



# Application Database Scaling with Redis Enterprise and Heimdall Data


Datasheet

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DATA SHEET

# Application Database Scaling with Redis Enterprise and Heimdall Data

Application performance bottlenecks are often due to database interaction. Latency and inefficient SQL queries affect application performance and scale. Heimdall Data is a data access layer focused on SQL performance optimization to address these challenges. With Redis Labs, this joint solution offers a transparent and reliable in-memory storage solution. No more misconfiguration or stale cache.

## Cache Transparently

Developers often use the Hibernate cache interface, or interact directly with Redis to improve performance and scale through caching. However, there are customers who have applications which they cannot modify (i.e. 3rd party applications), or choose not to modify due to the application lifecycle which do not cache today.

Heimdall Data provides a transparent solution that complements Redis Enterprise offered by Redis Labs without the need for any application changes. With Heimdall, it just works with a “One-click” configuration that intelligently caches SQL responses into the Redis Enterprise data store. Performance bottlenecks are greatly reduced, increasing database scale and performance. Caching with Redis Enterprise also accelerates cache cold-start repopulation. On application restart, a large surge of traffic can greatly slow down the database. Redis Enterprise solves this problem by allowing cluster members to share data retrieved from the database on a restart, reducing the overall load.

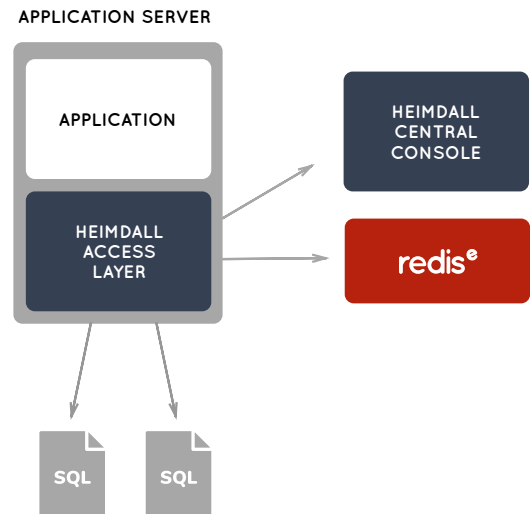
## Cache with Confidence

In addition to serving as a shared data store, Redis Enterprise also prevents stale responses. When the application writes to the database through Heimdall, Redis Enterprise is used to synchronize invalidations between application servers. This guarantees the entire cache is synchronized within the cluster.

## Cache with High Availability

Along with caching, Heimdall also provides Enterprise class database failover and SQL sharding. Redis Enterprise is used to synchronize server state information for Heimdall, allowing faster detection of database node failures to improve application availability.

The combination of Redis Enterprise and Heimdall Data provides a transparent way to help your current application infrastructure grow with “One-click” configuration.



HEIMDALL DATA

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