**USE CASE - AWS (Instance Scheduling)**

**Business challenge: To minimize the resource cost in AWS**

Analyzing and re-configuring resources in AWS for Cost Optimization.the greatest benefit of any cloud platform is to control the operational expenditure by utilizing the resources optimally by scaling up/down based on the demand. our team of AWS specialists has expertise in managing the cloud operating expenses by optimizing resource usage using data analytics and machine learning techniques and arriving at recommendations.

**Solution**

AWS Cloud Cost Optimization can be categorized into different services based on their usage and needs. Prioritizing the recommendation is important because there are different business reasons for such configurations, some of which are shown in the following.

* Compute Optimizations
* Storage Optimizations
* Big Query Optimizations
* Pricing Efficiency

**Compute Optimizations:**

The best way is to get rid of ideal cloud resources which don’t provide any business value. This saves nearly 100% of the total cost. Autoscaling helps to scale the resources up and down based on activity.

Some of the processes we follow in Compute Services for Cost Optimization based on the analysis are

* Instance Scheduler
* Ideal Instance Recommendations and Implementation (AWS Compute Optimizer)
* Drift Management
* Auto Scale Instances
* Custom Machine Type
* Pre-emptible Instances
* Committed Use Discounts for Instances

**Instance Scheduler Recommendations**

**Following are the activities performed on Instances to optimize the usage.**

**Automate start times and deallocate times for AWS Instances based on the Instance’s ideal time.**

* **Identify the Ideal working time for VM via Recommended API of AWS**

Use Recommend APIs to identify the Instance’s ideal working time.

* **Select your Instances to schedule**

Use your existing tag structure to identify which Instances to target. we manage your Instances with our tools to schedule at a particular time

* **Define a schedule**

Define the working time for Instance based on the Instance’s usage.

* **Integrations for full automation control**

Receive upcoming schedule execution notifications via MS Teams or email. From there you can snooze or cancel the action.

* **Start Instances**

Bring up Instances by a schedule based on their working time.

* **Use Your AWS Tags**

Use your existing AWS tag structure to target Instances for your schedule

* **Deallocate Instances**

Instances will be shut down for the ideal period automatically without any user intervention.

* **Control Costs**

Reduce your costs by cycling your Instances when they’re not required

* **Improve Elasticity**

AWS is designed to be elastic so take full advantage by cycling on and off

* **Intervene**

Cancel or snooze a schedule by interacting with rich notifications from MS Teams or email.