



# AWS Cost Explorer

AWS Cost Explorer is a comprehensive tool that allows you to analyse, track, and optimize your AWS costs. Here's a detailed breakdown of its key features and how they can be utilized:

## 1. Cost and Usage Analysis:

- **Historical Data:** View up to 13 months of historical AWS usage and cost data, helping you identify trends and patterns over time.
- **Filtering and Grouping:** Customize your reports by filtering data by services, linked accounts, tags, regions, and other dimensions. Group costs by service, usage type, or any other relevant category.
- **Granularity:** Drill down to daily, monthly, or hourly granularity for precise insights into how resources are being utilized and what's driving costs.

## 2. Cost Forecasting:

- **Forecasting:** Predict your AWS costs for up to 12 months in the future, based on historical usage trends. This can help with budgeting and cost optimization.
- **Budget Planning:** Set custom cost budgets and compare them against forecasted costs to ensure your spending remains within limits.

## 3. Savings Plans and Reserved Instance Recommendations:

- **Optimization:** Cost Explorer provides recommendations for purchasing **Savings Plans** or **Reserved Instances (RIs)** based on your historical usage. This helps in reducing costs for steady workloads.
- **RI Coverage Reports:** Track the usage and coverage of your Reserved Instances to ensure optimal cost savings.

## 4. Cost Allocation Tags:

- Assign **cost allocation tags** to resources to categorize and track costs associated with specific departments, projects, or teams. These tags allow for better visibility into spending patterns.

## 5. Cost Anomaly Detection:

- **Anomaly Detection:** AWS Cost Explorer uses machine learning to detect anomalous spending patterns. You can receive alerts when unexpected changes in usage or costs occur, enabling quick corrective actions.

## 6. Cost Categories:

- Define custom **Cost Categories** to group related costs under common business terms. For example, group all development-related costs across multiple AWS accounts or services.

## 7. Monthly Reports:

- Create and schedule monthly or custom reports for regular updates on cost trends. These reports can be shared with stakeholders or used for internal budget reviews.

## 8. Integration with Budgets:

- **AWS Budgets:** Cost Explorer integrates with AWS Budgets, allowing you to track your actual spend against defined budgets. You can also set up automated alerts if your costs exceed the budget thresholds.

### Usage Scenarios:

- **Business Intelligence:** Gain insights into which departments or projects are driving your AWS costs.
- **Cost Control:** Use forecasts and anomaly detection to keep costs within a set budget and avoid overspending.
- **Optimization:** Leverage cost-saving recommendations like Reserved Instances and Savings Plans.

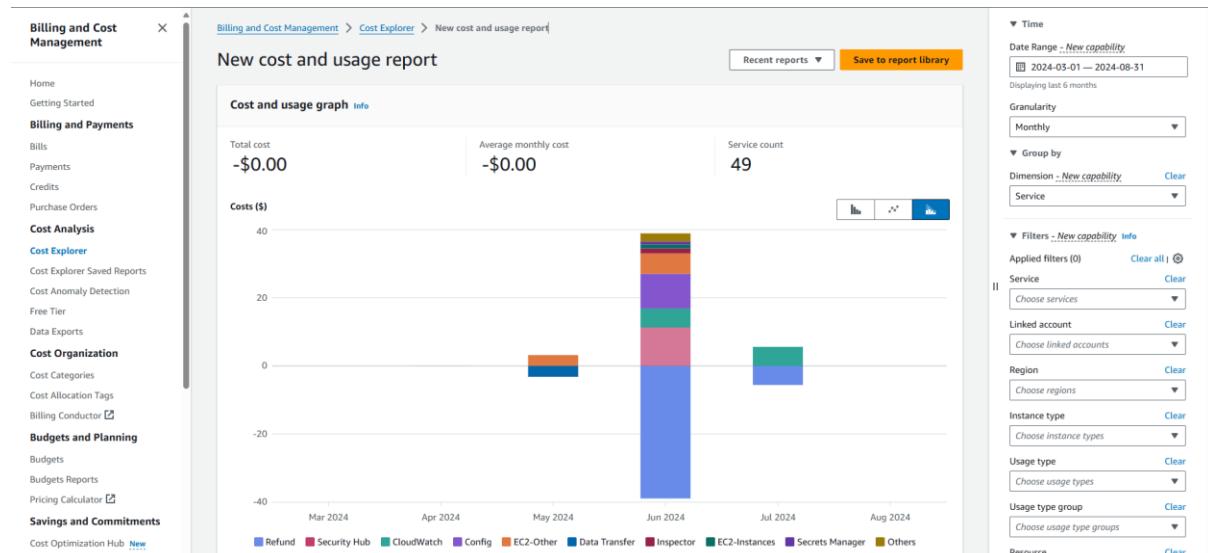
### Access and Permissions:

- Access to AWS Cost Explorer is provided through the AWS Management Console, and permissions can be managed via AWS Identity and Access Management (IAM) to restrict who can view or edit cost data.

By leveraging AWS Cost Explorer, businesses can effectively manage and optimize their cloud spending, ensuring they maximize value from their AWS resources.

## 😊 To begin with the Lab:

1. In your AWS Console, navigate to Billing and Cost Management.
2. From the left pane, under Cost Analysis choose Cost Explorer. On the dashboard, you will see a page like this now if you can explore the options.



3. So, from the right pane expand Time, click on Date range and you will have the options and you will have the options to choose between individual months. You also can select the past and future range.

<
March 2024
April 2024
>

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Start date	End date
2024/03/01	2024/08/31

#### Auto-select range (Relative)

Choose from the range we've selected for you. If you save a report with an auto-select range, the duration will remain the same and the date range will update accordingly each time you open it.

Past: 1 Day 7 Days Month to Date 1 Month 3 Months | [More](#)

Future: +1 Month +3 Months +12 Months

[Cancel](#)

[Apply](#)

4. In the Granularity tab, you can choose between Hours Daily and Monthly. The daily and monthly come in free tiers but the hourly option has the cost associated with it.

#### Granularity

Monthly	▲
Hourly	
Daily	
Monthly	✓

5. Then you have the option of Dimensions, where you can select multiple services. If you explore the right pane then you can see all the options that you have.

6. Now in the date range choose the Past 3 months, in the granularity choose Monthly, Dimensions choose Service.

▼ Time

Date Range - *New capability*

2024-06-01 — 2024-08-31

Displaying last 3 months

Granularity

Monthly

▼ Group by

Dimension - *New capability*

[Clear](#)

Service

7. Now scroll down to charge type, select Credit and Refund then choose Exclude. Click on Apply.

Charge type

[Clear](#)

Charge types excluded (2)

Filter charge types

Includes  Excludes

Select all (4)

Credit

Refund

Tax

Usage

Showing 4 of 4 results.

[Cancel](#) [Apply](#)

8. Scroll down to the bottom, in the Advanced options choose Amortized costs and observe the graph.

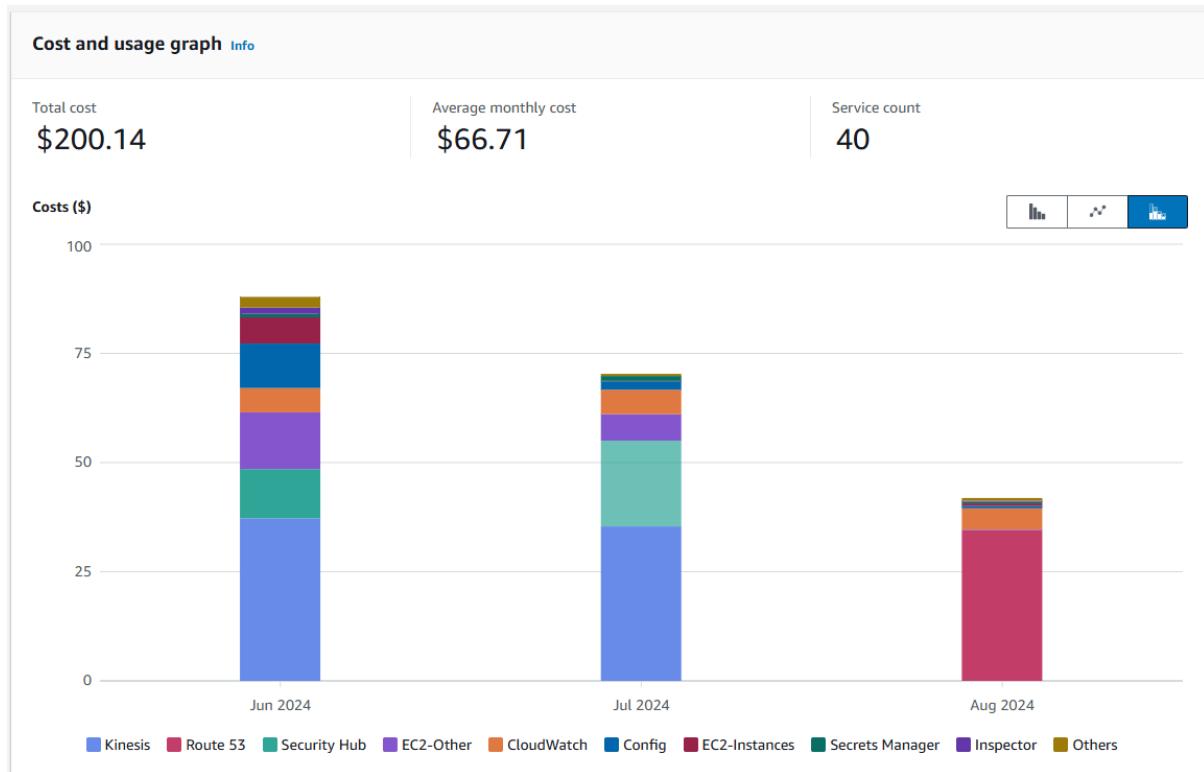
▼ Advanced options

Aggregate costs by [Info](#)

Amortized costs



9. Below you can see the graph for the last 3 months and the total cost that has been incurred.



10. Similarly, from the right pane expand service and search for EC2 then choose EC2 – Others, click on Apply.

Applied filters (1) [Clear all](#) | [⚙️](#)

Service	<a href="#">Clear</a>
<a href="#">Choose services</a> ▲	
🔍 EC2 <a href="#">X</a>	
<input checked="" type="radio"/> Includes	<input type="radio"/> Excludes
<a href="#">Select all (3)</a>	
<input checked="" type="checkbox"/> EC2 - Other	
<input type="checkbox"/> EC2 Container Registry (ECR)	
<input type="checkbox"/> EC2-Instances (Elastic Compute Cloud - Compute)	

Showing 3 of 55 results.

[Cancel](#) [Apply](#)

11. Below you have the graph for EC2 usage only. Similarly, you can view the graph for every other service which you have used in the past 3 months.



12. Also, if you scroll down below your graph, you will see an option to download as CSV.