

Proof Trading's Cloud Migration Enables Real-Time Transactions, Exceptional Scale, and 70 Percent Lower TCO¹

Amazon EC2 instances with Intel® Xeon® processors and SingleStoreDB provide extensive benefits for Proof Trading's solution.

Solution Summary

- Intel® Xeon® processors
- Amazon EC2 instances



Executive Summary

Proof Trading is an execution-only financial broker serving long-term investors' trading experiences. The company also creates market-related algorithms that support institutional clients. Proof Trading moved from running SingleStore in their own Amazon EC2 instances to using SingleStore's cloud based services supported by Intel® Xeon® processors. After the transition, Proof Trading benefitted from excellent performance and unrestricted scalability while reducing its TCO by 70 percent.¹

Challenge

As Proof Trading grew its client base, it needed a cost-effective, cloud-based solution that offered real-time responsiveness and the ability to scale up or down dynamically as workload demands changed throughout the day. The company also wanted a turnkey solution that allowed its team to focus on higher-value activities like extracting insights from accumulated data.

Solution

After an extensive search for an ideal solution, Proof Trading partnered with SingleStore and migrated their workloads to Amazon EC2 instances. SingleStore's patented Universal Storage solution enables real-time transactions, fast analytics, and exceptional scalability. SingleStore's offering can also handle multiple data types, including vector-based information, as a multi-model database. Underlying the Amazon instances, Intel Xeon processors speed workloads with the aid of Intel® Advanced Vector Extensions 512 (Intel® AVX-512) instructions and parallel



The Intel® Xeon® processor-based Amazon EC2 instance provided Proof Trading with excellent performance and unrestricted scalability.

processing through single instruction, multiple data (SIMD) capability. The combination of hardware and software creates an elastic cloud solution that operates in real time and requires little administration by the Proof Trading team.

Results

The updated trading system running on Amazon EC2 instances costs Proof Trading less than \$10,000 monthly while accommodating a massive data load of 250,000 to a million records per second. Using this infrastructure, Proof Trading can support 50 to 100 gigabytes of new customer transaction data daily. SingleStore's efficient compression approach lowers the storage burden and the cost to accommodate that information. Plus, thanks to SingleStoreDB's Cloud suspend and resume functionality, Proof Trading can halt its clusters outside active trading hours to lower its TCO by 70 percent.

"Our migration to Amazon EC2 instances with Intel Xeon processors and DataStoreDB solutions provided our business exceptional scale and a 70 percent reduction in TCO since we can halt unneeded instances outside active trading hours."

– Marcio Moreno, at Proof Trading

Key Takeaways

As an [AWS Workload Migration Program](#) partner, SingleStore can accelerate the cloud migration process and reduce complexity for its customers.

Suspending cloud workloads outside of business hours can result in enormous cost savings.

SingleStore offerings can also support AI use cases and applications, future-proofing its solution for customers' needs in the months and years ahead.

[Explore Intel Xeon processors.](#)

[Learn about the SingleStoreDB real-time, unified, and distributed SQL solutions.](#)

[Find out more about Intel AVX-512 instructions.](#)

[Read about best practices for Amazon EC2 instances.](#)



¹ Due to SingleStoreDB's Cloud suspend and resume functionality, Proof Trading can halt its clusters outside active trading hours to lower its TCO by 70 percent.

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