CLOUDCANNY

Majority of the IT budget spent in the cloud goes into IAAS (Infrastructure as Service), where cloud waste constitutes more than 60% of the monthly budget. According to Gartner, the global market for cloud is 266.4b and IAAS constitutes more than 50b, in which 13.5 b was spent in cloud waste.We have discussed more details in our cloud waste report whitepaper.

Cloud waste generally happens in 4 ways.
- **Idle Resources**
- **Orphaned Resources**
- **Underutilized Resources**
- **No Centralized view of resources**

Even after keeping a sharp eye on the resources cloud waste continues to increase and the budget shoots over the benchmark. It's a time-consuming task to monitor and identify which are idle, underutilized or orphaned resources and take necessary actions like deleting, turning off, reducing the size of the servers and finally comparing and calculating the cost projections to make it within the budget. It's an even more time-consuming process when you have a multi-cloud strategy i.e having more than one cloud provider (AWS and AZURE).

To understand more, let's walk through real-life scenarios where and how cloud waste happens. A small team comprising 4 engineers (A, B, C, D) in an organization working on an application development following the software development life cycle. A and B works in development, C works in testing and D in deployment and Infra-DevOps. They have a total of 6 servers, 2 for developers, 1 for staging and 1 for testing and 2 for production.

TEAM / DEVELOPER	SERVER / SIZE	HOURS *	COST **
Development (A and B)	2 * (4 vCPU , 16 GB Ram)	1440 hrs	340 $
Staging	1 * (4 vCPU , 16 GB Ram)	720 hrs	170 $
Testing & Deployment (C and D)	1 * (4 vCPU , 16 GB Ram)	720 hrs	170 $
Production	2 * (4 vCPU , 16 GB Ram)	1440 hrs	340 $
Total	**6 Servers**	**4320 hrs**	**1020 $**

* 24 hrs x 30 days = 720 hrs   ** cost per 4 vCPU ,16 GB Ram = 170 $ (0.236$ /per hr)

A total of 1020 $ has been spent every month for the team, where a huge amount of money was spent on cloud waste, let's look into it more detailed.

Idle Resources:

Out of 6 servers 4 servers are non-production i.e development, staging, testing and deployment servers. These servers are utilized by the developers generally during working hours are from 9 am - 6 pm (9hrs) Monday to Friday, however the servers are running 24*7. If we calculate it, In a week, as supposed to 168 hrs (24h * 7 days) only 45hrs (9h * 5 days) are utilized, the remaining hours i.e not working hours (7 pm - 9 am + weekends) are running not utilized which is 73% of the time servers are not utilized.

TEAM/ DEVELOPER	ORIGINAL HOURS	OPTIMIZED HOURS *	ORIGINAL COST	OPTIMIZED COST	SAVINGS
Development	1440 hrs	396 hrs	340 $	93.6 $	72.5 %
Staging	720 hrs	198 hrs	170 $	46.8 $	72.5 %
Testing & Deployment	720 hrs	198 hrs	170 $	46.8 $	72.5 %
Production	1440 hrs	1440 hrs	340 $	340 $	0
Total	**4320 hrs**	**2232 hrs**	**1020 $**	**505.2 $**	**54.5 %**

* 9 hrs a day x 22 working days in a month = 198 hrs

In total, more than 50% of the money is saved alone in Idle resources by utilizing the servers effectively.

Orphaned Resources:

After a few months into the successful deployment, developer B leaves the company, and developer A continues to work on rolling updates and bug fixes ..etc . Because the busy nature of the work, the communication b/w the Infra, Dev-Ops team and Engineering team was broken, which lead to, they forget to stop/delete the machine of Developer B

Underutilized Resources:

In the production, usually the developer estimates the size to be 2x bigger than the necessary, to avoid any future problems with the size.

No Centralized view of resources:

Since there is no effective tool to view the effectiveness of the utilization data, across multiple cloud providers makes difficult to find the root cause and moreover it does not provide any pro-active decisions

CloudCanny solves all the above-mentioned problems.

1. **Fully Automated**:
   a. Single-Click Setup - One click onboarding of cloud providers and server
   b. Handsfree - No Need for Scripting, adding CRON and Monitoring

2. **Smart and Intelligent:**
   a. Finds and recommends the decisive actions to be taken. Looks for Idle, oversized and orphaned resources.

3. **Easy Scheduler**:
   a. Scheduling to power off and on from anywhere at any time zone

4. **Turns data into actions**:
   a. With a centralized view on utilization data of all the servers, across cloud providers, it's easy exploratory analysis on cost vs utilization chars across the organization and easy calculation of the budget,
   b. Take decisive actions on the total budget, keep an eye on the benchmark of the budget
   c. When budgeting overshoots, easily click and analyze to find the root cause Exploratory analysis on data with the easy chart on cost vs utilization chars across the organization

5. **Easy access and Integrations:**
   a. Use the cloud as your desktop and laptop, easy access control through platform and mobile
   b. Actions and Notification through integration with Slack, Microsoft Teams, Webhook, etc

CloudCanny empowers DevOps and Infra team to save cloud costs smartly. CloudCanny's app provides easy managing, scheduling and monitoring the cloud servers to save costs by optimizing the cloud usage. Currently supported for Digitalocean servers.