Case Study

Intel® Xeon® Processors
Intel® Instruction Set Extensions Technology

Customers Get Real-Time Insights to Optimize Ad Spend

Cometly's AWS Migration provides customer solutions powered by Intel® Xeon® processors and SingleStoreDB, delivering the performance, scale, and AI-readiness for enterprise-scale analytics.

Solution Summary

- Intel® Xeon® Processors
- Intel® Instruction Set Extensions Technology
- Amazon EC2 and S3 instances

Executive Summary

Cometly offers a marketing attribution platform that helps marketing teams prove ROI. After it migrated from MySQL to SingleStoreDB and Amazon EC2 and S3 instances supported by Intel® Xeon® processors, Cometly gained the compute speed and dynamic scaling capability to query client data sets with hundreds of millions of records and to return advertising insights in near real time. With that knowledge, Cometly's customers can reallocate funds to those ads that generate the most sales or leads. The migration also reduced Cometly's cost of concurrency by 33 percent while future-proofing its deployment for new products and services involving artificial intelligence (AI). Latency for large complex queries also lessened by 50 percent.[1]

Challenge

Cometly's customers face the ongoing challenge of understanding the specific advertising campaigns that drive the most revenue and the greatest number of qualified lead appointments. Using Cometly's analytics services, customers can quickly determine which ads are most effective—and which placements are less so—and increase ROI by diverting ad spending to the most impactful ones. User interactions with enterprise customers' ads can result in hundreds of millions of records, which must be processed and stored in the cloud for further analysis. In the past, Cometly's MySQL-based solution architecture struggled to accommodate the load. The company needed a flexible cloud solution that offered real-time analytics plus the speed and elasticity for highly complex queries against enormous data sets.

With Cometly's Customer Journeys mapping, clients gain deeper insight into which marketing channels drive the most user interaction and revenue to optimize ad spend.

Solution

After a thorough evaluation, Cometly approached SingleStore for its expertise in massive data migrations to AWS and SingleStoreDB. The team elected Amazon EC2 and S3 instances running Intel Xeon processors with Intel® Advanced Vector Extensions (Intel® AVX5-12) instructions and parallel processing through single instruction, multiple data (SIMD) capability. The resulting database architecture offered greater accuracy, unlimited scalability, and the performance characteristics needed to process complex data queries cost-effectively. The solution's AI-readiness paves the way for future Cometly products and features that add value for its customers.

> "Thanks to Amazon EC2 and S3 instances with SingleStoreDB and Intel Xeon processors, Cometly's services run with exceptional scale and speed to help our clients optimize their advertising spend and revenue. Our new solution also decreases our data storage costs and opens the doors for new Cometly products and services to give our enterprise clients even more value."
>
> *—Matt Pattoli, Co-Founder, Cometly*

Results

The new database architecture can scale dynamically, increasing or decreasing instance volumes and optimizing performance against workload demands. Cometly now has all the compute, storage, and analytics power it needs to expand its offerings with capabilities like its Customer Journeys feature. With Customer Journeys mapping, clients gain deeper insight into which marketing channels drive the most user interaction and revenue to optimize ad spend. The new AWS solution can handle query tables with over 100 million records in less than a second, allowing Cometly to load a customer's campaign in near real time with SingleStore. The resulting insights help customers revise their marketing campaigns on the fly for more significant ROI. The migration also helped Cometly decrease its concurrency cost by 33 percent, and reduce latency for large, complex queries by 50%.[1]

Key Takeaways

Consider your database solution needs carefully, especially factors like scalability, performance, security, and compliance. Doing so will help ensure your deployment has all the required capabilities without over-provisioning.

Migrating massive volumes of data takes significant planning and preparation. The help of experts, like the team at SingleStore, can make the process painless and seamless.

Consider adopting a future-proofed cloud solution capable of enabling new features that provide customer value using AI.

Where to get more information

- Explore Intel Xeon processors.
- Find out more about Intel Instruction Set Extensions Technology.
- Learn about real-time, unified, distributed SQL solutions built on SingleStoreDB.
- Read about best practices for Amazon EC2 and S3 instances.

intel + aws

[1] Performance benefits provided by Cometly based on the organization's migration from MySQL to SingleStoreDB and AWS EC2 instances supported by Intel® Xeon® Processors. Testing completed by Cometly as of March 2023.

Performance varies by use, configuration and other factors. Learn more at www.Intel.com/PerformanceIndex.

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