



9 Best Practices To Reduce Your MultiCloud Spend

Many organizations have learned the hard way that migrating to the public cloud doesn't always deliver the expected results. This realization does not mean that the change is a mistake. The public cloud brings tremendous benefits in terms of agility, responsiveness, simplified operations, and enhanced innovation.

However, the problem stems from assuming that the migration will automatically reduce technology costs. Without implementing optimization and governance best practices, controlling all of your cloud deployments becomes impossible, inefficiencies mount, and costs rise.

With cloud, changes come so quickly that organizations often have multiple versions, snapshots, and volumes running even though they are no longer needed. However, you. The first step in combating rising cloud costs is to gain visibility into multicloud spending across your entire organization, according to a recent **Cloud Health** report. Here's how to identify cloud problems and remediate them:



1. Delete Unused Volumes and Disks

The dynamic nature of cloud computing allows users to easily create new instances of virtual machines to meet peaks in demand. Problems arise because employees do not go back and shut off these resources once they are no longer needed. So, it's common to spend hundreds, thousands, and even tens of thousands of dollars on unused virtual server volumes and disks each month. The challenge is especially vexing with storage space, since firms want it to be available as needed.



Pro TIP

Delete all virtual server disks that have been disassociated from a virtual machine for two weeks, as you are unlikely to use them again.

2. Delete Old Snapshots

Companies need to protect corporate information. Many organizations use Snapshots to create recovery points in the event of an unexpected data loss or a disaster. However, their cost can quickly get out of control, if it is not closely monitored and steps are not in place to schedule their disposal.

Organizations can help regain control of Snapshots by monitoring the cost and usage of snapshots for each virtual server. They should set a standard in the organization for how many Snapshots should be retained per virtual server, and do so knowing that typically, recovery systems use only the recent one Snapshot. Also, establish a best practice to regularly check and ensure that old Snapshots are continually deleted.



Pro TIP

One way to find unneeded Snapshots is to identify those that do not have associated volumes. When a volume is deleted, it is common for the Snapshot to remain in your environment.

3. End Zombie Assets

Zombie assets are infrastructure components that run in your cloud environment, but no longer have any purpose and have not been shut down. They arise when a launch process fails or where there are errors in the script and there is a failure to deprovision the bad code. Once found, they must be isolated, evaluated, and terminated immediately, if they are considered non-essential. To be safe, back up the asset before canceling to make sure you can recover it if needed.



Pro TIP

Start your zombie purge by identifying computing services that have a maximum CPU percentage <5% in the last 30 days. This metric doesn't automatically mean that this asset is a zombie, but it does help to identify unneeded cloud resources.

4. Cautiously Upgrade To State-Of-The-Art Services

Your cloud service is in a constant state of flux. Providers regularly launch new generations of services, typically offering users a better price, enhanced performance, and additional functionality. For most companies, migrating between the different versions is a gradual and often loosely conducted process. Sometimes, they leave money on the table by keeping the older systems running.



Pro TIP

A large SaaS company found that nearly 60% of the instance hours they ran within the last 12 months used previous generation instance types. Upgrading those instances faster would save them millions of dollars a year.



5. Correctly Resize Your Environment

One beauty of the cloud is applications constantly morph as business drivers change. Developers often provision infrastructure resources that are substantially larger than necessary. They want to have leeway to meet demand, or they are cautious and do not want to undershoot performance requirements for new workloads.

Over-provisioning is common and leads to exponentially higher costs. Resizing is a cost reduction initiative with great potential. Enterprises need performance monitoring or cloud management tools to recognize when assets are over-provisioned, so they take corrective actions.



Pro TIP

A good starting point to resize correctly is to look for virtual servers that have an average CPU <5% and a maximum CPU <20% for 30 days.

6. Take advantage Of Discounts

Vendors offer various discount programs.

Amazon Web Services

With Amazon EC2 Reserved Instances (RI), companies commit to AWS for specific instance types in exchange for a discount on your compute costs, as well as a capacity pool. The commitment saves companies up to 75% compared to on-demand pricing.



Pro TIP

EC2 instances aren't the only assets on AWS that have reservations, Amazon RDS, Amazon DynamoDB, Amazon Redshift, and Amazon ElastiCache also offer this option.

Microsoft Azure

Microsoft Azure Reserved VM Instances allows you to make a one-year or three-year agreement, to use specific virtual machine instances in exchange for compute costs and prioritized capacity lower pricing. These bookings save companies up to 72% compared to pay-as-you-go pricing.



Pro TIP

Microsoft offers reservations for Azure Virtual Machines and SQL Database and Azure Cosmos DB compute capacity

Google Cloud Platform

Google offer users the ability to purchase a specific amount of compute or memory for discounts, at no upfront cost. With a one-year or three-year commitment, customers can save up to 57% of the normal price of cloud use with Google Committed Use Discounts.



Pro TIP

Google sustained usage discounts are given to users when they consume certain resources for the better part of a billing month. These discounts are given automatically, so customers don't have to do any extra work to take advantage of them.



7. Set Equipment Shutdown Schedules

Cloud service providers bill for virtual servers while they are up and running. Conversely, if a virtual server is in a stopped state, there will be no charge associated with it.

In this regard, evaluate whether a server's activity state is imperative for the organization. For example, if a virtual server shuts down during business hours and stops on weekends and holidays, taking it down saves you between 488 and 592 instance hours per month.

The most cost-efficient environments stop and start dynamically based on set schedules. These types of lights-on/lights-off policies are often more cost-effective than buying discounts, so it's crucial to look at how to take advantage of this type of policy.



Pro TIP

Set a goal for the weekly hours that non-production systems must run. A large publisher set that goal at less than 80 hours per week, which saves them thousands of dollars a month.

8. Move Object Storage To Lower-Cost Tiers

Each cloud provider offers multiple storage tiers at different prices and performance levels.

The price differential, from the top tier to the bottom is usually quite high. The best practice is to move data among storage tiers based on its usage. Commonly used assets are placed in fastest storage systems, and data needed infrequently moves to slower retrieval systems.



Pro TIP

Many companies place new workloads in higher storage classes and do not migrate them to lower tiers of storage as workload requirements change. Frequently monitoring your workloads' storage tiers delivers great savings.

9. Best Practices

Creating best practices is a big step in a company's journey to maximize its cloud assets. They need to ensure that the processes are ingrained into the company DNA and consistently followed. The cloud is dynamic, so business processes cannot be static.



Pro TIP

Form a committee to shepherd the use of best practices throughout the company. Make sure that top management takes an active role in promoting the work.

Companies moved quickly to the cloud. In many cases, they lacked management insight and expertise to ensure that they leveraged these features as much as possible. Adding best practices to cloud deployments closes such gaps.

C&W Business understands how to help you select the right multi-cloud solution to achieve your desired outcome. Armed with deep, cross-industry experience and expertise, C&W business can help you within every stage of your cloud journey.

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