

## Assignment Lab 2

### 1- Creating IAM user and adding to group.

The screenshot shows the AWS IAM console 'Create user' page, specifically Step 4: Retrieve password. A green banner at the top states 'User created successfully'. The page title is 'IAM > Users > Create user'. The left sidebar shows the progress: Step 1 (Specify user details), Step 2 (Set permissions), Step 3 (Review and create), and Step 4 (Retrieve password). The main content area is titled 'Retrieve password' and includes a sub-header 'Console sign-in details'. It displays the following information:

- Console sign-in URL: <https://304554808542.signin.aws.amazon.com/console>
- User name: AdminOne
- Console password: [masked] [Show](#)

At the bottom right, there are three buttons: 'Cancel', 'Download .csv file', and 'Return to users list'.

The screenshot shows the AWS IAM console 'AdminOne' user details page, specifically the 'Permissions' tab. The page title is 'IAM > Users > AdminOne'. The left sidebar shows the 'Identity and Access Management (IAM)' section with a search bar and a list of navigation items: Dashboard, Access management (User groups, Users, Roles, Policies, Identity providers, Account settings), Access reports (Access analyzer, Archive rules, Analyzers, Settings, Credential report, Organization activity, Service control policies (SCPs)), and CloudShell. The main content area is titled 'AdminOne Info' and includes a 'Delete' button. The 'Summary' section displays the following information:

- ARN: [arn:aws:iam::304554808542:user/AdminOne](#)
- Console access: [Enabled without MFA](#)
- Access key 1: [Create access key](#)
- Created: October 29, 2023, 21:43 (UTC-05:00)
- Last console sign-in: [Never](#)

The 'Permissions' tab is selected, showing 'Permissions policies (1)'. It includes a search bar, a 'Filter by Type' dropdown set to 'All types', and a table of permissions:

Policy name	Type	Attached via
<a href="#">AdministratorAccess</a>	AWS managed - job function	Group <a href="#">Administrator</a>

## 2- Setting up a billing alarm on CloudWatch

The screenshot shows the AWS CloudWatch console in the 'Specify metric and conditions' step. The left sidebar lists the steps: Step 1 (Specify metric and conditions), Step 2 (Configure actions), Step 3 (Add name and description), and Step 4 (Preview and create). The main area is titled 'Specify metric and conditions' and contains a 'Metric' section and a 'Conditions' section.

**Metric Section:**

- Graph:** A line graph showing 'EstimatedCharges' over time. The y-axis is labeled 'No unit' with values 0, 0.13, and 0.26. The x-axis shows dates from 10/23 to 10/29. A blue line represents the 'EstimatedCharges' metric, which is rising. A red horizontal line is drawn at approximately 0.13. A text box says: 'This alarm will trigger when the blue line goes above the red line for 1 datapoints within 6 hours.'
- Namespace:** AWS/Billing
- Metric name:** EstimatedCharges
- Currency:** USD
- Statistic:** Maximum
- Period:** 6 hours

**Conditions Section:**

The 'Conditions' section is currently empty.

## 3- Creating SNS Topic

The screenshot shows the AWS CloudWatch console in the 'Configure actions' step. The left sidebar lists the steps: Step 3 (Add name and description) and Step 4 (Preview and create). The main area is titled 'Configure actions' and contains a 'Notification' section and an 'Auto Scaling action' section.

**Notification Section:**

- Alarm state trigger:** Define the alarm state that will trigger this action. There are three radio buttons:
  - In alarm:** The metric or expression is outside of the defined threshold. (Selected)
  - OK:** The metric or expression is within the defined threshold.
  - Insufficient data:** The alarm has just started or not enough data is available.
- Send a notification to the following SNS topic:** Define the SNS (Simple Notification Service) topic that will receive the notification.
  - Select an existing SNS topic:** (Selected)
  - Create new topic:**
  - Use topic ARN to notify other accounts:**
- Send a notification to...:** A search box containing 'Murwan\_Billing\_Alarm'. Below it, a note says: 'Only email lists for this account are available.'
- Email (endpoints):** A list of email addresses. One is 'murwansalah.abdelgafour@gmail.com' with a link to 'View in SNS Console'.
- Add notification:** A button to add the notification.

**Auto Scaling action Section:**

- Add Auto Scaling action:** A button to add an Auto Scaling action.

#### 4- Final result:

The screenshot displays the AWS CloudWatch Alarms console. At the top, a green banner indicates "Successfully created alarm MurwanBillingAlarm." with a "View alarm" button. Below this, a blue banner states "Some subscriptions are pending confirmation" with a "View SNS Subscriptions" button. The main content area shows a list of alarms under the heading "Alarms (1)". A table lists the alarm "MurwanBillingAlarm" with a state of "Insufficient data", a last state update of "2023-10-30 03:08:04", and conditions "EstimatedCharges >= 1 for 1 datapoints within 6 hours". The actions column shows "Actions enabled" and "Warning". The left sidebar contains navigation links for CloudWatch, Alarms, Logs, Metrics, X-Ray traces, Events, Application monitoring, Insights, Settings, Getting Started, and What's new. The bottom of the page shows the CloudShell icon, feedback link, and copyright information for Amazon Web Services, Inc. or its affiliates.

CloudWatch

Alarms (1)

Name	State	Last state update	Conditions	Actions
MurwanBillingAlarm	Insufficient data	2023-10-30 03:08:04	EstimatedCharges >= 1 for 1 datapoints within 6 hours	Actions enabled Warning