Executive Summary of an Audited LDBC Benchmark Result

Linked Data Benchmark Council – Social Network Benchmark – Business Intelligence Workload

Audit Overview

Test Sponsor: TigerGraph	Database management system: TigerGraph 3.7.0
	DBMS availability date: 2022/09/15

Setup Overview

Hardware	Operating system
Dell PowerEdge R7725 Server	Ubuntu 22.04.04 LTS

Hardware Configuration

CPU cores / threads / type	Total cache size per CPU	Memory size	Storage / file system
2x AMD EPYC 9355 at 3.545 GHz, 32 cores, 64 threads Total cores: 32 Total threads: 64	L1i cache: 2MiB L1d cache: 3MiB L2 cache: 64MiB L3 cache: 512MiB	1.5TiB	Dell NVMe PM1743 RI E3.S XFS 3.84TB

System Pricing

Total system cost	Machine cost	License cost	Maintenance fee
1,398,469.32 USD	191,461.32 USD	1,097,280.00 USD	109,728.00 USD

Benchmark Configuration and System Settings

Workload	Social Network Benchmark Business Intelligence workload (SNB BI)
SNB Datagen version	v0.5.1
SNB BI driver and implementations version	v1.0.3
SNB specification version	v2.2.0
Execution mode	disjoint RW mode
Data format	composite-projected-fk layout, compressed CSV files (decompressed during preprocessing)
Scale factor	1000

Summary of Performance Metrics

Scale factor	Benchmark duration	Power@SF	Power@SF/$	Throughput@SF	Throughput@SF/$
1000	167.57 minutes	34949.74	24.99	15089.13	10.79

Audited by David Puroja (Pometry)	Report date: 2024/10/10
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 and verified the overall system's configuration conformance to the description of the benchmark and its strict requirements.	