



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

System Details

Test Sponsor:  ALIBABA DAMO ACADEMY	GraphScope Flex 0.23.0  GraphScope	LDBC SNB Interactive v0.3.6 Auditing Policies v0.3.6
		Availability date of the SUT: 2023-05-26

Cloud provider	Machine region / instance type	Operating system	Database management system
Amazon Web Services	N. Virginia / r5d.12xlarge	Ubuntu 20.04.1 SMP	GraphScope Flex 0.23.0

Server processor cores / threads / type	Total cache size per CPU	Memory size	Storage / file system / average performance
24 / 48 / Intel Xeon Platinum 8175M @ 2.5GHz	L1 cache: 768KiB Data + 768KiB Instruction L2 cache: 24 MiB L3 cache: 33 MiB	384 GiB	900GiB NVMe SSD / xfs / 18,050 IOPS

System Pricing

Total system cost	Machine cost	License cost	Maintenance fee
99,236.04 USD	39,236.04 USD (r5d.12xlarge reserved instance machine in AWS, standard 3-year term)	0.00 USD	60,000.00 USD/A

Benchmark Configuration and System Settings

Datagen version	v0.3.8		
Driver version	v1.2.0		
Implementations version	v1.0.0		
Driver read threads	48		
Data partitions / driver write threads	32 / 64		
Data format	CsvComposite		
Scale factor	30	100	300
Time compression ratio	0.00112	0.0039	0.014
Transaction isolation level	Serializable		

Summary of Performance Metrics

Scale factor	Benchmark duration	Benchmark operations	Throughput (ops/s)	On-time query compliance
30	02h 03m 03s	244 980 478	33,180.87	100.00%
100	02h 01m 25s	244 974 654	33,625.36	100.00%
300	02h 02m 44s	244 951 252	33,261.38	100.00%

Audited by Arnau Prat-Pérez	Report Date: 2023-07-13
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.	