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

System Details

Test Sponsor: ontotext	Ontotext GraphDB 10.1.1 GraphDB	LDBC SNB 0.3.6 Auditing Policies 0.3.6
		Availability date: 23 Nov 2022

Cloud provider	Machine region / instance type	Operating system	Database management system
Amazon Web Services	N. Virginia / AWS r6id.8xlarge	Ubuntu 22.04.1 LTS	Ontotext GraphDB 10.1.1

Server processor cores / threads / type	Total cache size per CPU	Memory size	Storage / file system / average performance
16 / 32 / Intel Xeon Platinum 8375C @ 2.90 GHz	L1 cache: 2560 KiB L2 cache: 40 MiB L3 cache: 54 MiB	256 GiB	1900GB NVMe SSD / ext4 / 9257 IOPS

System Pricing

Total system cost	Machine cost	License cost	Maintenance fee
216,222 USD	30,222 USD (AWS r6id.8xlarge reserved instance machine in AWS, standard 3-year term)	36,000 USD (3-year term subscription)	150,000 USD (including 24/7 enterprise support for 3-year term)

Benchmark Configuration and System Settings

Datagen version	v0.3.5		
Driver version	v1.2.0		
Implementations version	v1.0.0		
Data format	Turtle		
Scale factor	30		
Driver read threads	1	2	4
Driver write threads	1	2	4
Time compression ratio	11.00	5.00	2.80
Transaction isolation level	Read committed		

Summary of Performance Metrics

Scale factor	Read threads	Write threads	Benchmark duration	Benchmark operations	Throughput (ops/s)	On-time query compliance
30	1	1	02h 03m 03s	22,444	3.04	95.38%
30	2	2	02h 03m 00s	49,911	6.76	96.86%
30	4	4	02h 03m 28s	90,129	12.16	99.00%

Audited by David Püroja	Report Date: 15 Feb 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.	