

DuckDB compared to PostgreSQL: Analytical DB for Analytical Processing

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● DuckDB

High-performance analytical database

- In-Process (Embedded)
→ Edge Computing
- Specialized for OLAP
→ Column-Vectorized Execution

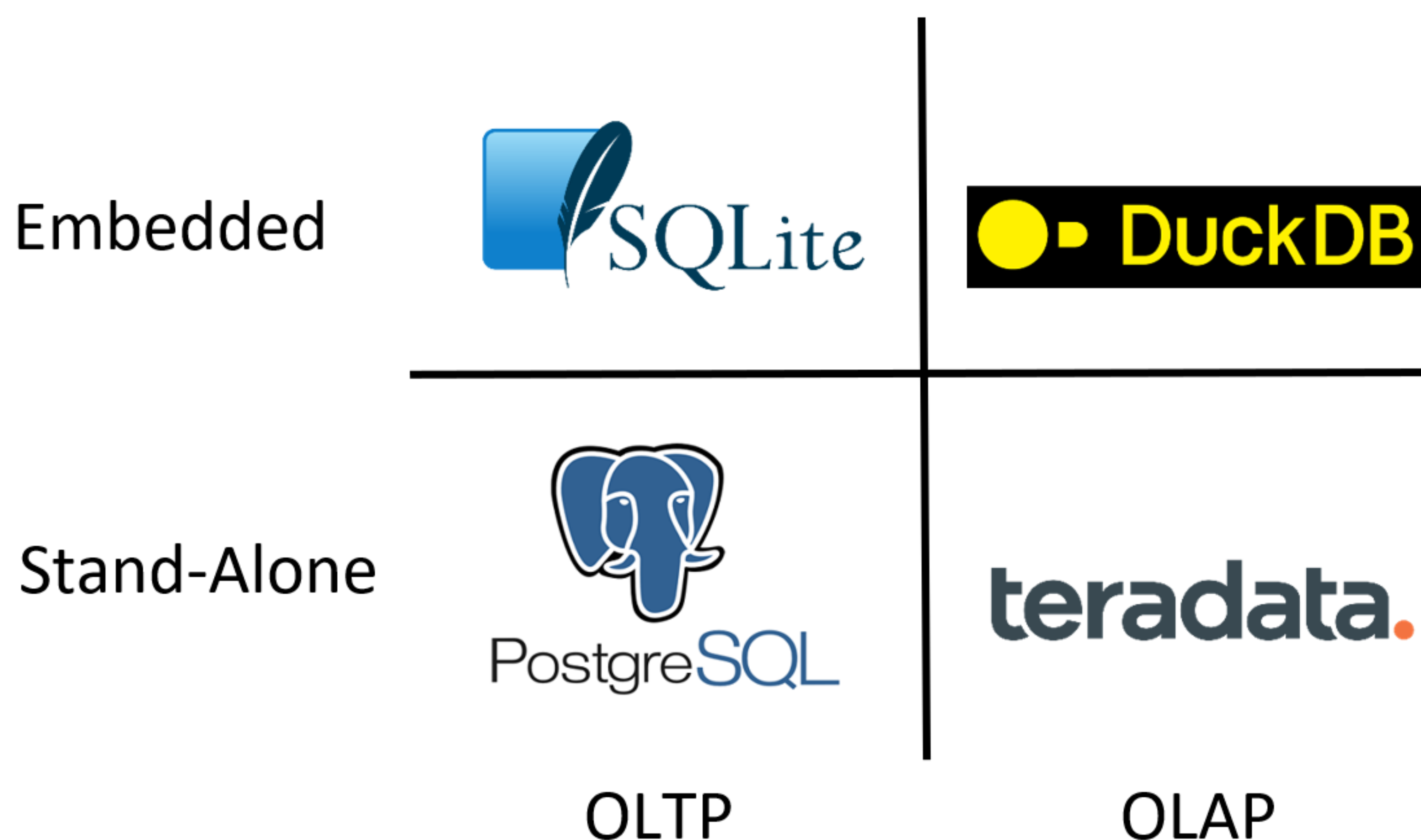


Enterprise-level relational RDBMS

- Stand-Alone Application
→ Client-Server Architecture
- OLTP Orientated
→ Row-Based Execution

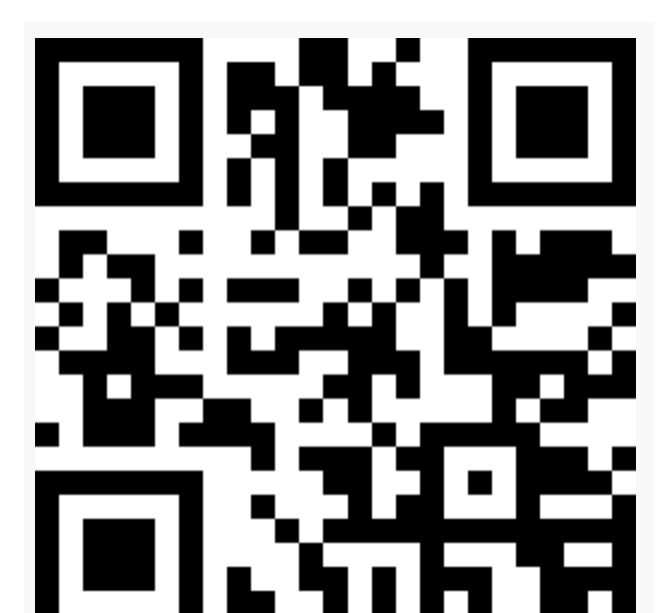


Features	DuckDB	PostgreSQL
Speed (OLAP)	Fast	Slow (?)
Transactions	ACID-Compliant	ACID-Compliant
Storage	In-memory/On-disk hybrid	On-disk
Data Types	Limited support for advanced data types	Supports advanced data types
Scaleability	Suitable for small to medium workloads	Highly scaleable for large workloads
Extensibility	Limited third-party extensions	Large number of third-party extensions
Licensing	Open source (MIT Licence)	Open source (MIT Licence)



DuckDB and PostgreSQL in the broader System Landscape

More Info:



<https://duckdb.org>