Optimizing Cloud Costs: A Comprehensive Guide

cost usage report, cost optimization, cost-savings, monitoring optiomization

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aws	Billing dashboard/bills	AWS Cost Explorer	Cost and Usag Report
Data field	• AWS account ID • Service (EC2) • Usage Type (BoxUsage:t3:large) • Operation (Runinstance) • Item Description (OS & Pricing) • Usage Quantity • Cost	All fields from Bills File + • User Defined Tags • API Operation • Region A/Z • Platform (OS) • Purchase Option • Tenancy	All fields from Bills File • Resource-id
Period	• Monthly	• Monthly (Last 12 M) • Daily	• Hourly • Daily
Output	• PDF and CSV	• Billing Dashbord UI • CSV • Cost Explorer API	• S3
Use for	• Simple monthly reports	• Daily/weekly cost tracking • Leverage Cost Awareness • Trend and Budget analysis	• Hourly/Daily repo

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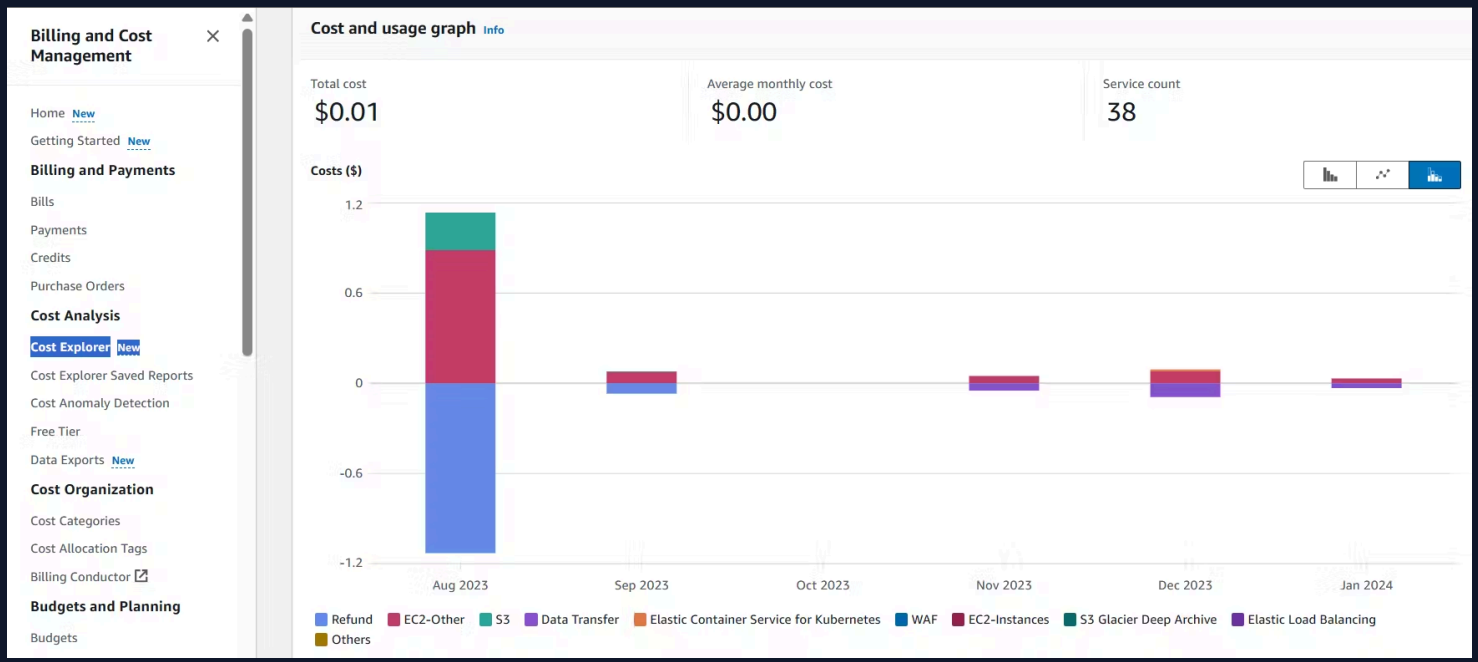
Introduction

In the era of digital trans me a vital component of businesses globally; ho to properly manage cloud costs. This article presents a step-by-step method for understanding and optimizing your cloud expenditures.

1. Accessing Cloud Cost and Usage Reports

The first step in cost optimization is identifying where your charges are coming from. This will provide you with a thorough snapshot of your cloud spending.

👉 Go to **Billing and Cost Management Console** → From the left navigation pane click on **Cost Explorer** → Here you can explore the cost of every resource you spend



2. Identifying Cost-Intensive Resources and Services

The next step is to exam[illegible]ion to determine which resources are the most [illegible]urces include virtual machines, storage, networking, and database services. Understanding these costs will allow you to better target your optimization efforts.

Service	Service total	August 2023	September 2023	October 2023	November 2023	December 2023	January 2024
Total costs	$0.01	$0.01	$0.01	$0.00	$0.00	-$0.00	-$0.00
EC2-Other	$1.12	$0.89	$0.08	$0.00	$0.05	$0.08	$0.03
S3	$0.25	$0.25	$0.00	-	$0.00	$0.00	$0.00
Elastic Container Service for Kubernetes	$0.01	-	-	-	-	$0.01	-
WAF	$0.00	-	$0.00	-	-	-	-
EC2-Instances	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Elastic Load Balancing	$0.00	$0.00	-	-	$0.00	$0.00	$0.00
Elastic Container Service	$0.00	-	-	-	-	$0.00	-
DynamoDB	$0.00	-	$0.00	-	-	-	-
MQ	$0.00	-	-	-	-	$0.00	-
VPC	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
CloudShell	$0.00	-	-	-	-	$0.00	-
Lambda	$0.00	-	$0.00	-	-	$0.00	$0.00
Key Management Service	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Secrets Manager	$0.00	$0.00	$0.00	-	-	-	$0.00
Elastic File System	$0.00	$0.00	-	-	-	-	-
SNS	$0.00	$0.00	$0.00	-	$0.00	$0.00	$0.00

3. Implementing Cost-Saving Measures

I. Instance Resizing

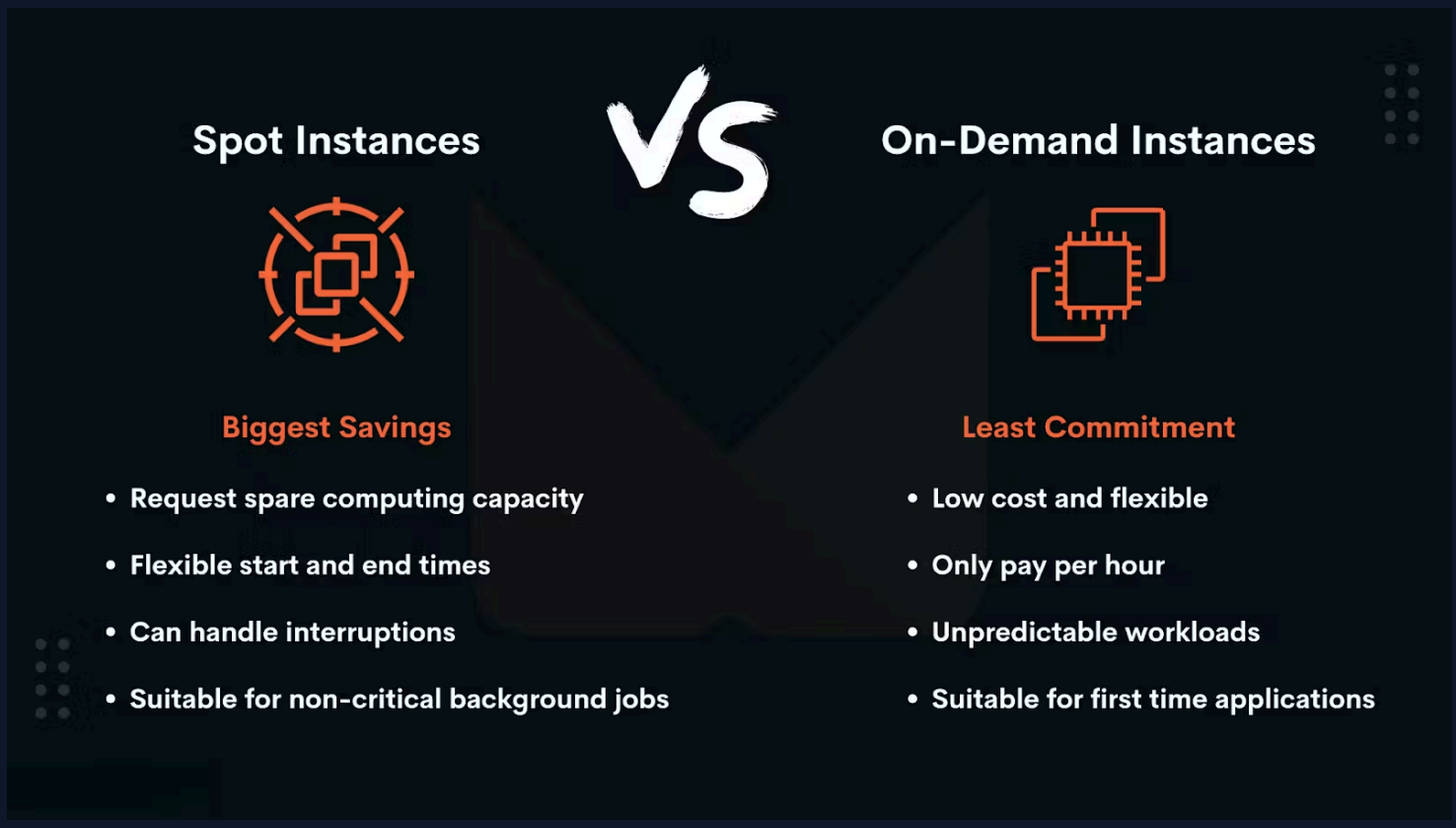
Over-provisioned instances are a common source of overspending; determining whether instances are larger than needed for their workload and downsizing them to a size that meets their real requirements can result in substantial cost savings.

II. Spot Instances

If your workloads can stand interruptions, try adopting spot instances, which provide computing capacity at a lower cost, making them appropriate for non-critical workloads. Keep track of the cost reductions and look into spot instance commitment alternatives to further optimize expenses.

III. Auto-Scaling C[illegible]

Review your auto-scaling policies and make adjustments to scale resources based on actual demand. Optimising auto-scaling rules can assist minimize over-provisioning during low-demand periods, resulting in cost savings.



4. Monitoring Cost Savings after Implementing Optimizations

After implementing these optimizations, it is critical to keep a close eye on your cloud costs. Keep track of the cost savings from each recommendation, as well as the overall impact on your cloud infrastructure costs. Review your cost reports on a regular basis to identify potential areas for further optimization.

➕ Additional Tips

> *Consider using third-party tools to analyse cloud costs and identify additional savings opportunities. Finally, share your cost optimisation findings and*

> *recommendations.*
>
> *Follow this guide to take control of your cloud costs and guarantee that your organisation gets the most value from its cloud expenditures.*

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