

# Amazon EMR and EKS Cloud Migration and Modernization Assessment



Understand the true cost of an AWS migration, including your most expensive queues and users. Reduce and realize those post-migration savings up to 38% with no manual intervention.

**FREE for up to 2 weeks | Includes Pepperdata software and up to 20 hours of professional services**

## Assessment Objectives

Install Pepperdata on your on-premises or cloud cluster(s).

- Realize the true the cost of migrating and modernizing your environment to AWS.
- Receive an assessment of your costliest users and queues.
- Understand the optimal instance types for your unique workloads, selected from the 500+ offered by AWS.
- See how your clusters stack up in terms of waste and potential savings with comparable clusters optimized by Pepperdata.

The assessment is compatible with all YARN-based workloads as well as Spark, PyTorch, and batch workloads on Kubernetes.

## Three Easy Steps to a Successful Assessment

### Step 1: Install Pepperdata to profile your workloads: ~60 minutes

Pepperdata will assist you in tailoring the install to your environment.

### Step 2: Run Pepperdata: ~2 weeks

Pepperdata will analyze the unique CPU and memory requirements of your workloads to determine baseline and burst characteristics. Pepperdata will then calculate the storage requirements for your new cloud environment based on the capacity of your existing clusters.

### Step 3: Review your customized assessment: ~60 minutes

Your customized assessment will contain:

- Rightsized AWS instance type recommendations based on the unique performance profiles of your workloads.
- Optimized Amazon EMR autoscaling parameters.
- Forecasted instance hours for your new cloud environment and the corresponding hourly, monthly, and annual costs.
- A waste and savings view of how your environment compares to others optimized by Pepperdata.
- Estimated savings from running Pepperdata Capacity Optimizer in your new cloud environment.

**"Pepperdata is super easy and self managed. Highly recommended for anyone one would like to explore infrastructure and operations cost savings and optimization."**

**—Director of Technology  
at a Fortune 1000 Enterprise**

## Special offer

For a limited time, you can install Pepperdata **for free** up to two weeks. This offer includes the software's full suite of solutions, including Capacity Optimizer, Application Spotlight, and Platform Spotlight. Also, you'll be eligible to receive up to 20 hours of professional services from Pepperdata representatives.

[Contact Sales](#)

## Driving Productivity and Business Growth for the World's Largest Brands



Expedia



# Estimate the Projected Cost of Your New Cloud Environment

## CLUSTER DETAILS FOR CLUSTER **Prod\_Cluster**

November 29, 2022 - December 13, 2022

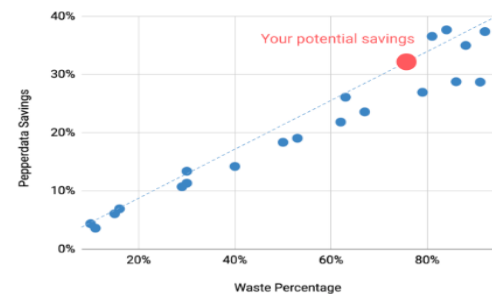
Queue Name	Recommended Instance Type	Minimum Instances	Maximum Instances	Projected Instance Hours	Estimated Daily Cost	Estimated Annual Cost	Current Memory Utilization	Current CPU Utilization
root.users	<b>r5a.16xlarge</b> cost: \$3.62   Memory: 512 GB   64 cores	18	617	23,766.38	\$6,139	\$2,240,559	38%	37%
root.scale1	<b>r5a.16xlarge</b> cost: \$3.62   Memory: 512 GB   64 cores	1	318	10,119.38	\$2,614	\$953,998	43%	8%
root.queue3	<b>r5a.16xlarge</b> cost: \$3.62   Memory: 512 GB   64 cores	1	318	8,514.53	\$2,199	\$802,702	28%	24%
root.user8	<b>m5a.24xlarge</b> cost: \$4.13   Memory: 394 GB   96 cores	1	81	1,553.37	\$458	\$167,178	13%	5%
TOTAL / AVERAGE		21	1,334	43,953.67	\$11,409	\$4,164,436	31%	18%

## Post Migration, Reduce Costs up to 38% Without Manual Intervention

Once you've migrated your workloads to your new cloud environment, Pepperdata's Capacity Optimizer allows you to reduce costs further. Cloud-native autoscalers tend to scale aggressively, which can lead to overprovisioning. Capacity Optimizer reclaims unused resources and bases its autoscaling on actual utilization instead of allocated resources. The net effect is that scaling is autonomously optimized, and both waste and cost are minimized.

### OPTIMIZATION OPPORTUNITY

Based on other clusters optimized by Pepperdata



## Pepperdata: Your Trusted Migration Partner

Pepperdata has experience working with numerous Fortune 500 enterprises in migrating and modernizing their Big Data environments.

Pepperdata operates natively in both Hadoop on premises as well as in all the different flavors of AWS environments shown here.

	to →	Spark on EKS	EMR on EC2	EMR on EKS	EMR Serverless
from ↓					
On-Premises Hadoop		✓	✓	✓	✓
EMR on EC2		✓		✓	✓

Sign up for the free migration assessment to see how much you can save by migrating and modernizing to AWS.

[Contact Sales](#)



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