digital space
powered by aws

3 Steps to Reducing Waste in AWS

Introduction

Experiencing bill shock can make many companies reconsider their move to the cloud, even prompting thoughts of migrating back to on-premises or company-hosted data centres. Unlike the cloud, these environments are typically fixed cost (focusing on hardware here, though some variability is always possible). You know exactly what you are paying for, which can be a relief. However, I am here to show you three ways to avoid the dreaded bill shock and make the most of your cloud environment.

Do You Know Where Your Costs Are?

As you continue using cloud services, it will become increasingly clear how much they differ from on-premises usage. Have ever been brave enough to open your Cost and Usage Report (CUR) file? You will have noticed the vast number of lines covered and how each service is divided into multiple subcategories.

This is where a cost allocation strategy that aligns with your business needs becomes invaluable. It helps you identify areas that are incurring higher-than-expected costs. Getting this right allows your business to shift its focus from worrying about what costs the most to investing in areas that are the most profitable.

Once you have implemented a tagging strategy (tagging is a massive part of cloud adoption, and I plan to write another blog about it in the coming months) that works for you and your business, you might think you can rest easy knowing that every penny is accounted for. Unfortunately, that is just the first step in generating savings. The next step is...

Visualising Your Spend

Now that you have tags in place, it is time to check that everything is as it should be. AWS offers a few simple tools to monitor your spending. Let us explore them one by one and see the benefits of each.

Cost Explorer

This should be everyone is starting point when monitoring costs and their impact on your bill. Cost Explorer provides a medium-level view into all aspects of your linked accounts, services, tags, usage items, and even how discounts or credits are affecting your costs. While it has limitations, primarily allowing views at annual, monthly, and daily levels (though hourly costs can also be unlocked, but at a potentially inflated cost depending on your business size), I highly recommend exploring all the ways you can analyse your costs.

AWS Budgets/Budget Reports

AWS Budgets is a great tool for both alerting and keeping a general eye on how your costs are evolving over time. You can set up alerts to notify you when a set target is breached at the linked account, service, or tag level. Additionally, setting up a weekly report that consolidates all your budgets in one place allows you to track trends over time. These tools can be helpful for reacting to large increases in spending and managing development account costs. While setting them up can be tedious, they are 100% worth the effort eventually.

With your resources tagged and your spending visualized, **what is next?**

Optimising for Efficiency

One of my dad's go-to phrases when he got home from work was, "Do you need all these lights on?" It was typical for me, after getting home from school, to turn on lights as I entered rooms and leave them on when I left to do my chores. Sound familiar? We see this a lot in the cloud: someone has a promising idea, tests it, gets excited when it works, puts it into production, and then forgets to shut down the test environment - suddenly, your costs have doubled.

Now, with the tools in place, it is much easier to see if someone has "left the lights on" accidentally and to shut down resources that are no longer needed. Major cost drivers, if left on, include EC2 instances in test or development environments. To continue the light bulb analogy, you can make your cloud environment "smarter" by automatically switching off resources when they are not needed. The tagging policy we discussed earlier can make this even easier. (For the nerds out there, a year has 8,760 hours. By just turning an instance on at the start of the workday and off again at the end, you can save around 6,550 hours per year - for a t3a.large instance on Linux, that is $556.75.)

That is a big example, but the little stuff matters too. Consider elastic IP addresses: with the recent changes, you are now charged for every public IP address associated with your account. By releasing an unallocated or additional IP address, you can save $438.00.

How Can Digital Space Help?

Digital Space is an AWS Managed Service Provider and an AWS Well-Architected partner. As a member of the FinOps Foundation and head of FinOps practices within Digital Space, I spend my time understanding bills, forecasting costs, and helping customers optimize their spending.

Get dedicated FinOps advice alongside your AWS infrastructure at no extra cost to you.

Request a free Cloud FinOps Review with us today – <u>FinOps Review</u>