



# **LDBC**

**Cooperative Project**

**FP7 – 317548**

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## **Benchmark design for navigational pattern matching benchmarking - Benchmark Executions**

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***Abstract***

This document contains a discussion about the executions of LDBC-SNB interactive workload for different vendors. This includes executions implemented using Sparksee API, Neo4j Cypher, Neo4j API and Virtuoso.

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## EXECUTIVE SUMMARY

This document contains a discussion about the executions of LDBC-SNB interactive workload for different vendors. This includes executions implemented using Sparksee API, Neo4j Cypher, Neo4j API and Virtuoso. The results shown cannot be taken as definitive, as they are just proof of concepts that help the LDBC-SNB development team to test the provided software, getting feedback for the specification, and in general, testing how all the benchmark behaves using real fire.

## DOCUMENT INFORMATION

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<b>Abstract (for dissemination)</b>	This document contains a discussion about the executions of LDBC-SNB interactive workload for different vendors. This includes executions implemented using Sparksee API, Neo4j Cypher, Neo4j API and Virtuoso.
<b>Keywords</b>	benchmark, graph database, query set, RDF, workload, executions

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# 1 VIRTUOSO

Figures 1.1 and 1.2 show the running times of Virtuoso SQL with scale factor 1. The graph shows minimum, maximum, 50th percentile, 95th percentile and 99th percentile query latencies. The machine used for the executions has the following characteristics: Intel Xeon CPU E5-2630 at 2.30GHz (24 Cores), 198 GB of RAM, Linux Kernel 2.6.32-220.el6.x86\_64.

From these graphics it can be seen that all of the queries have interactive execution times (less than a second) in this scale factor.

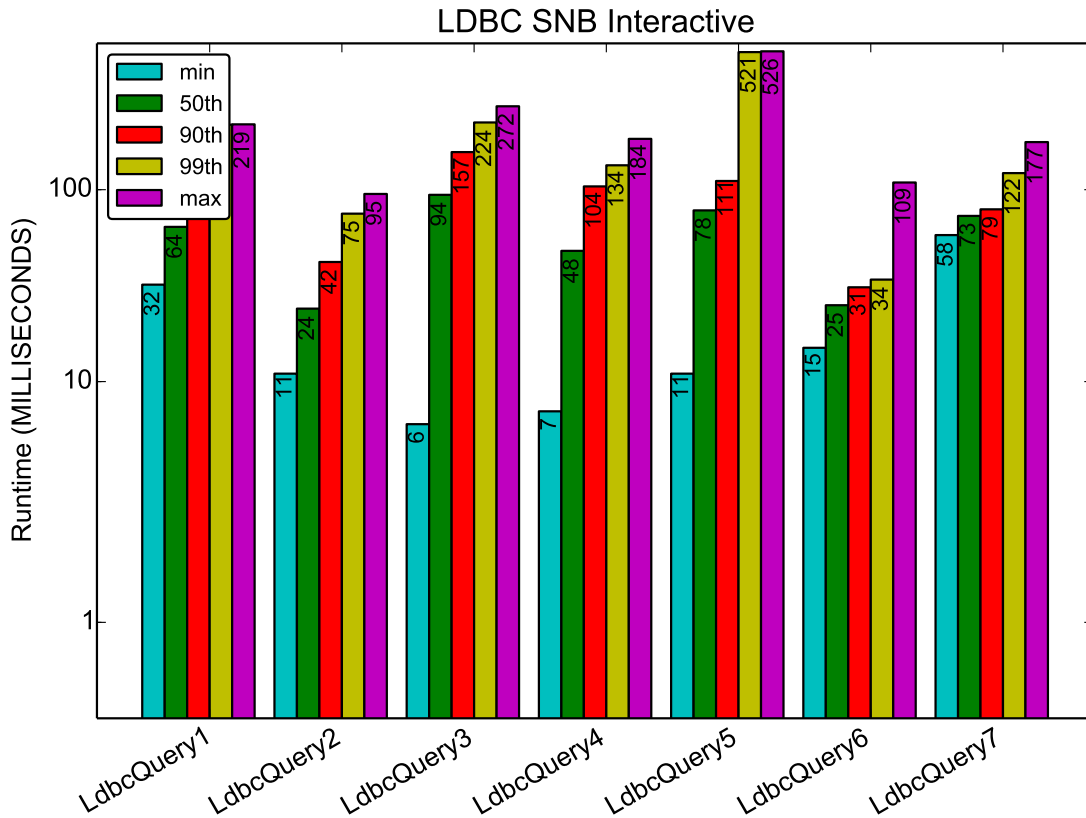


Figure 1.1: Query 1 to 7 execution times for Virtuoso SQL SF1

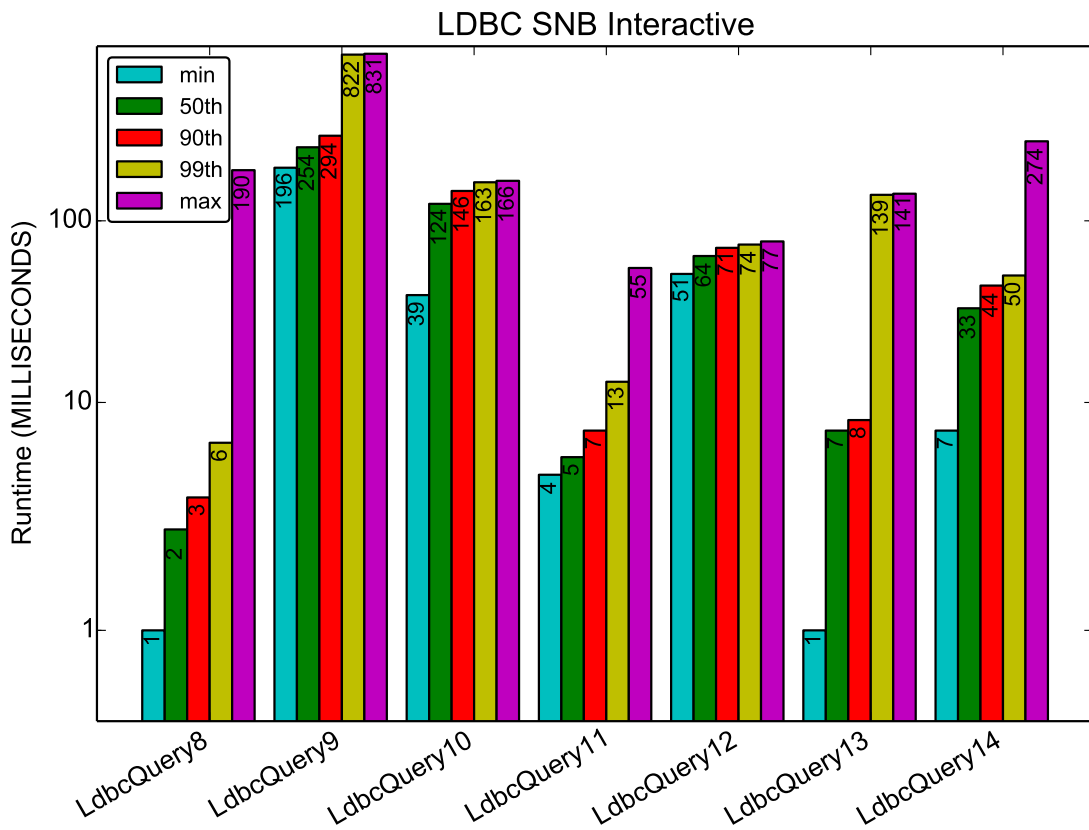


Figure 1.2: Query 8 to 14 execution times for Virtuoso SQL SF1