



# Carahsoft AWS FinOps Services Help Enterprise Solutions Provider Overcome Cost Visibility and Financial Management Challenges



## About the Customer:

Enterprise Solutions Provider (ESP) is a FISMA certified cloud hosting provider offering cyber security, IT operations, & contract vehicles for federal, state, & local government agencies. ESP offers fully managed AWS cloud services to the U.S. Government and its supporting contractors and is comprised of cloud, security, and IT specialists.

## Customer Challenge:

ESP faced several operational challenges that hindered their AWS practice. As a fully managed AWS provider servicing several different customers, they are responsible for invoicing their customers for their AWS consumption. However, they were experiencing a lack of visibility into detailed costs by customer. This lack of visibility prevented them from accurately tracking and managing spend at an individual customer account level, directly affecting their operational efficiency and their ability to treat each customer as one independent entity. Another critical component of their service offering, the monthly invoicing process, was compromised due to their inability to generate reliable and comprehensive reports by customer. Accurate and timely billing is essential for maintaining trust, especially with government clients. The administrative burden and potential revenue delays from rectifying billing inaccuracies diverted valuable ESP resources from the other initiatives.

In addition to the operational challenges around customer costs, ESP was lacking comprehensive strategies around AWS Budgets, budget alerts, and tagging. Without robust strategies for budgeting, cost monitoring, and effective resource tagging, they were not managing their cloud expenditure actively. The absence of budget alerts meant they could not quickly identify cost overruns, leading to unexpected expenses. Ineffective tagging practices hindered their ability to track costs and usage in any meaningful way and affected their decision-making capabilities and their efforts to optimize cloud usage and costs.

## Partner Solution:

The design principles of the solution at large included implementing cloud financial management, measuring efficiency, and analyzing and attributing expenditures in adherence to the Cost Optimization pillar of the AWS Well-Architected Framework.

Specifically, Carahsoft's FinOps framework solution included implementation, training, and enablement on the following:

- Cloud Intelligence Dashboard powered by Amazon QuickSight
- AWS Cost Allocation Tags
- AWS Budgets
- AWS Cost Anomaly Detection
- Amazon CloudWatch

To tackle the customer's challenges around cost visibility and the generation of reliable, comprehensive monthly invoice reports, Carahsoft leveraged AWS QuickSight's powerful data visualization and tagging capabilities. With QuickSight, Carahsoft was able to design a dashboard that provided granular insights into costs sorted by customer and customized the dashboard to enable the segmentation of costs according to the customer's unique business structure. This including the ability to filter and drill down into specific cost centers, projects, and customers.

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The custom views that Carahsoft configured in the dashboard showed total costs by end customer linked account and gave the ability to select one end customer linked account and see that customer's total costs by AWS service in near real time, providing the visibility and telemetry that they were lacking. This data could then be exported to a CSV file. A comprehensive training program was then conducted for the ESP team and solution documentation delivered, covering the operation and interpretation of the dashboard to ensure they could fully leverage its capabilities.

AWS Cost Allocation Tags are essential for tracking costs and usage across different dimensions—such as departments, projects, or environments—allowing for a granular analysis of cloud expenditures. Carahsoft guided ESP through the process of implementing and managing these tags, including best practices for tag naming conventions and policies for tag governance. By utilizing Cost Allocation Tags, ESP began to accurately allocate AWS costs, enhancing their billing accuracy and internal chargeback processes. Practical examples and case studies were provided to make the concepts more relatable and easier to implement.

AWS Budgets is a tool that allows for the creation of custom budget plans that alert users when their costs or usage exceed predefined thresholds. Carahsoft's enablement sessions with ESP covered the setup process, demonstrating how to establish cost and usage budgets that align with the agency's financial goals and operational requirements. Advanced sessions delved into strategies for utilizing AWS Budgets to track costs by the recently configured Cost Allocation Tags as well as set custom alerts based on forecasted and actual spend, enabling the agency to receive real-time notifications for budgetary overspends or anomalies.

## Results and Benefits:

The customized QuickSight dashboard that was made available to the ESP team significantly improved their cost visibility and gave them insights they didn't have prior. For example, it showed them the consistency and similarity of the compute usage across their end customer accounts, empowering them to make a Compute Savings Plans purchase that they could leverage for their own internal cost savings. From this, they began saving **12%** on AWS compute usage across their customer base each month. It also gave them the ability to generate reliable and timely invoice reports by end customer and overcome their chargeback hurdles.

The implementation of a comprehensive strategy around Cost Allocation Tags and AWS Budgets resulted in significant enhancements to ESP's AWS cost management and operational efficiency. Following adoption, they reported experiencing more granular cost visibility and allocation, optimized spending, better budget management and forecasting, and feeling far more informed to make strategic decisions. ESP estimated that the services provided by Carahsoft saved them **20 hours per week** over the course of four weeks in having to spin up their own internal subject matter experts to learn and implement the AWS services and strategies covered.

Perhaps the most significant outcome was the establishment of a FinOps framework and culture among the ESP team. The in-depth training that they received as a byproduct of implementation of AWS Budgets and Cost Allocation Tags provided the team with the knowledge and tools necessary to proactively manage their own cloud costs. This shift towards a more strategic, financially savvy approach to cloud management fostered a culture of accountability and efficiency, and staff members became more engaged in AWS cost optimization efforts, contributing to a collective effort to maximize the value of AWS cloud investments.



## About the Partner:

Carahsoft Technology Corp. is a government IT solutions provider and AWS distributor and service provider supporting Public Sector organizations across Federal, State and Local Government agencies and Education and Healthcare markets. Working with resellers, systems integrators and consultants, our sales, marketing, and service delivery teams provide industry leading IT products, services and training through hundreds of contract vehicles.



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