

Redis Enterprise and MySQL

You can use Redis Enterprise alongside MySQL as an enterprise cache or replica database to make your applications faster, more efficient, and more scalable.

When MySQL needs Redis Enterprise

Using Redis Enterprise alongside MySQL can alleviate common application challenges. Consider it when you care about:

- **Speed:** Because MySQL is disk-based, it isn't as fast as you need, especially at scale.
- **High velocity data:** High velocity data requires exact values to be constantly updated and instantly available. That's not a fit for long transactions.
- **Scaling applications effortlessly:** Large MySQL installations split datasets over multiple nodes or instances (sharding). But performance gains are lost when queries access data across multiple shards.
- **Fast data searches:** MySQL was not designed to run secondary index queries against massive data volumes.
- **Distributed data:** MySQL cannot effectively distribute unified datasets with real-time response times.

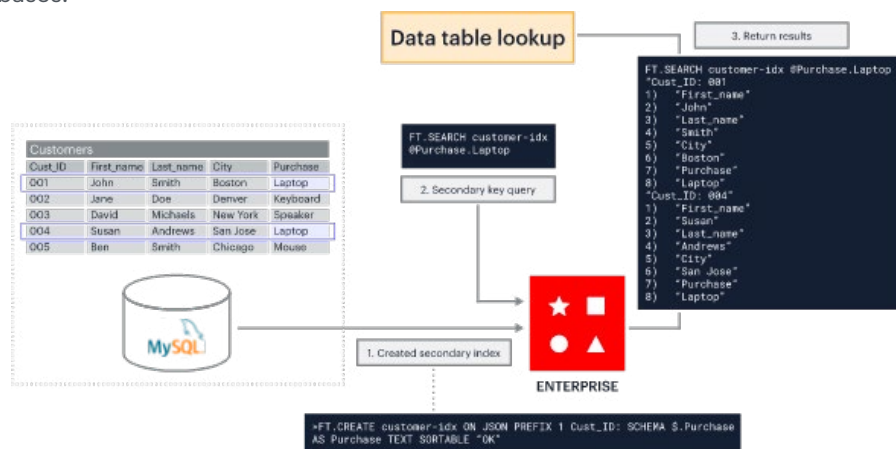
Here's how Redis Enterprise helps

- **Adds real time performance:** Redis Enterprise provides sub-millisecond performance. Adding Redis Enterprise alongside MySQL can increase read or write performance from seconds to milliseconds.
- **Improves data velocity:** Redis Enterprise offers data structures that efficiently combine high-speed data ingestion and real-time analytics.
- **Increases scalability:** Redis Enterprise automatically and linearly scales, optimizing the consumption of servers and DRAM.
- **Searches efficiently:** Powerful search features enable rapid secondary indexing against massive datasets.
- **Works around the world:** Redis Enterprise distributes a unified dataset across geographies, with real-time reads and writes.

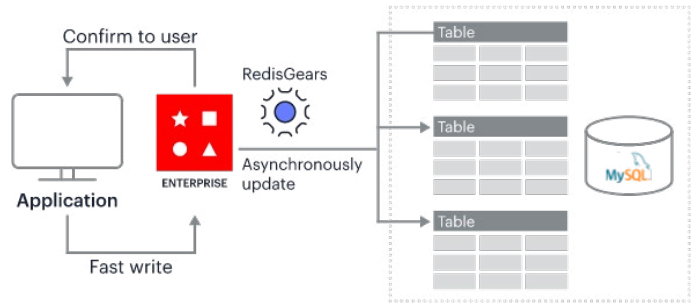
Let's make Redis Enterprise and MySQL work together

Redis Enterprise is used with MySQL as an in-memory database or cache. Here's a few scenarios:

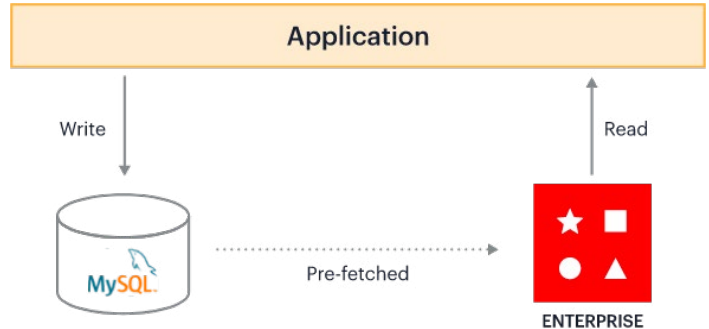
- **Secondary key queries:** Support queries of MySQL data held in secondary keys by indexing data into Redis Enterprise from MySQL databases.



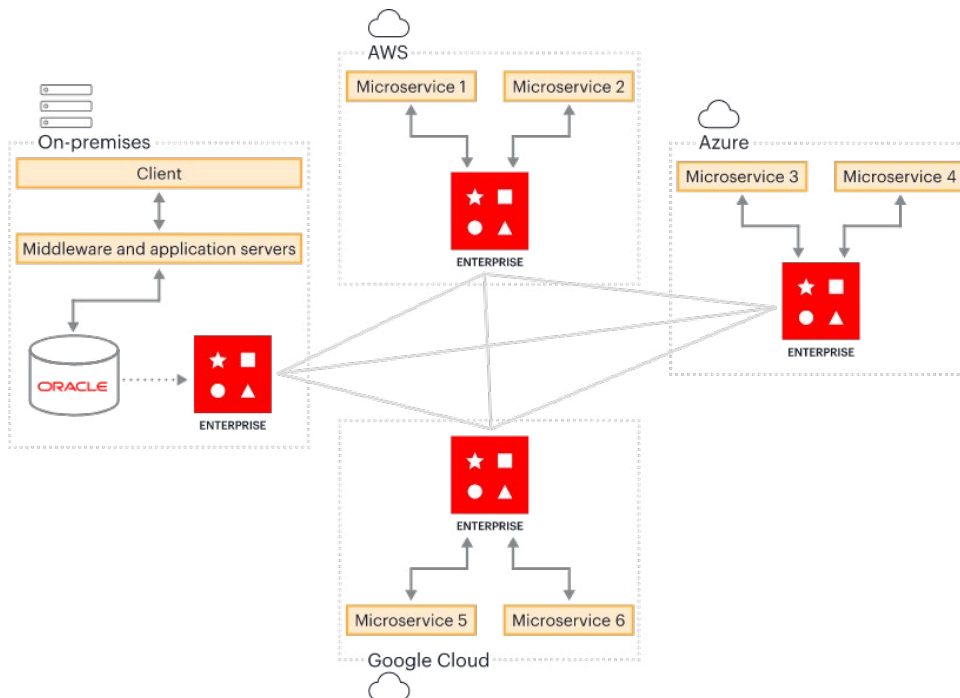
- **Write-behind caching for write-heavy workloads:** Use Redis Enterprise as a write-behind cache, receive and process thousands of write requests in sub-milliseconds.



- **Cache prefetching for read-heavy workloads:** Offload reads from MySQL to Redis Enterprise to boost application speed and lower costs. By writing data to MySQL and then pre-loading into a Redis Enterprise before your application needs it.



- **Update applications:** Use Redis Enterprise to bridge the gap between on-prem legacy applications and newer applications hosted in the cloud. With Redis Enterprise, data can be written and read in both environments, simultaneously, in real-time.



Want to learn more?

Explore customer stories and architectures showcasing how Redis Enterprise brings MySQL performance up to the standard that today's customers expect.

[Read the Redis Enterprise & MySQL Solution Brief >](#)