

ClustrixDB 8.0

The only scale-out, drop-in MySQL replacement for high-transaction, high-value workloads

Dramatic mobile growth is pushing MySQL database limit

More and more consumers are accessing websites and transacting while on-the-go, with mobile usage now overtaking the desktop 51 to 42 percent¹. Almost half of all consumers now expect a web page to load in two seconds or less, and 27 percent of cart abandonment occurs due to time constraints². These high expectations, coupled with high-transaction high-value workloads, are placing unprecedented demands on MySQL and other databases. In a recent survey, analyst firm ESG noted database growth in excess of 40 percent per year, with nearly half of respondents citing increases in transactional workloads and the ability to continue to capture transactions efficiently as a database challenge leading to performance concerns³.

Using replication or sharding to extend MySQL is old-school

With these old-school approaches, you have to deal with added risks and costs. With both replication and sharding you're dealing with manually managing data inconsistencies like slave lag. With sharding, you have to deal with even more issues of complexity and fragility: There's the complicated set-up and ongoing maintenance of manually adding/splitting shards as your data grows, and then having to change the application to point to where the data lies; and the fragility brought about by application downtime for server maintenance, security patches, or worse – unplanned failures without automatic recovery. These all translate to higher costs due to additional hardware required (double up to quadruple!), manpower and time to manage complexity, lost opportunity from application downtimes, and added business risk.

It's time for the next-generation scale-out relational database

ClustrixDB is a drop-in replacement for MySQL built from the ground up to deliver true scale-out performance. Bypass the headaches of replication and sharding and move to the relational database for high-transaction, high-value workloads that scales in a near linear fashion — allowing it to handle workloads more than 10x faster than those running on MySQL or AWS Aurora. ClustrixDB is used today in an array of industries — including e-commerce, gaming, IoT, and adtech — for critical business applications that support massive transactional volume and real-time reporting of business performance metrics.

ClustrixDB's distributed, shared-nothing architecture presents your application with a single-instance database that is made up of a cluster of commodity nodes. By simply adding or subtracting nodes to and from the cluster, you can easily Flex Up to meet extraordinary demand and Flex Down to save money. ClustrixDB is also the only ACID-compliant, scale-out SQL database that offers built-in high availability and self-management, reducing operational costs while ensuring mission-critical databases remain online with the performance you need.

CLUSTRIXDB POWERS SOME OF THE WORLD'S FASTEST-GROWING BUSINESSES



1 Meeker, M. (2016) Internet Trends 2016 [PDF Files]. Retrieved from <http://www.kpcb.com/internet-trends>
2 How Loading Time Affects your Bottom Line. (2016, September 12). Retrieved from <https://blog.kissmetrics.com/loading-time/>
3 ESG Research Report: Enterprise Database Trends in a Big Data World. (2014, July 31). Retrieved from <http://bit.ly/2cfVUnB>

ClustrixDB 8.0: Easier to Use and Improves Performance

ClustrixDB 8.0 is the latest release of the only drop-in replacement for MySQL with true scale-out performance. Designed to help customers meet the challenge of explosive growth in transactional workloads, this latest version combines in-memory processing, containerization and encryption to improve performance, ease-of-use and security.

In-Memory Processing Gives 3x Performance Boost

ClustrixDB now provides even faster performance, combining the speed of NoSQL with the relational benefits of SQL for:

- Performance improvements of up to 300 percent for in-memory bulk data ingest, in-memory streaming HTAP, and high-volume aggregate processing
- The ability to store in-memory or on-disk without separate coding requirements
- Automatic linear scalability to match growth by simply adding more servers

Full Containerization for Easy Installation and Deployment

It's now even easier and faster to get up and running on ClustrixDB 8.0, which is:

- Fully containerized, making it easy to install and orchestrate ongoing deployments, on any cloud or data center
- Virtually plug-and-play, requiring minimal changes, if any, to your MySQL application
- Intuitive, with an easy-to-use GUI for monitoring and managing cluster performance

Heightened Security with AES 256-Bit Encryption

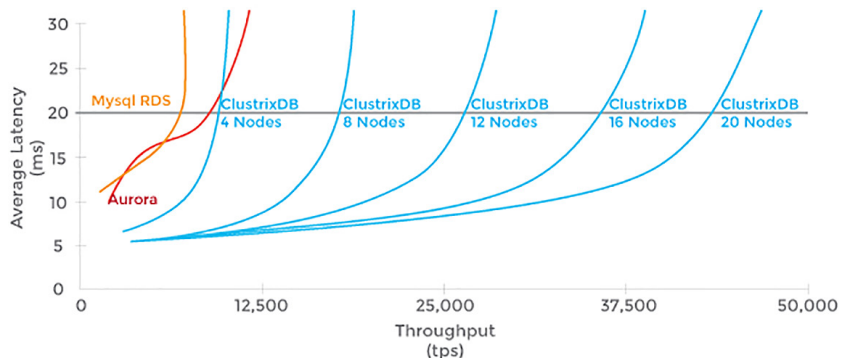
Your data is now more secure with the industry's most powerful cluster-aware encryption of data-at-rest. Leveraging the same worldwide standard adopted by the U.S. government, ClustrixDB 8.0 offers:

- Advanced Encryption Standard (AES) 256-bit encryption
- High-performance, partition-level encryption
- Performance optimized to meet big data scalability in distributed computing architectures--only approximately 3 percent impact on data-at-rest

ClustrixDB Provides Near-Linear Scaling

Clustrix ran a Sysbench test using AWS and their c3.2xlarge instances at a ratio of 90% reads and 10% writes on a 20GB database consisting of 40 million records. ClustrixDB was able to double and triple the workload using cluster sizes ranging from 4 nodes up to 20 nodes (ClustrixDB scales beyond 20 nodes, but the test stopped at 20). Transactions per second increased, and latency stayed below 20ms in all configurations. The near-linear scaling capabilities of ClustrixDB make it an ideal relational database for high-transaction, high-value workloads.

SYSBENCH OLTP 90:10 MIX



ClustrixDB scales performance as you add additional nodes. As a true scale-out relational database, ClustrixDB can scale to 4 times the performance of MySQL and Aurora.

ClustrixDB

Flexible transactional scale for the connected world.

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