



# Buyer's guide to cloud usage optimization

A comprehensive review of CloudHealth by VMware, Cloudability by Apptio, CloudZero, Finout CostGuard, AWS Cost Explorer, Karpenter, and Platform9 Elastic Machine Pool (EMP).

Author

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Sponsored by Platform9



## About the author



# Dieter Matzion

Dieter Matzion is a seasoned cloud professional with extensive experience in cloud management and optimization. He has been working in the cloud industry since 2013, holding key positions at leading technology companies such as Google, Netflix, Intuit, and Roku. Dieter is also a FinOps ambassador and a Cloud FinOps Certified Practitioner. His expertise spans cloud cost optimization, infrastructure management, and FinOps best practices, making him a trusted advisor in the field. Dieter's insights and knowledge are highly valued by organizations looking to optimize their cloud usage and drive operational efficiency.



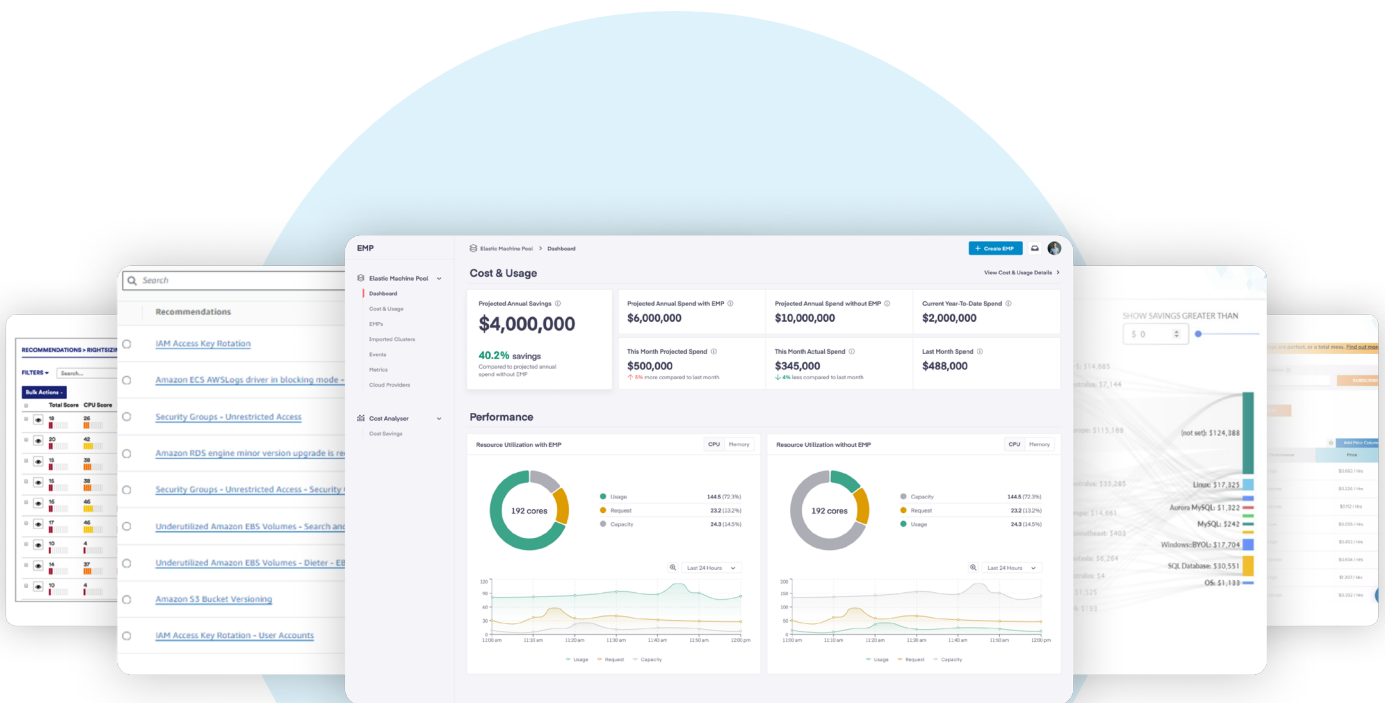
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# Introduction

Effective cloud usage optimization is a crucial aspect of managing cloud infrastructure, especially as organizations scale and their cloud costs increase.

This guide provides an in-depth look at several cloud usage optimization tools, their capabilities, pros and cons, and the challenges users face. We will cover CloudHealth by VMware, Cloudability by Aptio, CloudZero, Finout CostGuard, AWS Cost Explorer, Karpenter, and Platform9's Elastic Machine Pool (EMP). The information is based on a recent webinar by Dieter Matzion, drawing from his extensive experience working with these tools in high-profile organizations such as Roku, Intuit, Netflix, and Google. For more details, you can watch the full [webinar here](#).



# CloudHealth by VMware

## Overview

CloudHealth by VMware is a comprehensive cloud management platform designed to help organizations manage and optimize their cloud costs, usage, and performance. It provides visibility into cloud infrastructure and offers actionable recommendations for optimization.

## Features

- **Right-sizing recommendations:** Provides detailed insights into CPU, memory, disk, and network utilization to help right-size instances.
- **Cost tracking and allocation:** Tracks cloud spending and allocates costs to different business units or projects.
- **Automation:** Automates the execution of optimization recommendations and tracks savings over time.
- **Governance and security:** Ensures compliance with cloud security best practices.

## Product Pros and Cons

Pros	Cons
Offers detailed insights into potential cost savings through right-sizing and other optimizations.	Full visibility into memory and disk usage requires installing an agent, which can add complexity.
Provides specific, actionable recommendations to optimize cloud usage and reduce costs.	May not scale effectively for large environments with thousands of instances.
Monitors optimization opportunities and tracks their progress, helping organizations maintain continuous improvement.	Automated right-sizing can result in downtime without proper testing, potentially impacting application availability.
	The process of opening and managing Jira tickets for optimization tasks incurs additional costs and resource overhead.

## Organizational challenges

- **Finding ownership:** Identifying the responsible engineers or business units for each resource can be challenging, leading to delays in optimization actions.
- **Motivation and training:** Engineers need to be motivated and trained to act on recommendations, and leadership must prioritize optimization efforts.
- **Complex exemptions:** Managing exemptions for resources that cannot be optimized requires additional oversight and approval processes.
- **Cost of Jira tickets:** Managing Jira tickets has significant costs. For instance, the average cost of a Jira ticket can range from \$2,000 to \$17,000, depending on the organization's processes. This includes the time engineers spend on reviewing, testing, and implementing changes, which is a substantial expense for any organization.

In particular, it is important to discuss the complex exemptions and cost of Jira tickets because this is a major problem with all these tools which provide a lot of visibility and recommendations, but leave the actual implementation to the FinOps, DevOps, and the engineering teams.

## Complex exemptions

Managing exemptions for resources that cannot be optimized requires additional oversight and approval processes. Often, there are legitimate reasons why certain resources should not be included in optimization efforts, such as legacy systems, compliance requirements, or critical applications that cannot tolerate downtime or performance changes. These exemptions need to be documented, justified, and periodically reviewed to ensure they are still valid. This process involves:

- **Tracking and documentation:** Keeping detailed records of why exemptions are granted, including the business justification and the expected duration.

- **Approval processes:** Implementing a robust approval process to ensure that exemptions are granted only when necessary, often involving multiple levels of management or a review committee.
- **Periodic reviews:** Regularly reviewing exempted resources to determine if the exemptions are still justified, ensuring that they do not become permanent and unchecked sources of inefficiency.
- **Ownership and accountability:** Assigning clear ownership for exempted resources to specific teams or individuals to ensure accountability for maintaining and eventually optimizing these resources when possible.
- **Monitoring and Reporting:** Continuously monitoring exempted resources and generating reports that highlight the impact of these exemptions on overall cloud efficiency and costs.

## Cost of Jira tickets

Managing Jira tickets for optimization tasks incurs significant costs and resource overhead. Each Jira ticket represents an investment in time and effort from various stakeholders, including engineers, team leads, and project managers. The costs associated with Jira tickets include:

- **Engineering time:** Engineers need to review the recommendations, conduct necessary tests (such as smoke tests or load tests), and implement changes safely. This process can take several hours to days, depending on the complexity of the task.
- **Review and approval:** Each ticket often requires review and approval from team leads or managers to ensure that the recommended changes align with business priorities and do not negatively impact other projects.
- **Coordination and communication:** Effective implementation of changes requires coordination among multiple teams, especially in large organizations. This involves meetings, status updates, and continuous communication to align efforts and resolve any issues.

- Testing and validation:** Before implementing changes in a production environment, thorough testing is necessary to ensure that the changes do not introduce new problems. This might include running automated tests, manual validation, and potentially conducting rollback plans in case of issues.
- Opportunity cost:** While engineers and other team members focus on managing and implementing these tickets, they are diverted from other critical tasks, such as developing new features, fixing bugs, or improving system performance. This diversion can delay other important projects and impact overall productivity.
- Financial cost:** The average cost of processing a Jira ticket can vary significantly. At some organizations, the cost may be around \$2,000 per ticket, but in others, it can be as high as \$17,000, especially if the ticket involves complex changes, multiple teams, or extended validation periods. These costs include salaries, operational overheads, and potential downtime during implementation.

The cumulative effect of these factors makes managing Jira tickets for cloud optimization a costly and resource-intensive process, highlighting the need for more automated and streamlined solutions.

RECOMMENDATIONS > RIGHTSIZING > EC2 RIGHTSIZING BY INSTANCE														
FILTERS											Actions	Subscribe		
Bulk Actions		Total Score	CPU Score	Memory Score	Disk Score	Network In Score	Network Out Score	Instance Name	API Name	Zone Name	Projected Cost	Recommendation Savings	Recommendation	Action
18	26	53	7	<1	1	tf-chef-redis-master-2	r3.2xlarge	us-east-1b	\$119.49	\$108.73	Downgrade to r3.xlarge	Actions		
20	42	53	6	<1	<1	tf-chef-resque-es-pool-b-3	m3.xlarge	us-east-1e	\$46.55	\$35.38	Downgrade to m3.large	Actions		
15	38	23	15	<1	<1	tf-chef-app-cron-low-idempotent-9	m3.xlarge	us-east-1e	\$35.47	\$34.68	Downgrade to m3.large	Actions		
15	38	23	15	<1	<1	tf-chef-app-cron-low-idempotent-12	m3.xlarge	us-east-1e	\$35.41	\$34.68	Downgrade to m3.large	Actions		
16	46	18	18	<1	<1	tf-chef-app-cron-pulse-cache-b-2	r3.xlarge	us-east-1b	\$37.66	\$29.48	Downgrade to r3.large	Actions		
17	46	20	18	<1	<1	tf-chef-app-cron-pulse-cache-a-1	r3.xlarge	us-east-1a	\$37.29	\$28.43	Downgrade to r3.large	Actions		
10	4	32	16	<1	<1	tf-chef-webserver-newrelic-7	m3.xlarge	us-east-1a	\$31.47	\$28.35	Downgrade to m3.large	Actions		
14	37	17	15	<1	<1	tf-chef-app-cron-low-4	m3.xlarge	us-east-1a	\$31.40	\$24.93	Downgrade to m3.large	Actions		
10	4	32	16	<1	<1	tf-chef-webserver-newrelic-2	m3.xlarge	us-east-1b	\$28.91	\$18.26	Downgrade to m3.large	Actions		

Product dashboard: CloudHealth by VMware



# Cloudability by Apptio

## Overview

Cloudability by Apptio is a cloud cost management and optimization platform that provides visibility into cloud spending and usage, helping organizations optimize their cloud resources.

## Features

- **Right-sizing and termination recommendations:** Identifies opportunities to right-size instances and terminate unused resources.
- **Cost allocation and showback:** Allocates costs to business units or projects and provides showback reports.
- **Multi-cloud support:** Supports AWS, Azure, and Google Cloud, providing a holistic view of cloud spending.
- **Automation:** Automates the implementation of optimization recommendations.

## Product Pros and Cons

Pros	Cons
Provides a clear view of cloud spending and optimization opportunities across multiple cloud providers.	Managing a large number of recommendations and tracking ownership can be challenging.
Offers specific recommendations for right-sizing, terminating unused resources, and switching to more cost-effective instance types.	Recommendations often require manual review and validation before implementation, which can be time-consuming.
Manages costs across AWS, Azure, and Google Cloud, making it suitable for multi-cloud environments.	Similar to CloudHealth, scaling to very large environments with thousands of resources can be problematic.

## Challenges

- **Managing multiple recommendations:** Handling and acting on a large number of optimization recommendations requires significant effort and coordination.
- **Integration with existing tools:** Integrating with existing cloud management and ticketing systems can be complex.
- **Application impact:** Implementing optimization recommendations can potentially impact application performance if not managed carefully.
- **Cost of manual implementation:** Manually implementing recommendations can be expensive. Engineers must spend time reviewing and testing each recommendation, which adds up in terms of labor costs and can lead to significant delays in realizing cost savings.

## Riverflow diagram to understand distribution of cloud cost

Cloudability uses a visually compelling riverflow diagram to illustrate the optimization landscape across different cloud providers and services. The riverflow diagram helps users understand the flow and distribution of their cloud resources and cost-saving opportunities.

Description of the riverflow diagram:

### 1. Starting point - Cloud providers:

- On the left side of the diagram, the river starts with the different cloud providers such as AWS, Azure, and Google Cloud.
- Each cloud provider is represented by a distinct color and width proportional to its overall cost or resource usage.

### 2. Services breakdown:

- As the river flows from the cloud providers, it splits into various services such as EC2, RDS, DynamoDB, and more.
- Each service segment indicates the portion of resources or costs associated with that service.

### 3. Optimization actions:

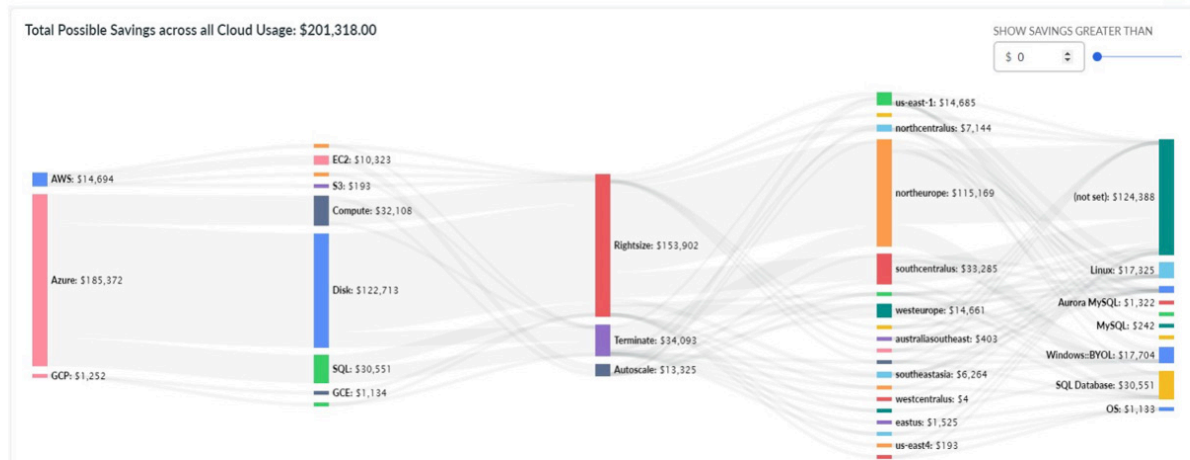
- Further downstream, the river splits into different recommended optimization actions, such as right-sizing, terminating unused resources, and enabling auto-scaling.
- The width of each stream represents the potential savings or impact of that action.

### 4. Regional distribution:

- The diagram also includes a regional breakdown, showing how resources are distributed across different geographic regions.
- This helps users identify optimization opportunities in specific regions.

### 5. Action breakdown:

- At the end of the river, the diagram provides a detailed view of the specific actions needed, such as resizing specific instance types or shutting down idle databases.
- This helps users understand the exact steps required to achieve the recommended optimizations.



Riverflow diagram: Cloudability by Apptio

# CloudZero

## Overview

CloudZero is a cloud cost intelligence platform that provides detailed insights into cloud spending and usage patterns, helping organizations optimize their cloud resources effectively.

## Features

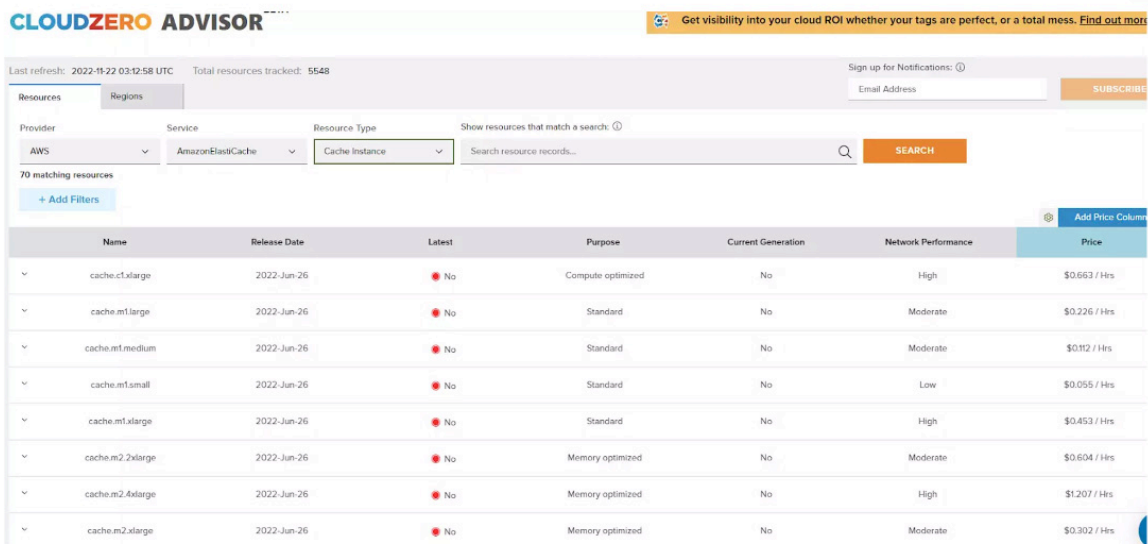
- **Cost allocation and visualization:** Allocates cloud costs to different business units or projects and provides detailed visualizations.
- **Anomaly detection:** Identifies unusual spending patterns and alerts users to potential issues.
- **Forecasting and budgeting:** Provides tools for forecasting future cloud spending and setting budgets.
- **Detailed reporting:** Offers detailed reports on cloud usage and costs, helping organizations understand and manage their spending.

## Product Pros and Cons

Pros	Cons
Provides deep visibility into cloud spending and usage patterns, helping organizations identify and address inefficiencies.	Provides insights on a service-specific basis, which can make it challenging to get a holistic view of cloud spending.
Alerts users to unusual spending patterns, allowing for proactive management.	May struggle to scale effectively in very large environments with numerous resources.
Helps organizations plan for future cloud spending and manage their budgets effectively.	Requires manual integration with other cloud management tools and systems.

## Challenges

- **Holistic visibility:** Providing a comprehensive view of cloud spending across all services and regions can be difficult.
- **Manual effort:** Significant manual effort is required to integrate with existing tools and manage recommendations.
- **Resource ownership:** Identifying and tracking the responsible owners for cloud resources is often a complex task.
- **Cost of manual effort:** The manual integration and review process can be labor-intensive and costly, involving substantial time investment from engineering teams.



The screenshot displays the CloudZero Advisor interface. At the top, it says "CLOUDZERO ADVISOR" and "Get visibility into your cloud ROI whether your tags are perfect, or a total mess. Find out more". Below this, it shows "Last refresh: 2022-11-22 03:12:58 UTC" and "Total resources tracked: 5548". There are tabs for "Resources" and "Regions", and a "Sign up for Notifications" section with an "Email Address" field and a "SUBSCRIBE" button. The main content area shows filters for "Provider" (AWS), "Service" (AmazonElastiCache), and "Resource Type" (Cache Instance). A search bar contains "Search resource records..." and a "SEARCH" button. Below the filters, it says "70 matching resources" and "+ Add Filters". The main table has columns: Name, Release Date, Latest, Purpose, Current Generation, Network Performance, and Price. The table lists various cache instance types with their respective prices per hour.

Name	Release Date	Latest	Purpose	Current Generation	Network Performance	Price
cache.c1.xlarge	2022-Jun-26	No	Compute optimized	No	High	\$0.663 / Hrs
cache.m1.large	2022-Jun-26	No	Standard	No	Moderate	\$0.226 / Hrs
cache.m1.medium	2022-Jun-26	No	Standard	No	Moderate	\$0.112 / Hrs
cache.m1.small	2022-Jun-26	No	Standard	No	Low	\$0.055 / Hrs
cache.m1.xlarge	2022-Jun-26	No	Standard	No	High	\$0.453 / Hrs
cache.m2.xlarge	2022-Jun-26	No	Memory optimized	No	Moderate	\$0.604 / Hrs
cache.m2.Axlarge	2022-Jun-26	No	Memory optimized	No	High	\$1.207 / Hrs
cache.m2.xlarge	2022-Jun-26	No	Memory optimized	No	Moderate	\$0.302 / Hrs

Product dashboard: CloudZero

# Finout CostGuard

## Overview

Finout CostGuard is a cloud cost management tool that helps organizations track and optimize their cloud spending by providing detailed insights and recommendations.

## Features

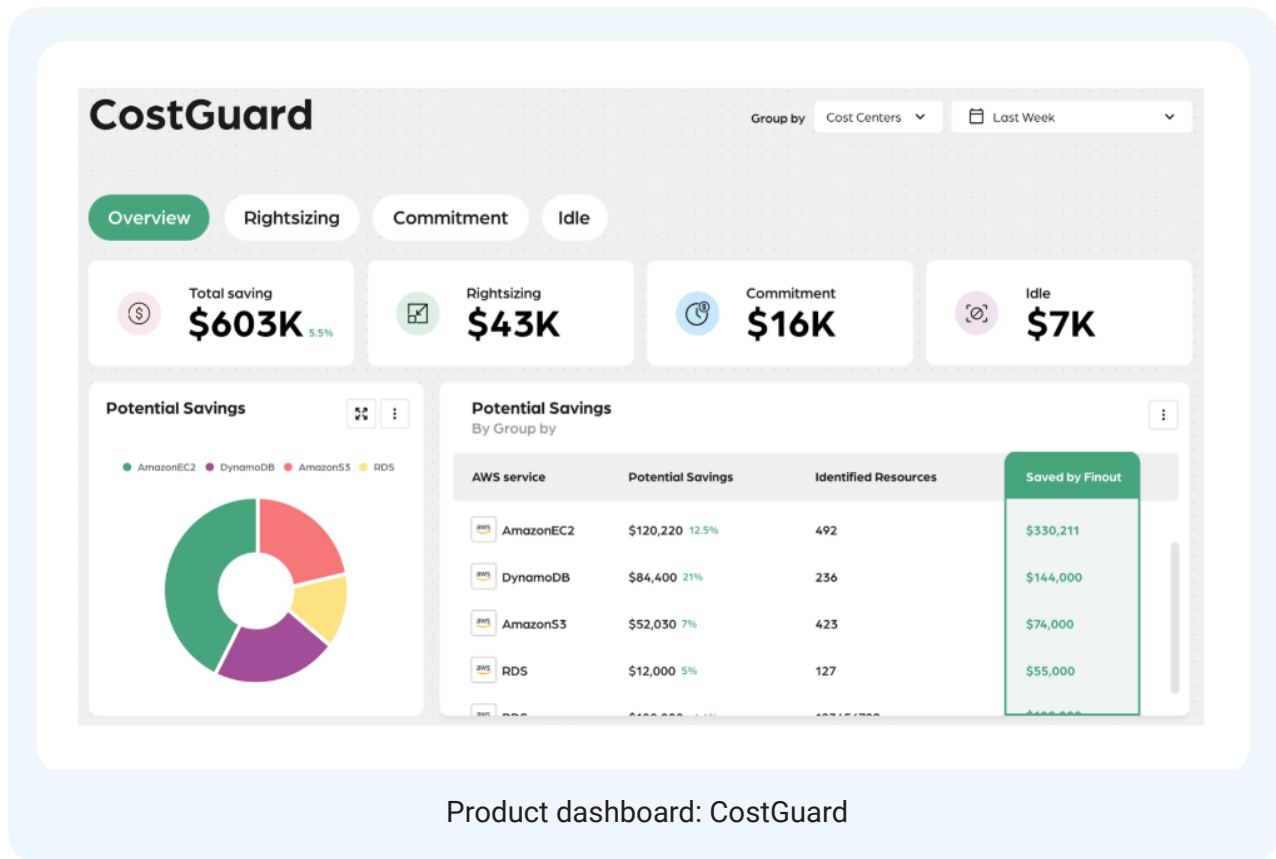
- **Cost savings analysis:** Analyzes cloud spending and identifies potential cost savings opportunities.
- **Resource utilization tracking:** Tracks the utilization of cloud resources to identify underutilized or idle resources.
- **Right-sizing recommendations:** Provides recommendations for right-sizing instances based on usage patterns.
- **Detailed reporting:** Offers detailed reports on cloud spending and utilization.

## Product Pros and Cons

Pros	Cons
Features a user-friendly and modern interface that is easy to navigate.	In some cases, the reported data may not add up correctly, leading to trust issues.
Provides a comprehensive analysis of potential cost savings.	May have limited integration capabilities with other cloud management tools.
Offers specific recommendations for right-sizing and optimizing cloud resources.	Requires significant manual effort to act on recommendations and manage optimizations.

## Challenges

- **Accurate cost calculation:** Ensuring that cost calculations are accurate and take into account various discounts and pricing agreements.
- **Integration with existing systems:** Integrating with existing cloud management and ticketing systems can be complex.
- **Resource ownership:** Identifying and managing the responsible owners for cloud resources remains a challenge.
- **Cost of manual effort:** The manual effort involved in implementing recommendations and ensuring accuracy can be high, leading to increased labor costs and potential delays.



Product dashboard: CostGuard

# AWS Cost Explorer

## Overview

AWS Cost Explorer is a native AWS tool designed to help organizations visualize and manage their AWS spending. It provides detailed insights into AWS costs and usage, helping users identify and optimize their cloud resources.

## Features

- **Cost and usage reports:** Provides detailed reports on AWS costs and usage patterns.
- **Cost forecasting:** Offers tools for forecasting future AWS spending based on historical data.
- **Resource optimization:** Identifies underutilized or idle resources and provides recommendations for optimization.
- **Budget alerts:** Allows users to set budgets and receive alerts when spending exceeds defined thresholds.

## Product Pros and Cons

Pros	Cons
As an AWS-native tool, it offers seamless integration with AWS services and detailed insights into AWS costs.	Limited to AWS, making it unsuitable for multi-cloud environments.
Provides accurate forecasts of future AWS spending, helping with budget planning.	Requires manual effort to act on optimization recommendations.
Offers comprehensive reports on AWS usage and costs.	May struggle to scale effectively in very large AWS environments.



# Challenges

- **Multi-cloud management:** Does not support non-AWS cloud environments, limiting its usefulness for multi-cloud strategies.
- **Resource ownership:** Identifying and tracking the responsible owners for AWS resources can be complex
- **Manual effort:** Requires significant manual effort to manage and implement optimization recommendations.
- **Cost of manual effort:** The time and labor required for manual implementation can be significant, adding to overall cloud management costs.

**Active prioritized recommendations (38)**  
Your AWS account team has prioritized the following recommendations for your organization. Choose a recommendation to learn more.

Q Search < 1 > @

Recommendations	Status	Source	Category	Age (days)
<a href="#">IAM Access Key Rotation</a>	Pending response	AWS Trusted Advisor aknanda@amazon.com	Security	13 day(s) Shared on: May 10, 2024
<a href="#">Amazon ECS AWSLogs driver in blocking mode - IMPORTANT-</a>	Pending response	AWS Trusted Advisor aknanda@amazon.com	Fault tolerance	13 day(s) Shared on: May 10, 2024
<a href="#">Security Groups - Unrestricted Access</a>	Pending response	AWS Trusted Advisor aknanda@amazon.com	Security	71 day(s) Shared on: Mar 12, 2024
<a href="#">Amazon RDS engine minor version upgrade is required</a>	Pending response	Amazon RDS aknanda@amazon.com	Security	71 day(s) Shared on: Mar 12, 2024
<a href="#">Security Groups - Unrestricted Access - Security Groups - Unrestricted Access</a>	Pending response	AWS Trusted Advisor aknanda@amazon.com	Security	108 day(s) Shared on: Feb 5, 2024
<a href="#">Underutilized Amazon EBS Volumes - Search and Rec Underutilized EBS</a>	Pending response	AWS Trusted Advisor mttorro@amazon.com	Cost optimization	111 day(s) Shared on: Feb 1, 2024
<a href="#">Underutilized Amazon EBS Volumes - Dieter - EBS Underutilized Dec 2023</a>	Pending response	AWS Trusted Advisor mttorro@amazon.com	Cost optimization	166 day(s) Shared on: Dec 8, 2023
<a href="#">Amazon S3 Bucket Versioning</a>	Pending response	AWS Trusted Advisor aknanda@amazon.com	Fault tolerance	168 day(s) Shared on: Dec 6, 2023
<a href="#">IAM Access Key Rotation - User Accounts</a>	Pending response	AWS Trusted Advisor mttorro@amazon.com	Security	225 day(s) Shared on: Oct 11, 2023

Product dashboard: AWS Cost Explorer

# Karpenter

## Overview

Karpenter is an open-source cluster autoscaler for Kubernetes, designed to automatically provision new nodes in response to unschedulable pods. It aims to improve the efficiency and performance of Kubernetes clusters.

## Features

- **EKS cluster scaling:** Automatically scales EKS clusters by provisioning new nodes as needed.
- **AWS API integration:** Integrates with AWS APIs to optimize node provisioning.
- **Support for Spot instances:** Utilizes AWS Spot Instances to reduce costs.
- **Node right-sizing:** Right-sizes nodes to match workload requirements.

Pros	Cons
Automatically scales Kubernetes clusters based on workload demands.	Does not provide cluster performance dashboards, making it harder to monitor performance.
Utilizes AWS Spot Instances to reduce costs.	Does not right-size individual containers, focusing only on node-level optimization.
Right-sizes nodes to ensure efficient resource utilization.	Lacks awareness of reserved instances and savings plans, which can impact cost optimization.

## Challenges

- **Visibility and monitoring:** Limited visibility into cluster performance and resource utilization.
- **Manual configuration:** Requires significant manual configuration and tuning to optimize performance.
- **Integration with other tools:** Integrating Karpenter with other cloud management tools can be complex.
- **Cost of manual configuration:** The manual configuration and tuning required can be labor-intensive, leading to increased costs and potential delays in optimization.

# Platform9 Elastic Machine Pool (EMP)

## Overview

Platform9's [Elastic Machine Pool \(EMP\)](#) is a cloud cost optimization tool designed to improve the utilization of Kubernetes clusters in the public cloud, specifically for EKS users. EMP offers a unique approach to optimizing compute resources using AWS bare metal instances and an unique optimized virtualization layer.

[EMP](#) fills a significant gap in the market by addressing the pervasive issue of underutilized Kubernetes resources. Unlike the tools covered in this guide so far that focus on visibility and recommendations, EMP takes a proactive approach by [dynamically and automatically managing resource allocation in real-time](#). This ensures that applications receive exactly the resources they need without over-provisioning, leading to substantial cost savings.

“EMP is unique because it automates everything behind the scenes. Unlike other tools that require manual actions and don't scale well, EMP allows for VM over-provisioning and live migration without intervention. By leveraging AWS bare metal and creating a highly optimized pool of Elastic VMs, EMP provides unparalleled resource utilization and cost savings.”

**Dieter Matzion, FinOps Ambassador**

## Features

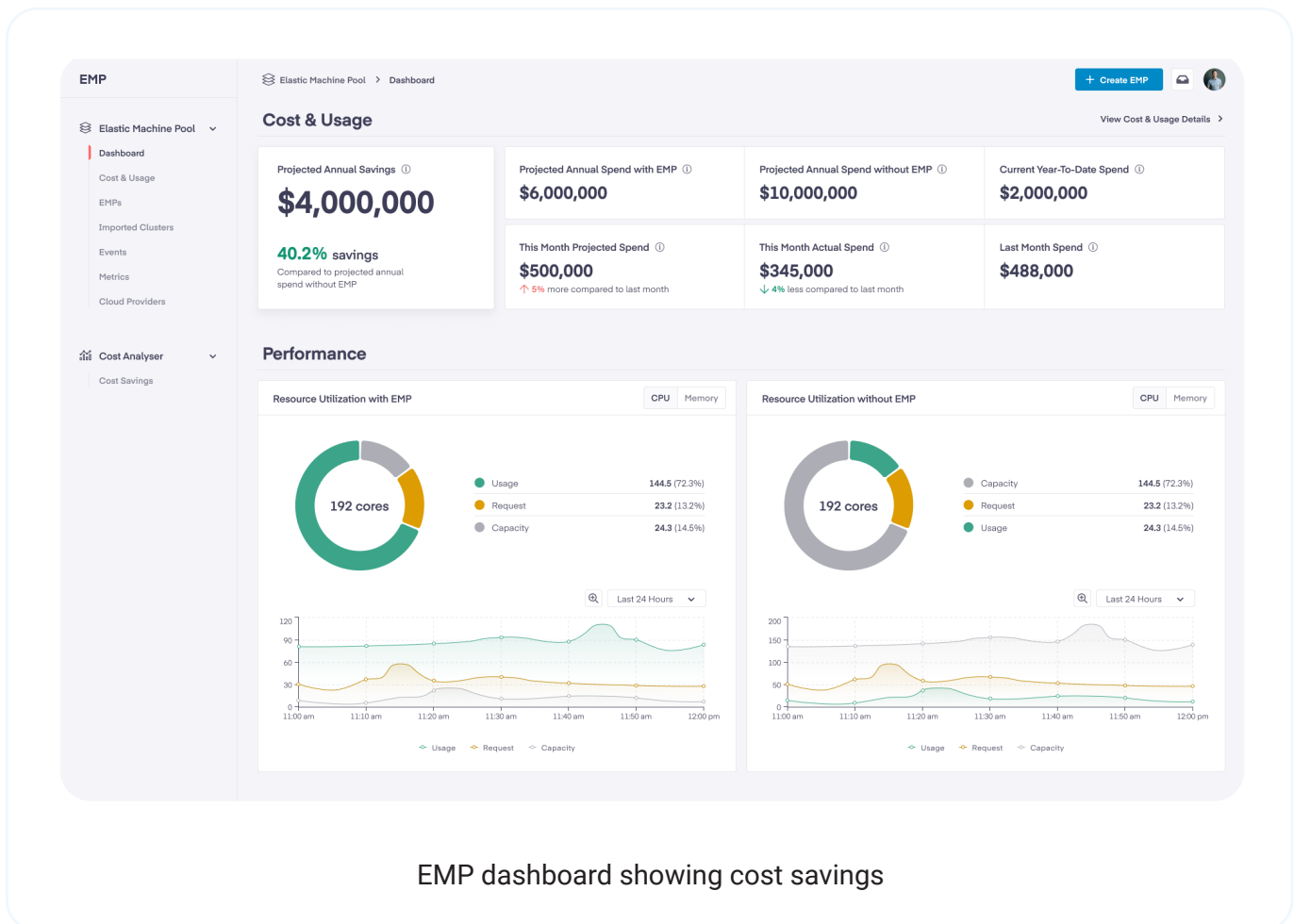
- **AWS bare metal utilization:** Uses AWS bare metal instances to create a pool of highly optimized virtual machines (Elastic VMs).
- **Utilization-aware optimization:** Dynamically adjusts resource allocation based on actual usage.
- **Live migration:** Supports live migration of virtual machines to balance resource utilization without disrupting applications.
- **Cost savings:** Achieves significant cost savings by [maximizing the utilization of bare metal instances and reducing the need for over-provisioned resources](#).

# Product Pros and Cons

Pros	Cons
Significantly improves resource utilization, reducing cloud costs.	Currently (May 2024) in limited availability, with general availability planned in the near future.
Supports live migration of VMs, ensuring no application downtime during optimization.	Relies on AWS bare metal instances, which may not be suitable for all workloads or organizations.
Fully automates the optimization process, reducing manual effort and errors.	Multicloud and Graviton optimization on the roadmap.

## Challenges

- Managing the pool of bare metal instances and Elastic VMs requires careful planning and oversight.
- Requires a minimum workload footprint to deliver savings.



EMP dashboard showing cost savings

## Summary table of all tools

Tool	Pros	Cons	Challenges
CloudHealth by VMware	Visibility into cost savings opportunities, actionable recommendations, tracking opportunities over time	Memory and disk utilization requires agent, solutions don't scale, right-sizing execution may result in downtime with no testing, Jira ticket has a cost	Finding ownership, motivation and training for engineers, complex exemptions management
Cloudability by Apptio	Comprehensive visibility, actionable insights, support for multiple clouds	Complexity in large environments, manual review needed, scaling issues	Managing multiple recommendations, Integration with existing tools, potential application impact
CloudZero	Detailed insights, anomaly detection, forecasting and budgeting	Service-specific views, scalability issues, manual integration required	Holistic visibility, manual effort, resource ownership
Finout CostGuard	Modern interface, detailed savings analysis, actionable recommendations	Data inconsistencies, limited integration, manual effort required	Accurate cost calculation, integration with existing systems, resource ownership
AWS Cost Explorer	Native integration, cost forecasting, detailed reporting	AWS-specific, manual implementation, scalability issues	Multi-cloud management, resource ownership, manual effort
Karpenter	Automated scaling, cost savings with spot instances, node optimization	Lack of dashboards, limited container right-sizing, no RI and SP awareness	Visibility and monitoring, manual configuration, integration with other tools
Platform9 Elastic Machine Pool	High utilization, zero downtime, automated optimization	Limited availability, bare metal dependency	Minimum footprint required to realize savings

## Conclusion

Cloud usage optimization is a critical component of effective cloud management. The tools covered in this guide offer a range of capabilities to help organizations optimize their cloud resources and reduce costs. Each tool has its strengths and weaknesses, and the best choice will depend on the specific needs and infrastructure of the organization. By understanding the features, pros, cons, and challenges associated with each tool, organizations can make informed decisions and implement effective cloud usage optimization strategies.

### About Platform9

[Platform9](#) empowers enterprises with a faster, better, and more cost-effective way to go cloud native. Its fully automated container and Virtual Machine management and orchestration solution delivers cost optimization, resource reduction, and speed of application deployment. Its unique Always-on Assurance™ technology ensures 24/7 non-stop operations through remote monitoring, automated upgrades, and proactive problem resolution. Innovative enterprises like Juniper, Aeromexico, Mavenir, Rackspace and Cloudera achieve 4x faster time-to-market, up to 90% reduction in operational costs, and 99.9% uptime. Platform9 is an inclusive, globally distributed company backed by leading investors.

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