Linked Data Benchmark Council – Social Network Benchmark Audited Run – Executive Summary

System Details

Test Sponsor: 蚂蚁集团 ANT GROUP	TuGraph v3.3.4 	LDBC SNB 0.3.6 Auditing Policies 0.3.6
		Availability date: 28 January 2023

Cloud provider	Machine region / instance type	Operating system	Database management system
Alibaba Cloud	China (Shenzhen)/ecs.g8y.16xlarge	Alibaba Cloud Linux 3	TuGraph v3.3.4

Server processor cores / threads / type	Total cache size per CPU	Memory size	Storage / file system / average performance
64 / 64 / ARM-based YiTian 710	L1 cache: 128 KiB L2 cache: 1 MiB L3 cache: 64 MiB	256 GiB	1.5TB NVMe SSD / ext4 file system/ 3431 IOPS

System Pricing

Total system cost	Machine cost	License cost	Maintenance fee
277,541.76 RMB	220,541.76 RMB (reserved instance)	free	57,000.00 RMB

Benchmark Configuration and System Settings

Datagen version	v0.3.5		
Driver version	v1.2.0		
Implementations version	v1.0.0		
Driver read threads	48		
Driver write threads	32		
Output format	CsvCompositeMergeForeign using the LongDateFormatter		
Scale factor	30	100	300
Time compression ratio	0.00220	0.00781	0.03400
Transaction isolation level	Serializable		

Summary of Performance Metrics

Scale factor	Benchmark duration	Benchmark operations	Throughput (ops/s)	On-time query compliance
30	02h 01m 30s	117,603,754	16,133.08	99.98%
100	02h 00m 26s	122,608,813	16,966.26	95.63%
300	02h 02m 51s	99,755,499	13,532.62	96.31%

Audited by Márton Búr	Report Date: 28 January 2023
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.	