

From Bottlenecks to Breakthroughs:

# Performance Tuning with Percona

“*Percona is the authority on database performance and scalability. Having the most knowledgeable team on our side is the reason we chose Percona to support our production database infrastructure.*”

**Tim Mirecki**  
Vice President of Technology,  
Carpages.ca

**Are you looking to improve query performance, minimize downtime, enhance scalability, reduce costs, and increase application responsiveness in your databases?**

Percona experts specialize in database performance tuning through consulting, tailored optimization strategies, advanced monitoring tools, and ensuring best practices in database management, including:

- **Designing your database schema** to support your application's data access patterns efficiently.
- **Implementation of appropriate indexing** to speed up query times without overly taxing write operations.
- **Allocating resources** (CPU, memory, disk I/O) based on the database workload.
- **Implementing strict access controls** such as role-based access control (RBAC) and the principle of least privilege (PoLP) to ensure users have only the access they need.
- **Encrypting sensitive data** at rest and in transit to protect it from unauthorized access.
- **Conducting regular security audits** and applying patches and updates promptly to mitigate vulnerabilities.
- **Designing backup strategies** that include regular backups, testing of backup integrity, and secure backup storage.
- **Developing and regularly testing a disaster recovery plan** to ensure rapid restoration of services with minimal data loss in case of a catastrophic failure.
- **Using monitoring tools** to keep a real-time eye on database performance, resource utilization, and abnormal activities that could indicate issues.

## Percona for performance tuning

A Percona Performance Tuning engagement enables you to unlock the full potential of your database, resulting in better application performance, faster response times, and improved user satisfaction. Our team brings decades of experience in solving complex performance challenges, providing a deep understanding of the unique obstacles present in your environment.

### Here's what a Percona Performance Tuning covers:

- **Configuration adjustments:** Tailoring your system settings to meet optimal performance standards.
- **Query optimization:** Refining queries for efficiency and speed.
- **In-depth analysis of application access patterns:** Understanding and improving how your applications interact with the database.
- **Hardware and software configuration:** Ensuring your infrastructure is primed for excellence.
- **Architectural consultation:** Strategic advice on system design for optimal performance.
- **Process enhancement:** Recommending changes for better workflow and efficiency.
- **Integration with third-party tools:** Leveraging additional tools for improved management and monitoring.

Our comprehensive analysis includes a thorough review of server, database, and performance metrics and configurations. Once complete, our team will provide you with tailored recommendations for improvement. You can opt to implement these measures on your own, or if needed, our team is readily available to offer support.

### Key benefits of Percona Performance Tuning:

- **Improve database performance:** Overcome bottlenecks and inefficiencies for smoother operations.
- **Cost and efficiency gains:** Minimize maintenance overhead while optimizing resource use.
- **Scalability enhancement:** Prepare your system to manage growing workloads efficiently.
- **Increase application performance:** Enhance responsiveness to improve the end-user experience.
- **Enhance stability and reliability:** Identify and address potential risks and vulnerabilities in your database environment, helping to ensure data integrity and high availability.
- **Proactive monitoring and maintenance:** Detect issues and prompt resolution before they impact application performance.

## Expertise that sets us apart

Percona is a recognized leader in open source database performance optimization, supported by an impressive roster of over 70 database experts with over 13 years of average experience, 30+ support engineers, 50+ DBAs, and 20+ consultants to help with the most demanding digital transformation projects.

“*Percona is an industry-leading database performance company with a strong track record of 24x7 support services. Percona recruits the sharpest minds in databases from across the globe, so we feel confident when we need to reach out for support, Percona will be able to step up and help us.*”

**Richard Chart**

Chief Architect and Co-Founder of ScienceLogic

In addition, many of our team members have utilized their expertise to author books on the subject, underscoring our role as service providers and thought leaders in the database community. Founders Peter Zaitsev and Vadim Tkachenko co-authored the renowned book “*High Performance MySQL*,” Sveta Smirnova is the co-author of “*MySQL Cookbook*” and “*MySQL Troubleshooting: What To Do When Queries Don’t Work*,” and Arunjith Aravindan co-authored “*Mastering Amazon Relational Database Service for MySQL: Building and Configuring MySQL Instances*.”

Percona’s active participation in the global database community through speaking engagements at leading conferences, conducting webinars, and offering training sessions exemplifies our belief in a collaborative approach to innovation, where sharing knowledge and experiences leads to better solutions for all.

## Your trusted partner for performance

At Percona, we understand the critical role databases play in your business success, and our experts position us to uniquely address your database challenges, proven by the trust placed in us by a significant portion of Fortune 50 companies and 9 of the top 10 companies in the tech industry.

“*Our databases must be high-performing and always available so that our Grab application provides an excellent experience for our customers. With Percona Consulting and Support, we know that we can architect solutions that meet our needs and are covered whenever issues arise that impact performance.*”

**Edwin Law**

Data Engineering Lead, Grab

Our comprehensive range of services, from health assessments to on-demand performance tuning and ongoing support with industry-best SLAs, ensures your databases function at their best.

And if you need additional help after tuning, we’ve got you covered. Our Percona Support team is available 24/7 and is your go-to source for expert assistance, available whenever and wherever you need it. With flexible and cost-effective support subscriptions, you can access the best open source database advisors with extensive operational knowledge of MySQL, MongoDB, PostgreSQL, and MariaDB. Whether your databases are in the cloud, on-premises, or a hybrid setup, we’re here to assist you in ensuring their top performance.

No matter the complexity, we’ll help you configure and tune environments on most infrastructures. Elevate your database performance and ensure your applications run smoothly and efficiently — contact Percona today to discover how our performance tuning can transform your database operations.

[Future Proof Your Databases](#)



### Contact Us

To learn more about Percona’s services, contact us at +1-888-401-3401 in North America, +44 (203) 608-6727 in Europe, or [sales@percona.com](mailto:sales@percona.com).