



MySQL ENTERPRISE EDITION

THE WORLD'S MOST POPULAR
OPEN SOURCE DATABASE

HIGHLIGHTS

- Oracle MySQL Service Cloud
- MySQL Database
- MySQL Document Store
- MySQL Enterprise Backup
- MySQL Enterprise High Availability
- MySQL Enterprise Scalability
- MySQL Enterprise Authentication
- MySQL Enterprise TDE
- MySQL Enterprise Encryption
- MySQL Enterprise Masking
- MySQL Enterprise Firewall
- MySQL Enterprise Audit
- MySQL Enterprise Monitor
- Enterprise Manager for MySQL
- MySQL Query Analyzer
- 225+ MySQL Advisors
- 600+ Monitored Variables
- 60+ Performance Graphs
- MySQL Workbench
- Oracle Premier Support

"With the MySQL Query Analyzer, we were able to identify and analyze problematic SQL code, and triple our database performance. More importantly, we were able to accomplish this in three days, rather than taking weeks."

—**Keith Souhrada**,
Software Development Engineer,
Big Fish Games

MySQL Enterprise Edition includes the most comprehensive set of advanced features, management tools and technical support to achieve the highest levels of MySQL scalability, security, reliability, and uptime.

MySQL Enterprise Edition reduces the risk, cost, and complexity in developing, deploying, and managing business-critical MySQL applications. Only MySQL Enterprise Edition enables you to:

- **Easily setup, run and manage MySQL in the cloud** using Oracle MySQL Service Cloud
- **Use Relational Tables and Schema-less JSON Documents** with MySQL Document Store
- **Achieve database high availability** using MySQL InnoDB Cluster
- **Meet exponential growth** in users and data with MySQL Enterprise Scalability
- **Reduce risk of data loss** with MySQL Enterprise Backup for hot backup and recovery
- **Leverage existing security infrastructures** with MySQL Enterprise Authentication
- **Protect sensitive data** using encryption, key generation, and digital signatures.
- **Hide confidential data** from unauthorized users with MySQL Enterprise Masking & De-identification
- **Block database attacks** such as an SQL Injection with MySQL Enterprise Firewall
- **Implement policy-based auditing compliance** to existing MySQL applications
- **Improve database performance and availability** with MySQL Enterprise Monitor
- **Pinpoint SQL code that is impacting database performance** with MySQL Query Analyzer
- **Implement MySQL best practices** using more than 225 MySQL Advisors
- **Visually design, develop, administer and migrate databases**, with MySQL Workbench
- **Migrate databases to MySQL** using the MySQL Workbench Migration Wizard

Oracle MySQL Service Cloud

Oracle MySQL Service Cloud delivers a secure, cost-effective and enterprise-grade MySQL database service. Built on MySQL Enterprise Edition and powered by the Oracle Cloud, it provides the best in class management tools to automate administrative tasks such as provisioning, patching, backup & recovery, monitoring & tuning. Multi-layered security protects your data against external attacks while helping you achieve regulatory compliance. Self-service provisioning creates pre-configured MySQL databases optimized for performance and automated scaling enables users to elastically scale compute resources, storage resources and MySQL replicas.

MySQL Database

MySQL is the world's most popular open source database for cost-effectively delivering reliable, high-performance and scalable e-commerce, online transaction processing, and embedded database applications. It is an integrated, transaction safe, ACID-compliant database with full commit, rollback, crash recovery, and row-level locking capabilities. MySQL delivers the ease of use, scalability, and high performance, as well as a full suite of database drivers and visual tools to help developers and DBAs build and manage their MySQL applications. The MySQL Database provides the following features:

- **High Performance & Scalability** to meet the demands of exponentially growing data loads and users.
- **Self-healing Replication Clusters** to improve scalability, performance and availability.
- **Online Schema Changes** to meet changing business requirements.
- **Performance Schema** for monitoring user & application level performance and resource consumption.
- **Relational Tables and Schema-less JSON Documents** in a single database.
- **Platform Independence** giving you flexibility to develop and deploy on multiple operating systems.
- **Big Data Interoperability** using MySQL as the operational data store for Hadoop and Cassandra.

MySQL Document Store

MySQL Document Store gives users the flexibility to develop traditional SQL relational applications and NoSQL, schema-free document database applications. This eliminates the need for a separate NoSQL document database. The MySQL Document Store provides multi-document transaction support and full ACID compliance for schema-less JSON documents. For high availability and scale out, the MySQL Document Store utilizes all the advantages of MySQL Group Replication and InnoDB Cluster.

MySQL Enterprise Backup

MySQL Enterprise Backup performs online, non-blocking backups of your MySQL databases. Perform full, incremental and partial backups for all InnoDB data while MySQL is fully available for transactional operations. All backup operations are executed in parallel for quick results and also support compression options that reduce the size of backup images by 90%. Recovery options include backward compatible full recovery, precise one-click, point-in-time recovery and partial recovery for restoring a specific set of objects.

MySQL Enterprise High Availability

MySQL Enterprise High Availability enables you to meet the availability requirements of even the most demanding, mission-critical applications. MySQL InnoDB Cluster delivers an integrated, native, HA solution for your databases using MySQL Servers with Group Replication, MySQL Router and MySQL Shell. It leverages proven MySQL features including InnoDB, GTIDs, binary logs, multi-threaded slave execution, multi-source replication and Performance Schema. A MySQL InnoDB Cluster can be set up in less than five minutes and managed using the scriptable AdminAPI in the MySQL Shell.

MySQL Enterprise Scalability

MySQL Enterprise Scalability enables you to meet the sustained performance and scalability requirements of ever increasing user, query and data loads. MySQL Thread Pool provides an efficient thread-handling model, designed to reduce overhead in managing client connections and statement execution threads.

MySQL Enterprise Authentication

MySQL Enterprise Authentication provides ready to use external authentication modules to easily integrate with existing security infrastructures including Linux Pluggable Authentication Modules (PAM) and Windows Active Directory. MySQL Enterprise Authentication enables organizations to implement a Single Sign On mechanism and leverage existing security rules and process from centralized directories.

MySQL Enterprise Transparent Data Encryption (TDE)

MySQL Enterprise Transparent Data Encryption (TDE) enables data-at-rest encryption by encrypting the physical files of the database. Data is encrypted automatically, in real time, prior to writing to storage and decrypted when read from storage. As a result, hackers and malicious users are unable to read sensitive data from tablespace files, database backups or disks. MySQL Enterprise TDE uses a two-tier encryption key architecture, consisting of a master encryption key and tablespace keys, which provides easy key management and rotation.

MySQL Enterprise Encryption

To protect sensitive data throughout its lifecycle, MySQL Enterprise Encryption provides industry standard functionality for asymmetric encryption (Public Key Cryptography). MySQL Enterprise Encryption provides encryption, key generation, digital signatures and other cryptographic features to help organizations protect confidential data and comply with regulatory requirements such as HIPAA, Sarbanes-Oxley, and the PCI Data Security Standard.

MySQL Enterprise Masking and De-identification

MySQL Enterprise Masking and De-identification provides an easy to use, built-in database solution to help organizations protect sensitive data from unauthorized uses by hiding and replacing real values with substitutes. All major industry regulations require data masking of PII (personally identifiable information), PANs (Primary Account Number) and other confidential data so that only authorized personnel can access the data.

MySQL Enterprise Firewall

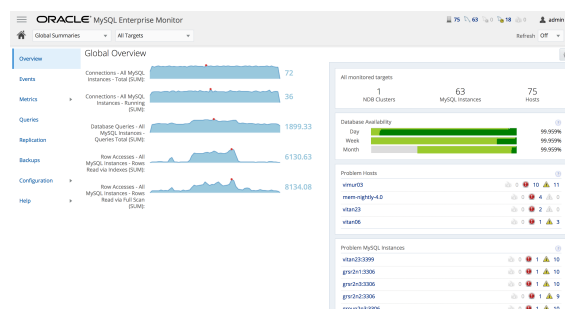
MySQL Enterprise Firewall blocks SQL Injection attacks that can result in loss of valuable personal and financial data. Whitelist creation, real-time threat monitoring, SQL statement blocking and alerting enable DBAs protect data assets. Acting as an intrusion detection system, MySQL Enterprise Firewall notifies administrators to SQL statement activity that does not match an approved whitelist.

MySQL Enterprise Audit

MySQL Enterprise Audit enables you to quickly and seamlessly add policy-based auditing compliance to existing applications. You can dynamically enable user level activity logging, implement activity-based policies, manage audit log files and integrate MySQL auditing with Oracle and third-party solutions.

MySQL Enterprise Monitor

The MySQL Enterprise Monitor and MySQL Query Analyzer enable you to improve the performance and availability of your MySQL instances, the applications that use them, and the supporting infrastructure. The MySQL Enterprise monitor continuously monitors MySQL queries and performance related server metrics and alerts developers and DBAs on significant deviations from the baseline performance trends. The Replication Dashboard displays MySQL instrumentation information and the Topology View displays the current configuration of your Replication Groups, enabling you to quickly see the status of each node and each replication subsystem. Best practice Advisors recommend changes to configuration and variable settings to improve performance. Harnessing the power of trend analysis, MySQL Enterprise Monitor can alert you to problems before they become critical and accurately predict future capacity requirements.

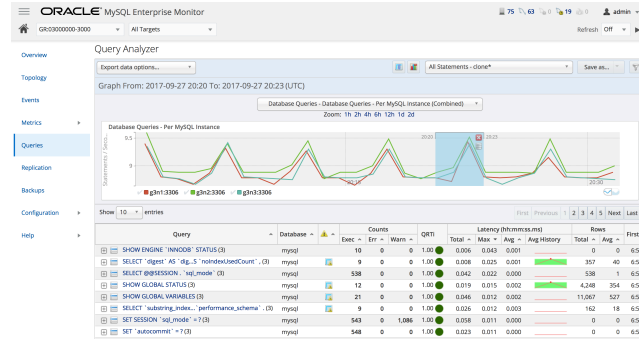


MySQL Enterprise Monitor provides real-time visibility into the performance and availability of MySQL servers.

MySQL Query Analyzer

The MySQL Query Analyzer provides a consolidated view of query activities and execution details enabling developers and DBAs to quickly find performance tuning opportunities. MySQL Query Analyzer enables developers to:

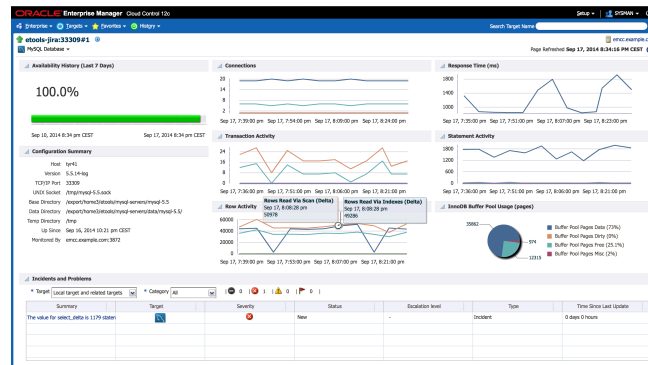
- **Quickly identify the most problematic queries** that impact the performance of their applications
- **Filter for specific query problems** like full table scans and bad indexes using advanced search
- **Visually correlate query executions with MySQL server activity** during a selected time period
- **Drill Down into detailed query statistics** to quickly determine why the query is problematic



The MySQL Query Analyzer allows developers to highlight a time slice on a graph to quickly expensive queries.

Oracle Enterprise Manager for MySQL

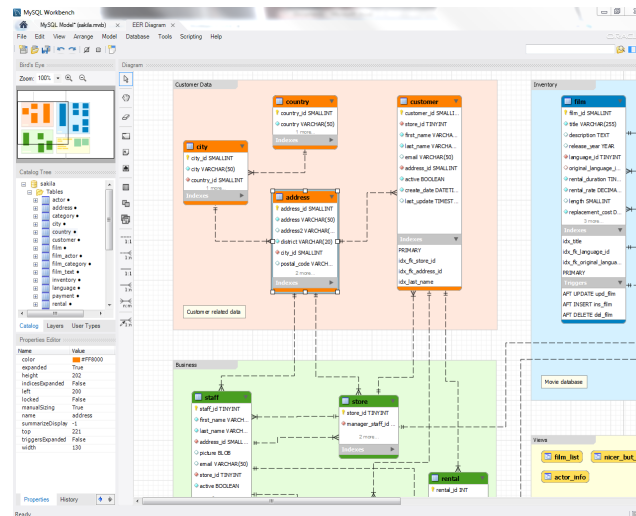
The Oracle Enterprise Manager for MySQL provides Oracle developers and DBAs with real-time monitoring and delivers comprehensive performance, availability and configuration information for your MySQL databases. Enterprise Manager collects more than 500 metrics covering various MySQL components. Custom critical and warning thresholds can then be set for each of the collected metrics. Plus, DBAs can track configuration details over time to easily keep track of configuration changes.



Oracle Enterprise Manager for MySQL provides Oracle developers and DBAs with real-time monitoring

MySQL Workbench

MySQL Workbench is a unified visual development and administration platform that includes advanced tools for database modeling and design, query development and testing, server configuration and monitoring, user and security administration, backup and recovery automation, audit data inspection, and wizard-driven database migrations.



MySQL Workbench provides data modeling, SQL development, administration, and migration tools.

Oracle Premier Support

Oracle offers 24x7, global support for MySQL. The MySQL Support team is composed of seasoned MySQL developers, who are database experts and understand the issues and challenges you face.

Oracle Premier Support for MySQL includes the following features:

- 24 x 7 production support
- Unlimited support incidents
- Knowledge Base
- Maintenance releases, bug fixes, patches and updates
- MySQL consultative support

MySQL Editions

MySQL is available in 4 commercial editions:

- MySQL Enterprise Edition
- MySQL Standard Edition
- MySQL Cluster Carrier Grade Edition
- MySQL Classic Edition (only available for ISVs/OEMs)

Oracle MySQL Cloud Service

- MySQL Database as a Service

About MySQL

MySQL is the world's most popular open source database software. Many of the world's largest and fastest-growing organizations use MySQL to save time and money powering their high-volume Websites, business-critical systems, and packaged software.

Powered by MySQL		
Web/End-User	Embedded/ISV	Telecom
<ul style="list-style-type: none"> • Alibaba • Airbnb • Disney • Facebook • Google • Tencent • Twitter • Visa • Wells Fargo • YouTube • Uber • Zappos 	<ul style="list-style-type: none"> • Adobe • Airbus • EMC • F-Secure • F5 Networks • Hewlett Packard • IBM • Intel • Intuit • NetApp • Palo Alto Networks • Symantec 	<ul style="list-style-type: none"> • AT&T • Cisco • Comcast • Ericsson • France Telecom • Huawei • Italtel • Nokia • Oi Telecom • Siemens • Telenor • Teligent

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