


Linked Data Benchmark Council - Social Network Benchmark - Executive Summary

System details

Test Sponsor  FMA Technologies LTD	FMA TuGraph 1.10 (Formerly known as LightGraph)		LDDBC SNB 0.3.2 Auditing Policies 0.2.0
			Availability Date 16 th July 2020
Cloud Provider	Machine Region/ Instance Type	Operating System	Database Manager
Amazon Web Services	Ohio/ r5d.12xlarge	18.04.1-Ubuntu	TuGraph 1.10
Server Processor Count/Cores/Threads/Type	Total cache size per CPU	Memory size	Storage/ Average Performance
1/24/48/ Intel Xeon Platinum 8175M @ 2.5GHz	L1 cache: 1.5MB L2 cache: 24MB L3 cache: 33MB	374 GB	2 x 900GB NVMe SSD in RAID0/ 28853 IOPS

System pricing

Total System Cost	Machine Cost	License cost	Maintenance fee
\$280,650 USD	\$34,150 USD (3 years reserved instance)	\$170,000 (permanent)	\$76,500 (3 years)

Benchmark configuration and system settings

Datagen version	v0.3.3		
Output format	CsvCompositeMergeForeign serializer		
Scale factor	30	100	300
Time Compression Ratio	0.0064	0.028	0.09
Transaction isolation level	Serializable		

Summary of performance metrics

Scale factor	Benchmark duration	Benchmark operations	Throughput	Query on-time compliance
30	02h 17m 56.784s	44 994 820	5 436.47 operations per second	100.00%
100	02h 03m 03.076s	36 994 870	5 010.77 operations per second	100.00%
300	02h 07m 00.853s	37 003 185	4 855.52 operations per second	100.00%

Audited by Marton Bur of Chorograph

Report Date: 21/07/2020

This summary references an audited LDDBC 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.