LDBC Social Network Benchmark Interactive Workload – Audited Run – Executive Summary

System Details

Test Sponsor	System Under Test (SUT)	Availability date of the SUT
HUAWEI CLOUD	Graph Engine Service (GES)	2025-10-28

Cloud provider	Machine region / instance type	Operating system	Database management system
Huawei Cloud	km2.40xlarge.8	Ubuntu 24.04.1	GES 3.1.0

Server processor cores / threads / type	Total cache size per CPU	Memory size	Storage / file system / average performance
160 cores / 160 thread / Kunpeng @ 2.0GHz	L1 cache: 10MiB Data + 10MiB Instruction L2 cache: 80 MiB L3 cache: 128 MiB	1280GiB	6000GiB NVMe SSD / ext4 / 1269 IOPS

System Pricing

Total system cost	Machine cost	License cost	Maintenance fee
2,939,112 RMB	529,112 RMB (km2.40xlarge.8 reserved instance in the Huawei Cloud, standard 3-year term)	2,400,000 RMB	– (included in the license)

Benchmark Configuration and System Settings

Benchmark specification and auditing policies version	v2.2.3		
Datagen version	v1.0.0		
Driver version	v1.2.0		
Implementation language	C++		
Driver read threads	64		
Data partitions / driver write threads	48		
Data format	CsvComposite-StringDateFormatter		
Scale factor	100	300	1000
Time compression ratio	0.00010	0.00315	0.02300
Transaction isolation level	Read Committed		

Summary of Performance Metrics

Scale factor	Benchmark duration	Benchmark operations	Throughput (ops/s)	On-time query compliance
100	02h 10m 36s	1 011 574 388	129 089.68	98.92%
300	02h 00m 55s	1 011 528 900	139 411.14	98.96%
1000	02h 02m 28s	924 962 052	125 872.54	95.50%

Audited by Dr. Benjamin Steer	Report Date: 2025-12-01
This summary references an audited LDBC benchmark run. The results have been gathered by an independent and impartial auditor who has validated the implementation of the queries, successfully run the ACID tests associated with the claimed isolation level, and verified the overall system's configuration conformance to the description of the benchmark and its strict requirements.	