

## Industry Analyst Commentary on MySQL HeatWave Lakehouse

“Snowflake’s entire business is based on pulling in data from an object store—based on querying data from files,” said Marc Staimer, senior analyst, Wikibon. “And now, with the latest publicly available 400TB benchmarks, we see that MySQL HeatWave Lakehouse is much faster in terms of query time and load time—and of course it will cost less. The competition appears frozen.”

“MySQL HeatWave Lakehouse sets the competition on fire by blazing the trail to the previously uncharted territory of 400TB cloud database benchmarks at breakneck speeds,” said Ron Westfall, senior analyst and research director, Futurum Research. “MySQL HeatWave Lakehouse is a quantum leap for HeatWave in terms of processing capacity and computing power: from 32TB and 64 nodes to 400TB and 512 nodes with performance and price performance that handily beat Amazon Redshift and Snowflake. Meanwhile, the cloud database competitors have yet to respond to the in-database convergence and the multi-cloud presence of MySQL HeatWave. How will they cope with the 400TB MySQL HeatWave Lakehouse?”

“The innovation leaps just keep on coming for Nipun Agarwal and the HeatWave Engineering Team,” said Holger Mueller, vice president and principal analyst, Constellation Research. “Not content to have the only converged MySQL cloud database service with in-database transactions, analytics and machine learning, they have extended the Heatwave offering capabilities to tap into the massive universe of data that resides outside of the database. With the newly announced MySQL HeatWave Lakehouse, customers can load and process as much as 400TB of data on object store much faster and at very attractive price performance. MySQL HeatWave has become a very competitive cloud database, in little time, offering CxOs a powerful universal MySQL database for their next generation applications.”

“We have watched MySQL HeatWave’s engineering innovations over the past 24 months, and it’s quite evident that MySQL customers are going to experience a whole range of game-changing features,” said Alexei Balaganski, lead analyst, KuppingerCole Analysts. “Whether it’s the freedom of choice between OCI, AWS, and now Azure, the ability to run analytics, transactions, and machine learning directly in a single familiar database, or a higher degree of security and compliance, the MySQL HeatWave innovation trajectory continues its ascension. With MySQL HeatWave Lakehouse, customers now have the flexibility of running cloud database workloads in the 400TB range, further expanding its addressable market and beating several popular competitors at performance and cost efficiency.”

“As Oracle continues to push MySQL HeatWave into new territories of data outside the database, the company has also expanded MySQL HeatWave’s scalability to 400TB and computing to 512 nodes and has introduced new automation algorithms to MySQL Autopilot to deliver improved performance and usability by eliminating manual tasks,” said Bradley Shimmin, chief analyst, AI platforms, analytics and data management, Omdia. “For example, Autopilot automatically maps file data to datatypes in the database. It also samples a small portion of the file in object storage to collect stats which are used by the query optimizer.

Autopilot can also analyze data to predict the load time into MySQL HeatWave and automatically generate appropriate loading scripts as well as dynamically adapt MySQL HeatWave Lakehouse to match the performance characteristics of the underlying object store. Taken together, these innovations enable MySQL HeatWave Lakehouse to greatly accelerate load times and optimize query performance and price performance in a 400TB lakehouse that is quite uncommon compared with customary analytical database architectures.”

“The modern enterprise generates data everywhere, all the time in countless formats. Data that—when transformed—fuels the business,” said Matt Kimball, vice president and principal analyst, Moor Insights & Strategy. “In this environment, the modern database must simplify the process of aggregating and querying data across the enterprise, the edge, and the cloud. MySQL Heatwave Lakehouse helps companies do this in a way that drives better performance as evidenced by the latest 400TB benchmarks for running queries and loading data. Given this extreme performance, coupled with Oracle’s pricing strategy, it’s clear that the company is focused on gaining market share from its principal competitors.”

“MySQL HeatWave, with its latest Lakehouse announcement, just threw a massive challenge to all comers by delivering the fastest query performance and data loading based on the 400TB TPC-H benchmark. The performance results put Amazon Redshift and Snowflake to shame,” said Marc Staimer, senior analyst, Wikibon. “While Aurora, Amazon’s own modified MySQL cloud database service is limited to 128TB database sizes, MySQL HeatWave Lakehouse supports cloud databases in excess of 400TB, demonstrating continued innovation at a compelling price point for customers worldwide.”

“Data lakehouses are the next wave of innovation in analytics, as they are redefining dated assumptions about what’s possible with object storage,” said Tony Baer, principal, dbinsight. “MySQL HeatWave Lakehouse takes that a step further by proving that optimizations like Autopilot not only make cloud object storage a first-class citizen in the lakehouse, but that it’s possible to get blinding performance from what was once regarded as bulk storage.”