



ACF Lab 1: Introduction to AWS IAM

COS 20019- Cloud Computing Architecture

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So this is screenshotted for ACF Lab 1, with detailed explanation:

Task 1: Explore the Users and Groups

IAM Overview

The screenshot displays the AWS IAM Management Console. On the left, a sidebar contains navigation links for Account, Dashboard, Courses, Calendar, Inbox, History, and Help. The main content area is titled 'Lab 1 - Introduction to AWS IAM' and includes instructions for creating and managing IAM users. The 'Users' page is active, showing a list of four users: 'awsstudent', 'user-1', 'user-2', and 'user-3'. Each user entry includes a checkbox, the user name, the group (all are 'None'), and the last activity (all are 'Never'). The 'Access management' section on the left lists various IAM services like User groups, Roles, Policies, and Identity providers.

Permissions Overview

The screenshot shows the AWS IAM Management Console with the 'Permissions' tab selected for a user. The 'Permissions policies' section lists one policy, 'AmazonEC2ReadOnlyAccess', which is AWS managed and provides read-only access to Amazon EC2. The 'Access Advisor' section shows a list of permissions for this policy, including 'elasticloadbalancing:Describe', 'cloudwatch:Describe*', and 'cloudwatch:ListMetrics'. The 'Policy name' column is highlighted. The left sidebar and main content area with instructions are also visible.

The screenshot shows two browser windows. The left window is the AWS Academy interface, displaying a lab titled 'Lab 1 - Introduction to AWS IAM'. It contains a list of instructions for managing IAM policies. The right window is the AWS IAM Management Console, showing the 'Permissions' tab for the 'AmazonS3ReadOnlyAccess' policy. The console displays the policy's JSON definition, which grants permissions to get and list resources in Amazon S3.

Instructions from the AWS Academy lab:

15. Choose the minus icon (-) to hide the policy details.
16. In the navigation pane on the left, choose **User groups**.
17. Choose the **S3-Support** group and then choose the **Permissions** tab.
18. Choose the plus (+) icon to view the policy details.
19. Choose the minus icon (-) to hide the policy details.
20. In the navigation pane on the left, choose **User groups**.
21. Choose the **EC2-Admin** group and then choose the **Permissions** tab.
22. Choose the plus (+) icon to view the policy details.
23. Choose the minus icon (-) to hide the policy details.

Task 2: Add Users to Groups

1. Add user-1 to the S3-Support Group

The screenshot shows two browser windows. The left window is the AWS Academy interface, displaying a lab titled 'Lab 1 - Introduction to AWS IAM'. It contains instructions for adding users to the S3-Support group. The right window is the AWS IAM Management Console, showing the 'Users' tab for the 'S3-Support' group. The console displays the 'Add users' button and a list of users in the group, including 'user-1'.

Instructions from the AWS Academy lab:

24. In the left navigation pane, choose **User groups**.
25. Choose the **S3-Support** group.
26. Choose the **Users** tab.
27. In the **Users** tab, choose **Add users**.
28. In the **Add Users to S3-Support** window, configure the following:
 - Select **user-1**.
 - At the bottom of the screen, choose **Add Users**.

In the **Users** tab you will see that user-1 has been added to the group.

2. Add user-2 to the EC2-Support Group

The screenshot shows two browser windows. The left window is the AWS Academy interface, displaying a lab titled 'Lab 1 - Introduction to AWS IAM'. It includes instructions for adding users to the EC2-Support group. The right window is the AWS IAM Management Console, showing the 'Users added to this group' page for the 'EC2-Support' user group. The page lists 'user-2' as a member of the group.

EC2-Support

Summary

User group name: EC2-Support
Creation time: June 18, 2023, 21:49 (UTC+07:00)
ARN: arn:aws:iam:170651963221:group:EC2-Support

Users in this group (1)

User name	Groups	Last activity
user-2	1	None

3. Add user-3 to the EC2-Admin Group

The screenshot shows two browser windows. The left window is the AWS Academy interface, displaying a lab titled 'Lab 1 - Introduction to AWS IAM'. It includes instructions for adding users to the EC2-Admin group. The right window is the AWS IAM Management Console, showing the 'Users added to this group' page for the 'EC2-Admin' user group. The page lists 'user-3' as a member of the group.

EC2-Admin

Summary

User group name: EC2-Admin
Creation time: June 18, 2023, 21:49 (UTC+07:00)
ARN: arn:aws:iam:170651963221:group:EC2-Admin

Users in this group (1)

User name	Groups	Last activity
user-3	1	None

Task 3: Sign-In and Test Users

1. Open private window and sign in as user-1

The image displays two screenshots from a computer screen, illustrating the steps for signing in as a user in the AWS Academy lab.

Top Screenshot: The left pane shows the AWS Academy lab interface for "Lab 1 - Introduction to AWS IAM". The instructions include:

- 35. Paste the **IAM users sign-in** link into the address bar of your private browser session and press **Enter**. Next, you will sign-in as **user-1**, who has been hired as your Amazon S3 storage support staff.
- 36. Sign-in with:
 - **IAM user name:** user-1
 - **Password:** Lab-Password1
- 37. In the **Services** menu, choose **S3**.
- 38. Choose the name of the bucket that exists in the account and browse the contents. Since your user is part of the **S3-Support** Group in IAM, they have permission to view a list of Amazon S3 buckets and the contents.

The right pane shows the AWS IAM sign-in page. The "Account ID (12 digits) or account alias" is 170851863221. The "IAM user name" is user-1. The password is masked with dots. The "Sign in" button is visible. A banner on the right says "COMPUTE Build on Graviton Get better performance and lower cost for a broad set of workloads Start building".

Bottom Screenshot: The left pane shows the same AWS Academy lab interface, with instructions 39 and 40:

- 39. In the **Services** menu, choose **EC2**.
- 40. In the left navigation pane, choose **Instances**. You cannot see any instances. Instead, you see a message that states *You are not authorized to perform this operation. This is because this user has not been*

The right pane shows the AWS S3 Management Console. The "Buckets" section is active, displaying a table of buckets:

Name	AWS Region	Access
samplebucket--38a073b0	US East (N. Virginia) us-east-1	Bucket and objects not public

2. Sign in as user-2 to view EC2 instance

The image consists of two screenshots from a Windows desktop environment, showing the process of signing in as user-2 to view EC2 instances in AWS.

Top Screenshot: The left window shows the AWS Academy course page for "ACFv2EN... > Modules > Module 4... > Lab 1 - Introduction to AWS IAM". The right window shows the AWS Sign-in page for user-2. The account ID is 170851863221, and the IAM user name is user-2. The password is masked with dots. The "Sign in" button is highlighted. An AWS re:Invent banner is visible on the right.

Bottom Screenshot: The left window shows the same AWS Academy course page, but the instructions are now for step 44: "In the **Services** menu, choose **EC2**." The right window shows the AWS Management Console for the "Instances" page. The "LabHost" instance is selected, and its details are displayed. The instance state is "Running". The instance ID is i-035a890c4843c042b. The public IPv4 address is 54.159.235.109. The instance type is t2.micro.

Cannot Stop an instance

The screenshot shows two browser windows. The left window displays the AWS Academy course 'ACFv2EN... > Modules > Module 4... > Lab 1 - Introduction to AWS IAM'. It contains instructions for step 49: 'In the **Services**, choose **S3**. You will see the message **You don't have permissions to list buckets** because user-2 does not have permission to access Amazon S3. You will now sign-in as **user-3**, who has been hired as your Amazon EC2 administrator.' Step 50 instructs to 'Sign user-2 out of the **AWS Management Console** by completing the following actions: At the top of the screen, choose **user-2**. Choose **Sign Out**'. A small inset shows the IAM user selection dropdown with 'user-2' selected. The right window shows the 'S3 Management Console' with a red error message: 'You don't have permissions to list buckets. After you or your AWS administrator have updated your permissions to allow the s3:ListAllMyBuckets action, refresh this page. Learn more about identity and access management in Amazon S3'.

3. Sign in as user-3

The screenshot shows two browser windows. The left window displays the AWS Academy course 'ACFv2EN... > Modules > Module 4... > Lab 1 - Introduction to AWS IAM'. It contains instructions for step 51: 'Paste the **IAM users sign-in** link into your private window and press **Enter**. If it is not in your clipboard, retrieve it from the text editor where you stored it earlier.' Step 52: 'Paste the sign-in link into the address bar of your private web browser tab again.' Step 53: 'Sign-in with: IAM user name: user-3, Password: Lab-Password3'. Step 54: 'In the **Services** menu, choose **EC2**.' Step 55: 'In the navigation pane on the left, choose **Instances**. As an EC2 Administrator, you should now have permissions to Stop the Amazon EC2 instance.' The right window shows the 'Amazon Web Services Sign-In' page for 'user-3'. It displays the account ID '170851863221' and the IAM user name 'user-3'. The password field is filled with 'Lab-Password3'. The 'Sign in' button is visible. A banner for 'AWS re:Invent' is also present.

Stop instance successful

