BERKELEY DB

Factsheet

Shelby Hendrickx

&

Lucas van der Laan

Facts

Berkeley DB is designed for high-performance, transactional data management. The in-process architecture enables speed and reduces complexity.

- BerkeleyDB uses an Embedded Ordered Key-Value store
- BerkeleyDB was acquired by Oracle Corporation in 2006
- The name BerkeleyDB is given to three products:
    1) Berkeley DB (written in C)
    2) Berkeley DB Java Edition (written in Java)
    3) Berkeley DB XML (written in C++)
- BerkleyDB implements concurrency by using two-phase locking to permit multiple reader cursors or a single writer cursor to access the database.
- Supports operation on partial records
- Ability to store memory in-memory, on-disk or a combination
- Supports replicability for high system scalability and availability
- Developed in C with API bindings for Java, C++, C#, Python, Ruby, Perl, PHP, etc.
- Uses a B+Tree algorithm to store keys and values in leaves
- B+Tree is sorted to support efficient exact match lookups and range scans
- BerkleyDB supports licensing under open-source licensing terms and proprietary for commercial use
-