Overview

McObject's eXtreme SQL is a high-performance implementation of the SQL database programming language for the eXtremeDB database system. eXtremeSQL can be used with eXtremeDB as an embedded or client/server database systems. eXtremeSQL strengthens eXtremeDB’s appeal in fields where ultra-fast, reliable responsiveness is a must and SQL is the dominant database language.

Built on the unsurpassed performance of eXtremeDB, eXtremeSQL delivers blazingly fast processing of dynamic SQL queries.

Benefits of using eXtremeSQL include…

Co-exists with native eXtremeDB API. Use eXtremeSQL alongside the eXtremeDB native API in the same application—the native interface for speed, and eXtremeSQL when a higher level of access helps, as in retrieving data from multiple tables or performing aggregation.

JDBC & ODBC support. eXtremeSQL offers Java Database Connectivity (JDBC) and Open Database Connectivity (ODBC) support.

Extensions to exploit eXtremeDB features and data types. eXtremeSQL implements eXtremeDB-specific extensions including support for structures, arrays, vectors, time series and pipelined functions for data analysis, and query optimizations based on eXtremeDB capabilities.

Compatible with other eXtremeDB editions. eXtremeSQL is fully compatible with the eXtremeDB hybrid in-memory database and persistent system, High Availability, Transaction Logging, and Cluster editions. The eXtremeSQL distributed query engine facilitates elastic horizontal scalability.

No client/server inter-process communications. Like eXtremeDB, eXtremeSQL can be embedded in application code, not deployed as a separate process, eliminating client/server inter-process communication overhead.

xSQL client/server. xSQL is a full-featured database server that supports all that eXtremeDB offers. Use it as client, too, and be up and running with no programming.

xSQL supports sharding (horizontal partitioning) and High Availability, to create highly scalable and resilient systems.

xSQL isolates applications from the details of the network topology through its distributed query processing engine. No reprogramming or recompilation needed.

xPanel console

xPanel consists of several graphical interfaces that simplify eXtremeDB configuration and monitoring. xSQL is configured by a JSON-formatted file that includes a variety of configuration parameters that determine xSQL behavior.

- The xSQL Configuration Tool facilitates creating new, and modifying existing, xSQL JSON-formatted configuration files.
- The SQL System Analyzer collects and visualizes SQL processing statistics.
- The SQL Query Console provides the capability to execute ad hoc SQL statements and view the results.
- The eXtremeDB Performance Monitor provides a comprehensive, live view of various factors affecting the performance of eXtremeDB-based systems.
- The Feed Handler Configuration Tool simplifies the process of establishing application settings that implement connections to financial market feeds.
- The Tracer displays the contents of a trace-log-file that tracks the runtime activity of eXtremeDB modules.
- The NetViewer module visualizes the topology of eXtremeDB shards.