

# Tame the Kubernetes cost explosion

Platform9 Elastic Machine Pool (EMP) cuts your AWS EKS bills by 50% without compromising application SLAs

Elastic Machine Pool (EMP) is a new computing engine designed for AWS EKS that can double your resource utilization while lowering costs by up to 50%. Our patent-pending software uses proven server consolidation principles and modern cloud infrastructure to dynamically scale compute instances according to actual resource usage, without disrupting your applications.

The results? Unparalleled cost savings for your EKS clusters. Most customers see a significant increase in EKS cluster utilization and a reduction in EKS infrastructure costs of more than 50%.

## The Kubernetes sprawl and cost crisis

Kubernetes adoption is exploding, but poor utilization is leading to massive waste and cost overruns.

- Kubernetes now accounts for over 35% of infrastructure budgets as adoption accelerates.
- The average organization runs 63 Kubernetes clusters, with some managing up to 1,000 clusters. However, utilization rates remain extremely low, languishing between 10-30% in most environments.
- This massive underutilization results in up to 70% or more of allocated cloud resources being completely wasted.

Kubernetes adoption is exploding, but poor utilization is leading to massive waste and cost overruns.

## Alternatives don't solve the problem

Although there are many open-source or commercial tools available in the market that claim to address this problem, most of them fail to deliver meaningful cost savings without requiring ongoing manual tweaking and ongoing negotiations with developers.

01

Many tools give solid right-sizing suggestions, yet manual adjustments are time-consuming and can't keep up with workload changes.

02

Ops teams struggle to get developers to adjust resource allocations for their apps, resulting in limited impact on cost savings.

03

Leveraging spot instances may reduce costs, but introduces unacceptable performance, unreliability and application disruption risks.

04

Utilizing reserved instances locks organizations into a long-term commitment, exacerbating the utilization issue.

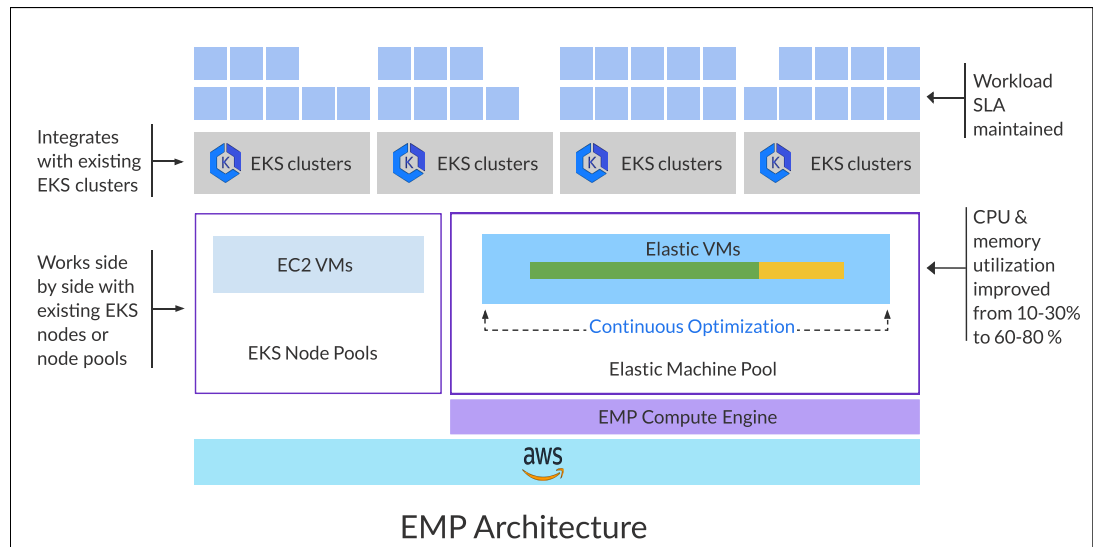
05

Existing visibility tools only spotlight inefficient utilization, but many lack automated solutions that maintain application uptime SLAs.

## The Platform9 Elastic Machine Pool (EMP) solution

EMP provides breakthrough optimization with automated efficiency gains, transparent to engineering.

- Consolidates cluster deployments using advanced algorithms to maximize resource density.
- Monitors utilization continuously across all clusters to identify optimization opportunities.
- Predictively scales resources up and down in real-time to maintain optimal efficiency.
- All automated actions occur seamlessly behind the scenes, transparent to engineering teams.
- Integrates smoothly with existing cluster management tools and processes.

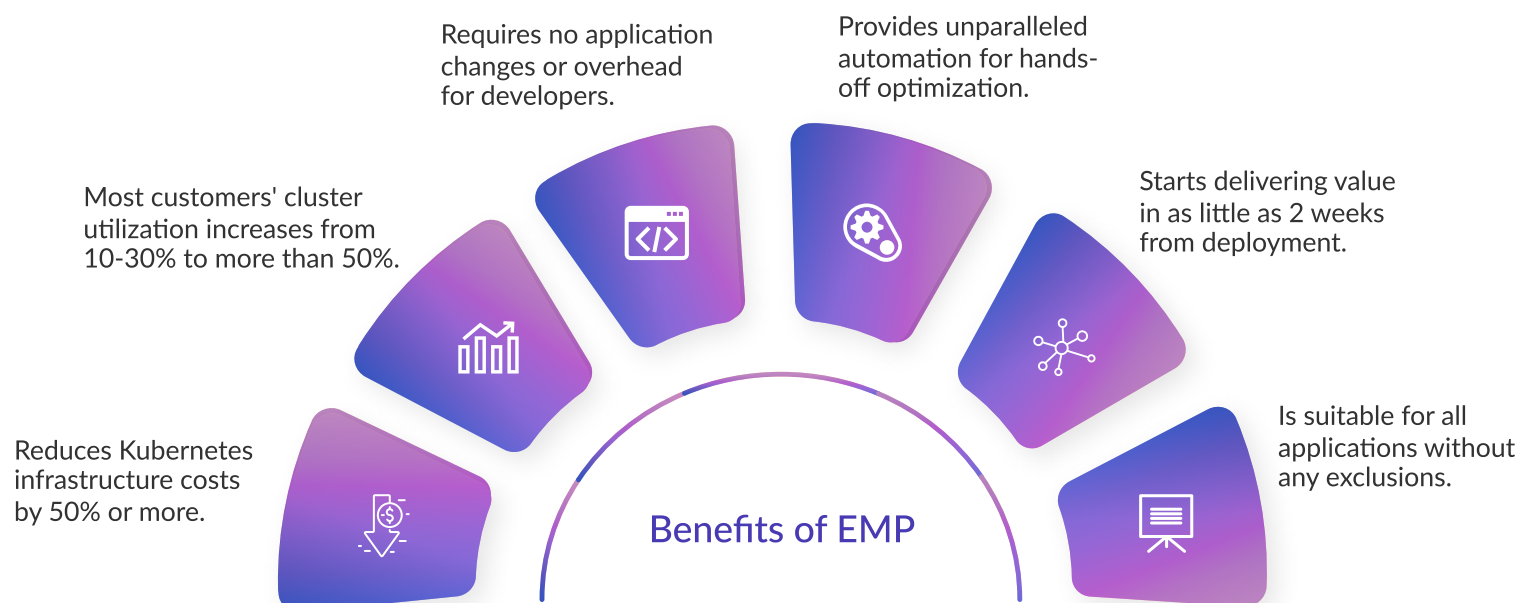


“ Our Kubernetes costs were multiplying out of control. With EMP, we finally achieved automated optimization. In months, we cut spending by 58%, and our cluster memory utilization improved from 25% to 60%, helping us avoid a budget crisis.”

VP Engineering,  
SaaS Data Management company

## Benefits of EMP

EMP significantly cuts costs via an intelligent, automated approach to increasing utilization of AWS resources. This has the added benefit of enhancing your organization's environmental responsibility by substantially lowering energy consumption and carbon emissions.



Take control of your Kubernetes spending with Platform9's Elastic Machine Pool.