



# Capacity Optimizer for Big Data and Kubernetes

Reduce cost by up to 38% in the cloud and increase throughput on-premise with zero code changes and no manual intervention

## Do More With Less

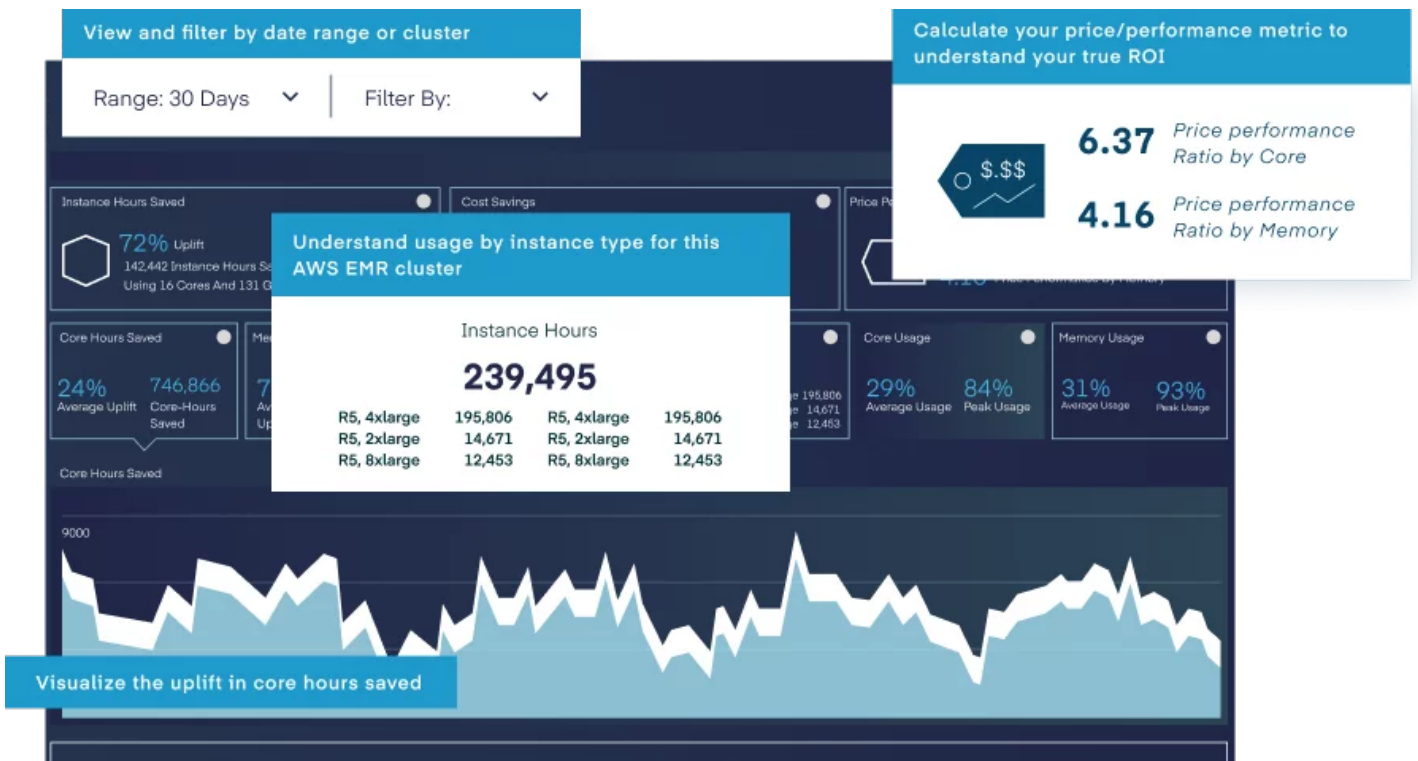
You've made a significant investment in your on-prem or cloud infrastructure, but how do you know you're extracting the maximum value out of it? Pepperdata Capacity Optimizer provides you that peace of mind.

Capacity Optimizer analyzes the resource usage of each of your cluster's nodes in real time and uses machine learning to make thousands of resource allocation decisions per second. It identifies where more work can be done and adds tasks to nodes with available resources. The result: CPU, memory, and I/O resources are autonomously optimized to increase utilization, and waste is eliminated in both Kubernetes and traditional (Hadoop/YARN) big data environments. Even the most experienced operator dedicated to resource management can't make manual configuration changes with Capacity Optimizer's level of precision and speed.

## Boost Autoscaling Performance and Slash Cloud Costs

In cloud environments, autoscaling provides the elasticity that you need for your big data workloads, but it often leads to uncontrolled costs. Cloud providers provision infrastructure based on the peak needs of workloads—guaranteeing that maximums are met but, more often than not, creating provisioning waste. Capacity Optimizer identifies this waste and returns it to you in the form of optimized, available resources to run more jobs.

Capacity Optimizer complements traditional EMR autoscaling by reducing resource waste on your cluster before EMR autoscaling is enabled. On top of Amazon EMR, Capacity Optimizer can reduce the number of cores by up to 63%, active nodes by up to 67%, and CPU idle time by up to 30%.



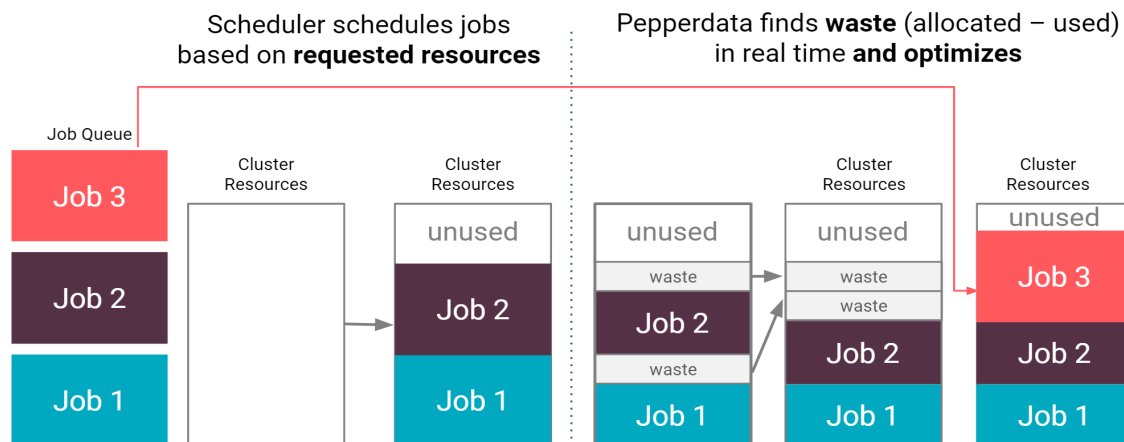
## You're In Control

- Install Capacity Optimizer on the cluster(s) you choose and experience immediate resource and cost reductions.
- Relax with the peace of mind that your clusters are operating at the highest levels of resource and cost efficiency.
- Automatically extend the life of your on-prem hardware investments by running up to 50% more workload on your existing system.
- Free your developers from the drudgery of manual tweaking and empower them to focus on innovation and growth.

## Supported Technologies

- Amazon EKS
- Amazon EMR for EKS
- Apache Spark
- Google Cloud Platform (GCP)
- Microsoft Azure

## Reclaim Reserved but Unused Resources



“Capacity Optimizer automatically tunes cluster capacity for workloads in real time, avoiding lots of manual tuning and helping to save money.”

—Chief Data Architect, Fortune 1000 Company

Want to learn more on how [Pepperdata](#) can radically reduce the inefficiencies in your Big Data environment?

Visit [pepperdata.com/big-data](https://pepperdata.com/big-data) or reach out to us at [sales@pepperdata.com](mailto:sales@pepperdata.com). Pepperdata installs in most clusters in about 30 minutes, providing you a rapid path to cost savings.



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## About Pepperdata

**Pepperdata** products help customers transform the performance of their big data cloud and Kubernetes workloads. Unlike solutions from infrastructure monitoring and APM vendors that provide only summary dashboards, **Pepperdata** automatically scales system resources while providing a detailed and correlated understanding of each application using hundreds of real-time application and infrastructure metrics. This helps IT maintain business continuity, ensuring that applications and workloads meet SLAs, and track resource spend for clear accountability. Companies like Expedia and Royal Bank of Canada depend on Pepperdata to deliver big data success. For more information, visit [www.pepperdata.com](http://www.pepperdata.com).