



#ASLI ENGINEERING

Embedded Databases

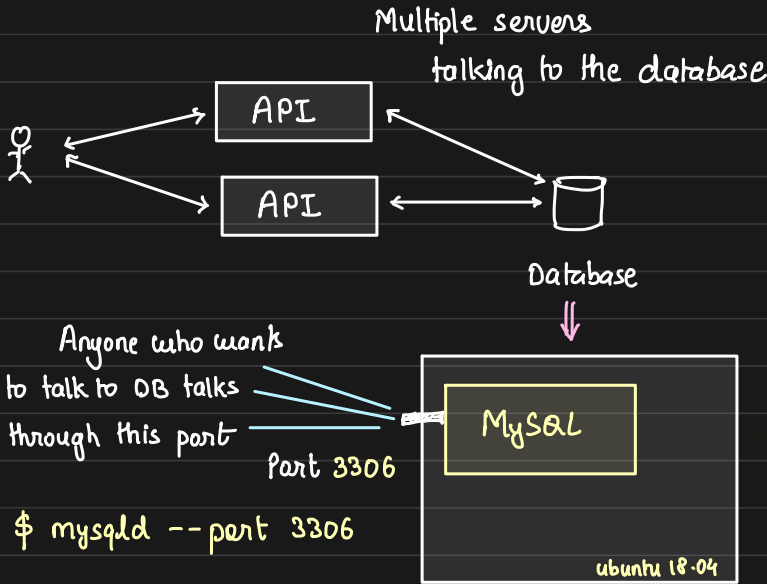


BY

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Embedded Databases

Server-based Databases



Database is a separate process running on a Server on top of an Operating System

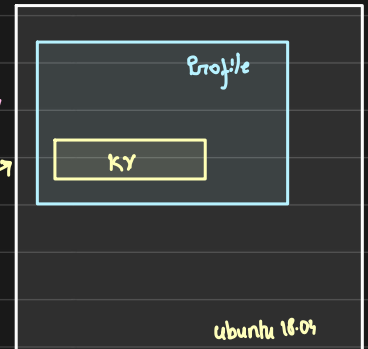
Embedded Databases

Say, we have a profile service and API servers of profile service are caching frequently accessed profiles in an in-memory Hash-Table

Note: Embedded DB need not be in-memory

Database is embedded within the application (profiles)

Clients cannot directly connect to the database



Some Embedded Databases

- SQLite - an embedded SQL database
- LevelDB - on disk KV store by Google
- RocksDB - on disk KV store optimized for performance
- Berkeley DB - KV store with ACID, locking, replication

An embedded DB is designed to solve one niche really well

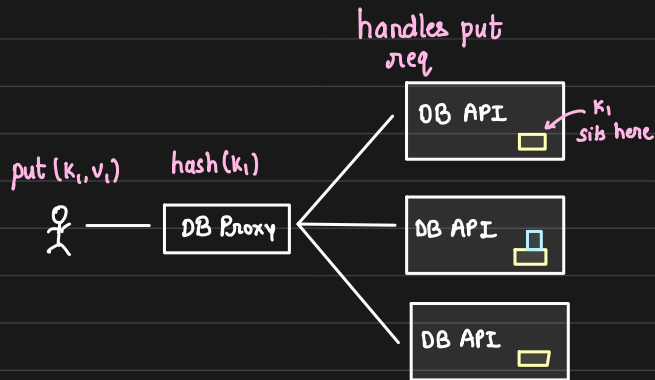
Applications of Embedded Databases

Browsers — Indexed DB

Mobile phones — SQLite

You want to build your own partitioned KV store

Just use an embedded KV DB



If you want to Query a data

that is contained in a space → Use an Embedded DB

why do it hackily with raw File I/O