CloudSnooze

Cloud Waste Checklist

What is Cloud waste

Cloud waste constitutes an alarmingly hefty sum per year – projected to be as high as $21 billion by 2021. That's an enormous amount of budget that companies could have spent on critical business ventures, but was instead wasted on unused or idle cloud resources. CloudSnooze aims to eliminate this wastage. In order to help you get started, we've compiled this checklist of potential wasted resources.

Here is an overview of what you can find on the checklist:

- **Orphaned Resources:** When a virtual machine is terminated, some resources linked to that machine continue existing, incurring unnecessary costs. These are called orphaned resources. If any of these exist in your cloud environment, you should terminate or reassign them.
- **Overprovisioned Resources:** Your data needs may have changed since you migrated to the cloud, or you may have selected a package size larger than what you actually need. Whatever the reason, you may have cloud resources available that are far too large for your current needs. Rightsizing these resources will save cloud expenditure, redirecting it to where it's needed most.
- **Idle Resources:** These types of resources are generally prime candidates for on/off scheduling. Here, you will find resources that are running when no one is using them, especially in a testing or development environment. You will also find resources that are no longer needed but have not been terminated.
- **Legacy Resource Types:** Cloud providers are constantly updating their instance families, thus your legacy instances are probably running on an outdated version. Newer versions are often available at lower cost.
- **Suboptimal Pricing Options:** Rather than using the "on demand" pricing option by default, investigate reserved instances and other pricing options that could offer discount. • **Suboptimal Reserve Capacity:** Use discount options wisely, since they easily accrue cloud waste. • **Expensive Options:** Choose the least expensive option when possible, allowing for flexibility in your Cloud environment.

CloudSnooze is a SaaS (Software as a Service) platform aimed at identifying and eliminating public cloud resource waste. We are able to save our clients upwards of 65% on their annual Cloud expenditure. For more information, contact us or visit our website.

CloudSnooze

Cloud Waste Checklist

Orphaned Resources		
☐	Orphaned Snapshots	Snapshots of decommissioned systems
☐	Orphaned Volumes	EBS (Amazon), Virtual Discs (Azure), Block Storage (GCP), EBS (Alibaba)
☐	Unassociated Ips	Elastic IPs (AWS & Alibaba Cloud), Static Public IPs (Azure), Static External IP Address (GCP)
☐	Load Balancers	These have no instances
☐	Unused Machine Images	AMI (AWS), Images (GCP & Alibaba Cloud)
☐	Orphaned Object Storage	S3 Buckets (AWS), Block Blobs (Azure), Storage (GCP), OSS (Alibaba Cloud)
Overprovisioned Resources		
☐	Underutilized Volumes	EBS (Amazon), Virtual Discs (Azure), Block Storage (GCP), EBS (Alibaba)
☐	Underutilized Database Warehouses	Redshift (Amazon), Datastore (GCP), SQL Data Warehouse (Azure), MaxCompute (Alibaba)
☐	Underutilized Relational Databases	RDS (Amazon), SQL (Azure & GCP), Apsara DB (Alibaba). Other scenarios include databases with unnecessarily high redundancy, multi AZ databases where you only need one or multiple read replicas.
☐	Underutilized Instances	EC2 (Amazon), Virtual Machines (Azure), Compute Engine (GCP), ECS (Alibaba)
☐	Inefficient Containerization	Containers that are not fully utilized should be switched off or consolidated.
☐	Idle Host Caching Tools	ElastiCache (Amazon), Cache (Azure), Managed Redis (GCP), ApsaraDB for Redis (Alibaba)
Idle Resources		
☐	Idle Instances	EC2 (Amazon), Virtual Machines (Azure), Compute Engine (GCP), ECS (Alibaba). Prime candidates for on/off scheduling
☐	Idle Load Balancers	
☐	Idle Relational Databases	RDS (Amazon), SQL (Azure), SQL (GCP), Apsara DB (Alibaba)
☐	Idle Scale Groups	Auto Scaling Groups (AWS), Scale Sets (Azure), Scale Groups (GCP), Auto Scaling (Alibaba)
Legacy Resource Types		
☐	Running Instances	Outdated Instance Families

CloudSnooze

Cloud Waste Checklist

Suboptimal Pricing Options		
☐	Consistent Workloads	Optimizable using Reserved Instances (AWS, Azure), Committed Use Discounts (GCP), Subscription-Based Pricing (Alibaba)
☐	Dynamic Demand	Optimizable using scale groups: Auto Scaling (AWS, Alibaba), Scale Sets (Azure), Scale Groups (GCP)
☐	Batch Processing Demand	Optimizable using discount options: Spot Instances (AWS), Low-Priority VMs (Azure), Preemtible VMs (GCP), Preemptible Instances (Alibaba)

Suboptimal Reserve Capacity		
☐	Expiring Reservations	Review your workload regularly, renewing & re-optimizing as you go.
☐	Unused Reservations	Review how exisiting reservations are applied. If unused, adjust workloads or sell reservation on the Cloud Provider's marketplace.

Expensive Options		
☐	Regional Pricing	Pricing differs between regions. Ensure that you use the least expensive option, moving workloads as necessary.
☐	Vendor Pricing	Avoid vendor lock-in. Shop around for more cost effective options.