

# Performance Optimization & Tuning

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## Overview:

Cluster performance tuning involves various areas of analysis and a multitude of methods to optimize performance. Some of these include infrastructure, system resources, application architecture, indexing strategy, query construction, and transaction logic.

The Performance Optimization and Tuning package is a fixed-priced engagement that enables your team to address latency and performance challenges in your CockroachDB workloads for either self-hosted or cloud customers.

## Benefits:

- Collaborate with CockroachDB expert(s)
- Learn best practices to apply to future performance challenges

## Scope:

This engagement is intended to address the performance for a chosen workload. CockroachDB expert(s) will work jointly with your team to identify your top 1-5 queries with significant performance concerns. Together with your team, we will review the areas for improvement to achieve performance objectives.

## Duration:

This engagement is estimated at 2-4 weeks over a maximum of 30 days (elapsed time).

## Deliverable(s):

- **Assessment**
- **Baseline/current performance**
- **Knowledge Transfer:** Topics may include:
  - SQL performance tuning

- Cluster optimization
- Performance best practices
- **Final Report**

## **Prerequisites:**

Your team members are expected to have taken the appropriate Cockroach University courses and to have a working knowledge of SQL and CockroachDB fundamentals. Cockroach Labs will require participation of team member(s) to iterate on recommendations.

The following should be completed by the engagement kickoff meeting:

- Project intake form
- Health Check package (recommended)

## **Tooling:**

Access to and use of Cockroach Labs performance tooling to identify performance and bottleneck issues impacting the workload. These tools may include:

SQL access  
CLI access  
DB console access  
metrics-exporter  
sql\_efficiency\_check