Process for defining new LDBC benchmarks

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The process of proposing new benchmarks for LDBC is the following.

1. Create a draft benchmark proposal, motivated by real-world use cases and a category of data processing systems that perform some graph processing tasks (e.g. querying data as a graph) and could have significant industry adoption in the next 5–10 years.
2. Establish why the benchmark is significantly different from existing LDBC benchmarks: challenging performance aspects (choke points), challenging properties of the data, required query language features for expressing queries, etc.
3. Present the benchmark to the LDBC Members Policy Council.
4. Gather agreements from 2+ LDBC member companies that they are willing to contribute to the benchmark specification and create reference implementations of the benchmark.
5. Draft a work charter for the benchmark task force. The work charter should list the companies interested in working on the benchmark. For examples, see the following work charters: FinBench, SNB.
6. Have the LDBC Members Policy Council vote on the establishment of a new benchmark task force. The vote needs a simple majority.
7. Create the benchmark specification, implement the data generator, driver, etc. During this process, it is recommended to give periodic reports to the Members Policy Council.
8. Create 2+ reference implementations and cross-validate them for correctness.
9. Define auditing guidelines for the benchmark, conduct 2+ *standard-establishing audits* on the reference implementations, and produce the Full Disclosure Reports detailing the outcomes of these audits.
10. Upload the specification to arXiv and (preferably) the data sets to a public repository.
11. Have LDBC members vote on the acceptance of the benchmark. A simple majority is needed.
12. Create questions for auditor certification exams.
13. Find, train, and certify auditors to conduct audits for the benchmark.
14. Organize audits. Full Disclosure Reports are signed off by the task force leads. Additionally, the first few audits should be closely supervised by the task force leads.

If you have any questions about the process, feel free to reach out to the task force leads (listed in the work charters).