

AWS Users and Groups – Documentation

1. Introduction

In AWS, **Users** and **Groups** are managed through **AWS Identity and Access Management (IAM)**. They are fundamental for controlling access to AWS resources securely. IAM allows you to create individual identities, group them, and assign permissions to follow the **principle of least privilege**.

2. AWS Users

- **Definition:** An **IAM User** is an identity you create in AWS to represent a person or application that interacts with AWS resources.
- **Components:**
 - **Username** – Unique identifier within the AWS account.
 - **Credentials** – Includes access keys for programmatic access and passwords for AWS Management Console access.

- **Access Types:**

1. **Programmatic Access** – Using AWS CLI, SDK, or API with access keys.
2. **Console Access** – Using username and password to sign in to the AWS Management Console.

Example:

If you have 5 developers working in your team, you can create **5 separate IAM users**, each with their own credentials and permissions.

3. AWS Groups

- **Definition:** An **IAM Group** is a collection of IAM users. Groups let you assign permissions to multiple users at once.
- **Purpose:**
 - Simplifies permission management.
 - Ensures consistency in access control.
- **Key Points:**

- Groups **cannot** be nested (i.e., one group cannot contain another group).
- A user can belong to **multiple groups**.

Example:

You can create a group named **Developers** with permissions to manage EC2 and S3. Any user added to this group inherits those permissions automatically.

The screenshot displays the AWS IAM console interface. At the top, a green notification bar states "1 user added to this group." The left sidebar shows the navigation menu with "Identity and Access Management (IAM)" selected. The main content area is titled "Summary" for the user group "Hope". It shows the "Creation time" as "July 31, 2025, 10:39 (UTC+05:30)" and the "ARN" as "arn:aws:iam:412381768421:group/Hope". Below the summary, the "Users" tab is active, showing "Users (2)". A table lists the users in the group:

<input type="checkbox"/>	User name	Groups	Last activity	Creation time
<input type="checkbox"/>	User1	2	None	2 hours ago
<input type="checkbox"/>	user3	2	2 hours ago	2 hours ago

The bottom of the screen shows the Windows taskbar with the time 13:23 on 31-07-2025.

Amazon Web Services Sign-In x Hope3 | IAM | Global x +

us-east-1.console.aws.amazon.com/iam/home?region=ap-south-1#/groups/details/Hope3?section=users

aws Search [Alt+S]

IAM > User groups > Hope3

Identity and Access Management (IAM)

Search IAM

Dashboard

▼ Access management

- User groups
- Users
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- Root access management [New](#)

▼ Access reports

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- Analyzer settings
- Credential report

1 user added to this group.

Summary [Edit](#)

User group name: Hope3

Creation time: July 31, 2025, 11:19 (UTC+05:30)

ARN: [arn:aws:iam:412381768421:group/Hope3](#)

Users (2) | Permissions | Access Advisor

Users in this group (2) [Refresh](#) [Remove](#) [Add users](#)

An IAM user is an entity that you create in AWS to represent the person or application that uses it to interact with AWS.

Search

<input type="checkbox"/>	User name ?	Groups	Last activity	Creation time
<input type="checkbox"/>	User1	2	None	2 hours ago
<input type="checkbox"/>	user4	1	None	2 hours ago

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Amazon Web Services Sign-In x Create user | IAM | Global x +

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

aws Search [Alt+S]

IAM > Users > Create user

Step 1 **Specify user details**

Step 2 Set permissions

Step 3 Review and create

Specify user details

User details

User name

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](#)

[Cancel](#) [Next](#)

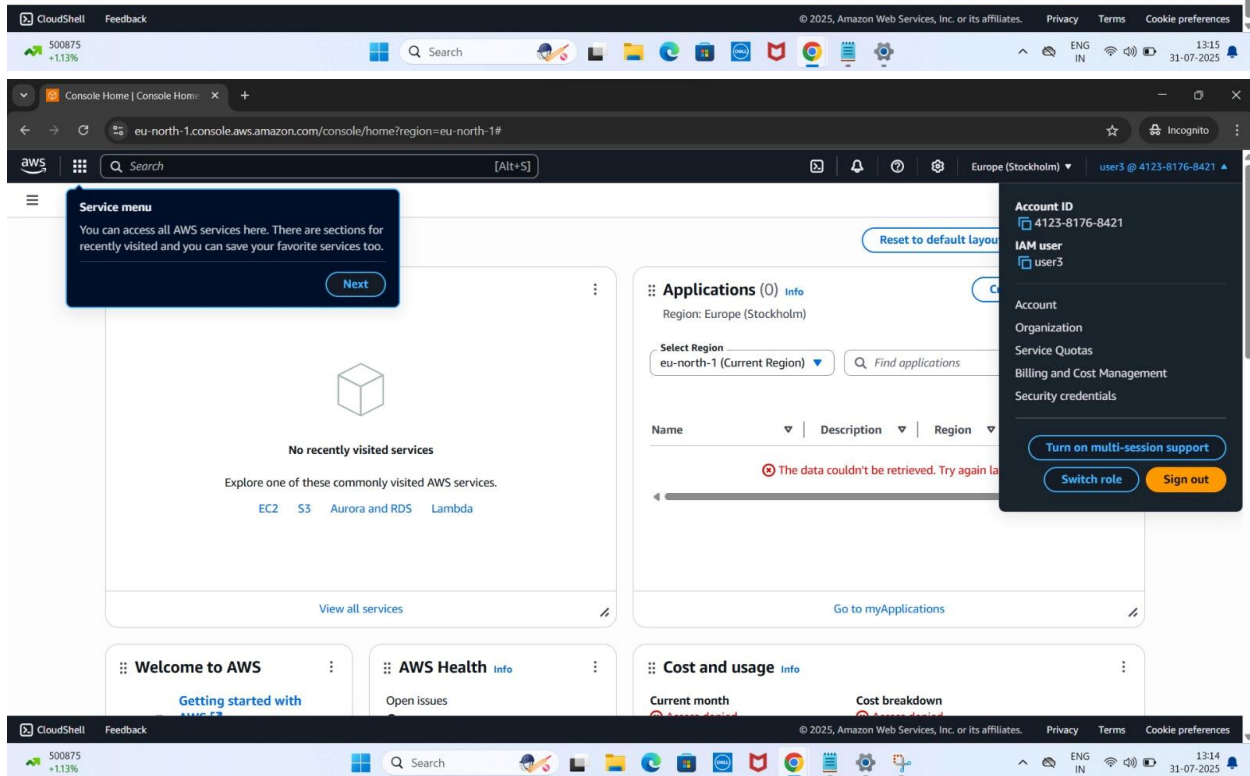
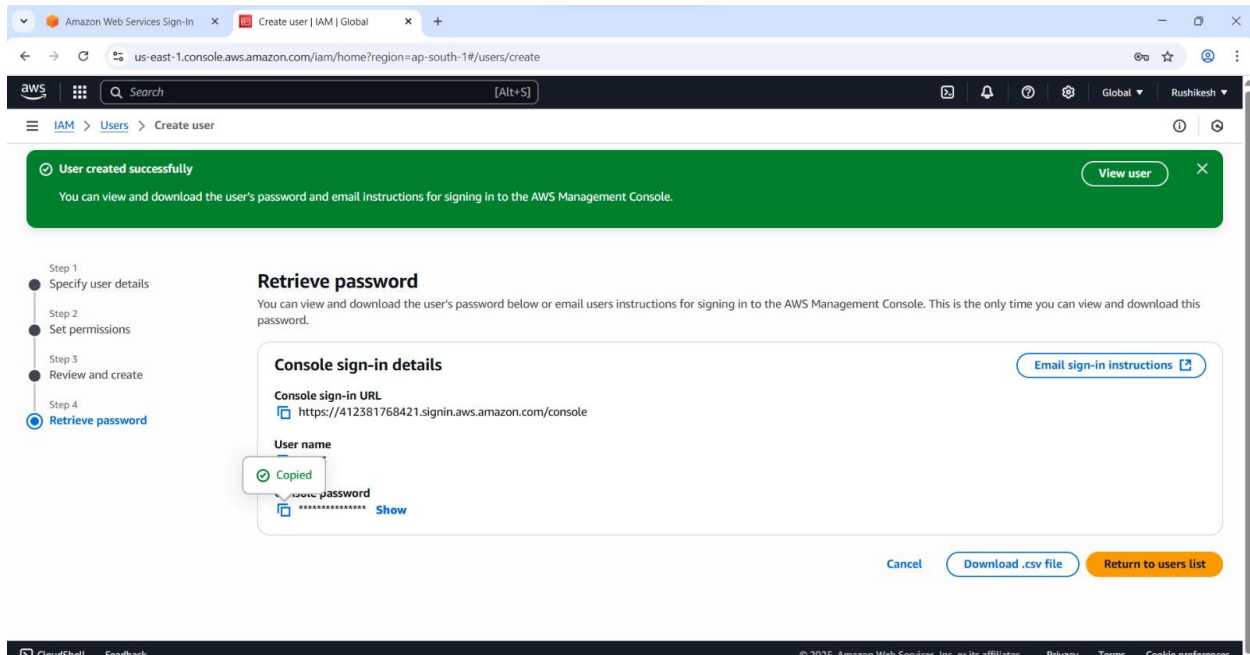
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Light rain In the afternoon

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Create user | IAM | Global

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GlobalRushikesh

Step 1

Specify user details

Step 2

Set permissions

Step 3

Review and create

Step 4

Retrieve password

Review and create

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

User details

User name

user3

Console password type

Custom password

Require password reset

Yes

Permissions summary

Name	Type	Used as
Hope2	Group	Permissions group
IAMUserChangePassword	AWS managed	Permissions policy

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.

[Add new tag](#)

You can add up to 50 more tags.

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GlobalRushikesh

Step 1

Specify user details

Step 2

Set permissions

Step 3

Review and create

Step 4

Retrieve password

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.

User groups (1/2)

Group name	Users	Attached policies	Created
<input type="checkbox"/> Hope	1	AdministratorAccess	2025-07-31 (2 hours ago)
<input checked="" type="checkbox"/> Hope2	1	AdministratorAccess	2025-07-31 (2 hours ago)

[Create group](#)

Set permissions boundary - optional

Cancel

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IAM

Users

Create user

Step 1

Specify user details

Step 2

Set permissions

Step 3

Review and create

Step 4

Retrieve password

Specify user details

User details

User name

user3

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.

Are you providing console access to a person?

User type

☒ Specify a user in Identity Center - Recommended

We recommend that you use Identity Center to provide console access to a person. With Identity Center, you can centrally manage user access to their AWS accounts and cloud applications.

☐ I want to create an IAM user

We recommend that you create IAM users only if you need to enable programmatic access through access keys, service-specific credentials for AWS CodeCommit or Amazon Keyspaces, or a backup credential for emergency account access.

Information

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](#)

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