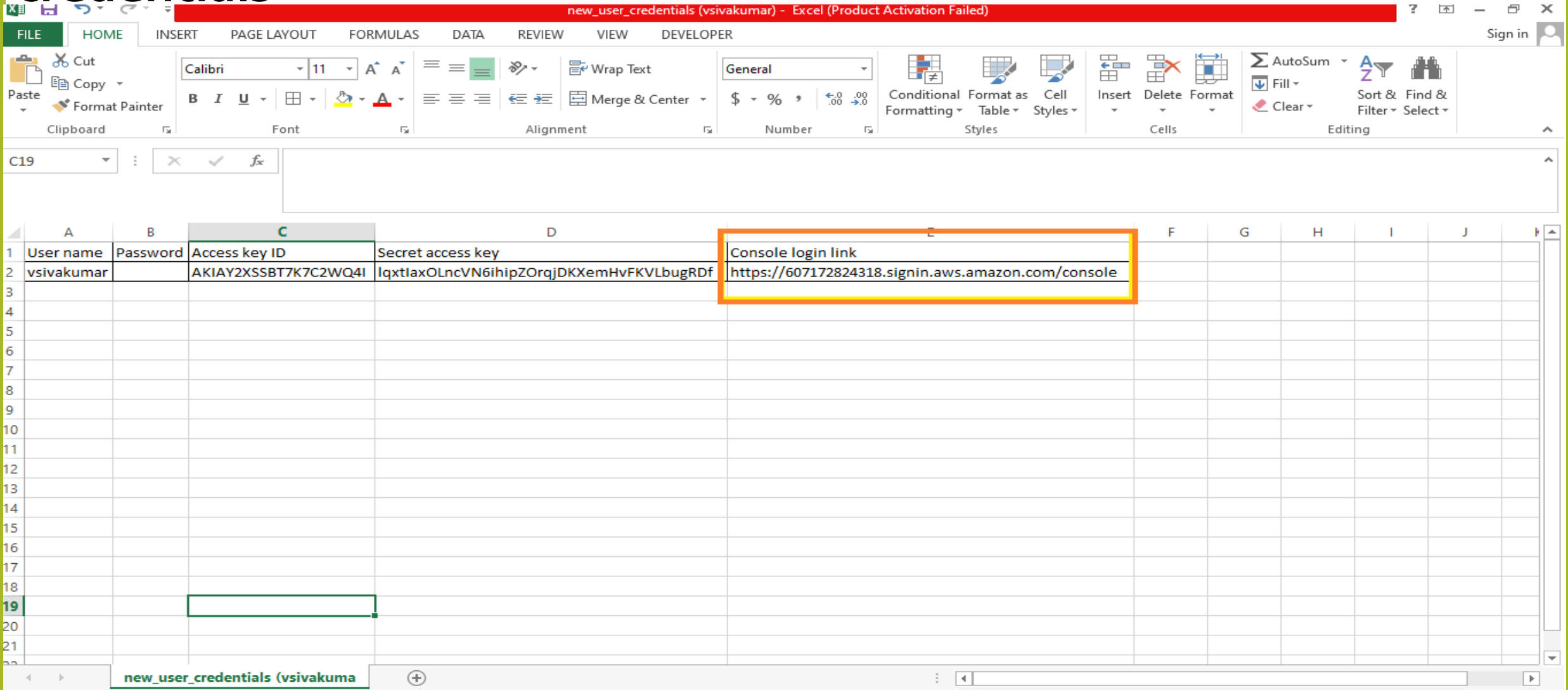
Billing Dashboard

Security credentials

Settings

Sign out

Lets go & check what are the permission given to the created account, lets login by the URL which we generated in User credentials



Copy login URL, paste in google page then sign in as IAM user

Terms of Use Privacy Policy © 1996-2022 Amazon Web Services, Inc. or its affiliates

Reset from old password to new password

Amazon Web Services Sign-In

+

ap-northeast-1.signin.aws.amazon.com/clm?action=changepassword&userType=iam&redirect_uri=https%3A%2F%2Fconsole.aws.amazon.com%2Fconsole%2Fhome%3...


↩ → ↻ 🔒

☆

🗖

👤

⋮



You must change your password to continue

AWS account

607172824318

IAM user name

vsivakumar

Old password

New password

Retype new password

Confirm password change

[Sign in using root user email](#)

English

▼

[Terms of Use](#) [Privacy Policy](#) © 1996-2022, Amazon Web Services, Inc. or its affiliates.

Yes now we are in console home, we have permissions only for S3 but not other services, lets see

Browser address bar: ap-south-1.console.aws.amazon.com/console/home?region=ap-south-1

Navigation bar: AWS logo, Services, Search, [Alt+S], Mumbai, vsivakumar @ 6071-7282-4318











EC2, Route 53

Console Home Info




[Reset to default layout](#) [+ Add widgets](#)

Introducing the new widget Applications. Find it at the bottom of your Console Home.

Recently visited Info

-  **S3**
-  EC2
-  AWS Amplify
-  AWS Budgets
-  Elastic Beanstalk
-  Activate for Startups
-  Route 53
-  Lightsail [↗](#)
-  VPC
-  IAM

Welcome to AWS

-  [Getting started with AWS](#) [↗](#)
Learn the fundamentals and find valuable information to get the most out of AWS.
-  [Training and certification](#) [↗](#)
Learn from AWS experts and advance your skills and knowledge.
-  [What's new with AWS?](#) [↗](#)
Discover new AWS services, features, and Regions.

We have permission only for S3 check the screen

The screenshot shows the AWS S3 console interface. The browser address bar displays `s3.console.aws.amazon.com/s3/get-started?region=ap-south-1`. The top navigation bar includes the AWS logo, a 'Services' menu, a search bar, and user information for 'vsivakumar @ 6071-7282-4318'. The main content area is titled 'Storage' and features the 'Amazon S3' logo and the text 'Store and retrieve any amount of data from anywhere'. Below this, a description states: 'Amazon S3 is an object storage service that offers industry-leading scalability, data availability, security, and performance.'

The 'Create a bucket' section is highlighted with a yellow circle around the 'Create bucket' button. The text in this section reads: 'Every object in S3 is stored in a bucket. To upload files and folders to S3, you'll need to create a bucket where the objects will be stored.'

The 'Pricing' section contains the text: 'With S3, there are no minimum fees. You only pay for what you use. Prices are based on the location of your S3 bucket.' It also includes a link to 'Estimate your monthly bill using the AWS Simple Monthly Calculator' and a link to 'View pricing details'.

The 'How it works' section features a video player titled 'Introduction to Amazon S3' with a 'Copy link' button.

The footer contains a 'Feedback' link, a note about language selection and Unified Settings, a copyright notice for 2022, and links for 'Privacy', 'Terms', and 'Cookie preferences'.

Referring to screen shot we don't have permissions for other services?

The screenshot displays the AWS Management Console for the 'ap-south-1' region. The left-hand navigation pane includes the 'EC2 Dashboard' link, which is circled in yellow. The main content area is titled 'Instances' and features a search bar, a 'Launch instances' button (circled in yellow), and a table of instance details. A yellow circle highlights the message 'You are not authorized to perform this operation.' displayed within the instance table. Below the table, a 'Select an instance' modal is visible.

ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#Instances:v=3;\$case=tags:true%5C,client:false;\$regex=tags:false%5C,client:false

Services Search [Alt+S]

EC2 Route 53

New EC2 Experience Tell us what you think

EC2 Dashboard

EC2 Global View

Events

Tags

Limits

Instances

Instances New

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances New

Dedicated Hosts

Capacity Reservations

Images

Instances Info

Find instance by attribute or tag (case-sensitive)

Launch instances

You are not authorized to perform this operation.

Select an instance

Deleting

us-east-1.console.aws.amazon.com/iamv2/home?region=ap-south-1#/users

aws Services Search [Alt+S]

EC2 Route 53

Identity and Access Management (IAM)

Search IAM

Dashboard

Access management

- User groups
- Users**
- Roles
- Policies
- Identity providers
- Account settings

Access reports

- Access analyzer
- Archive rules
- Analyzers

IAM > Users

Users (Selected 1/1) Info

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

Find users by username or access key

Refresh Delete Add users

<input checked="" type="checkbox"/>	User name	Groups	Last activity	MFA	Password age	Active
<input checked="" type="checkbox"/>	vsivakumar	None	✓ 3 minutes ago	None	✓ 21 minutes ago	✓ 49

THANK YOU