

# DuckDB compared to PostgreSQL: Analytical DB for Analytical Processing

Lucien Hagmann

## ● DuckDB

High-performance analytical database

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

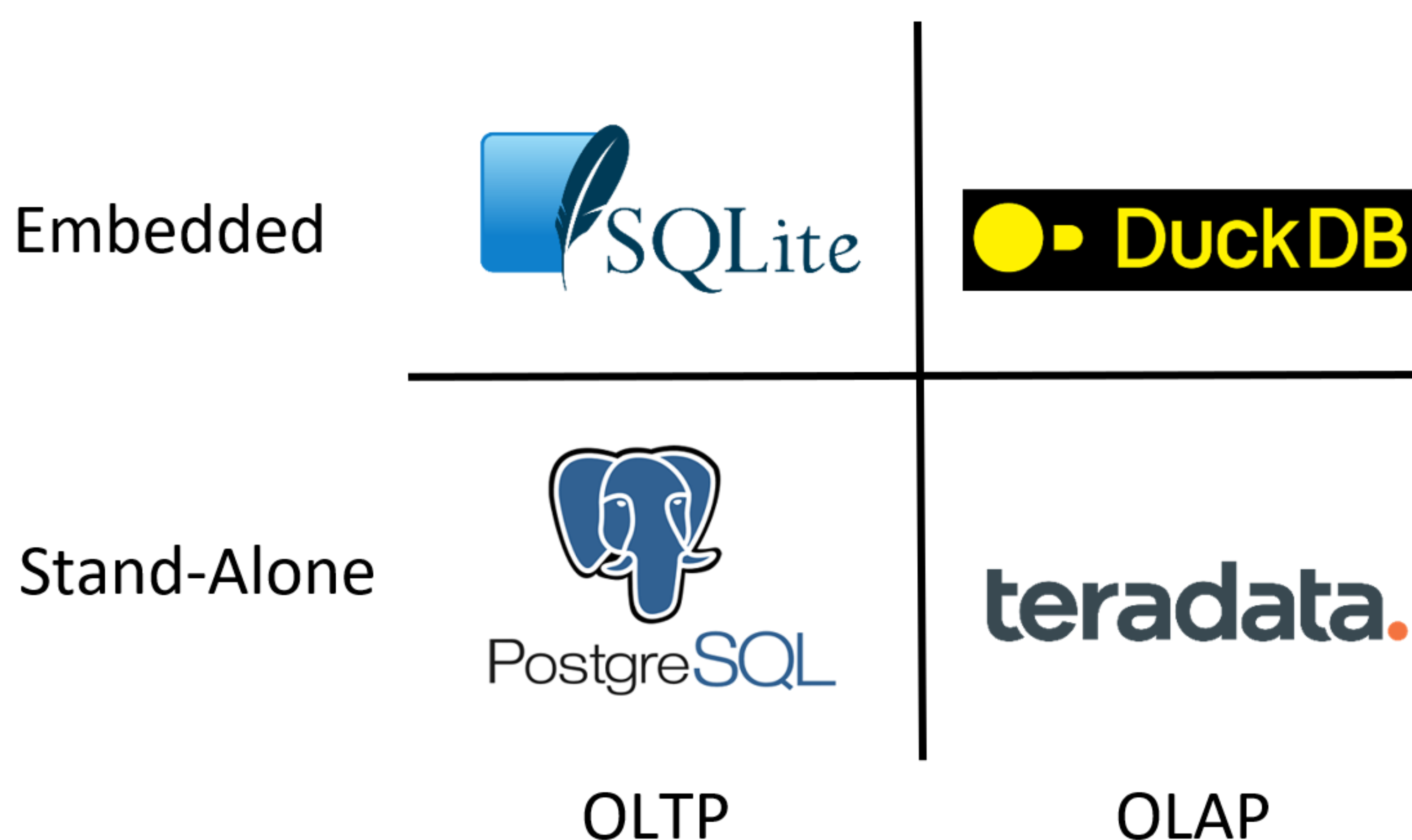


Enterprise-level relational RDBMS

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

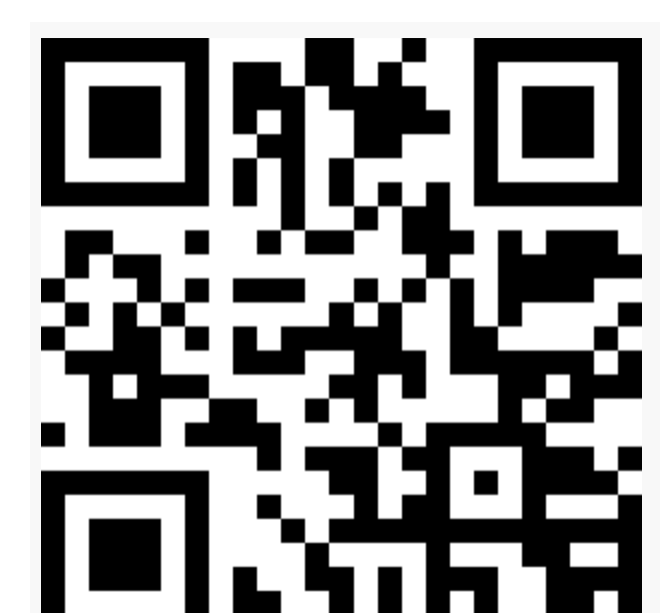


Features	DuckDB	PostgreSQL
Speed (OLAP)	Fast	Slow
Transactions	ACID-Compliant	ACID-Compliant
Storage	In-memory/On-disk hybrid	On-disk
Data Types	Limited support for advanced data types	Supports advanced data types
Scaleability	Suitable for small to medium workloads	Highly scaleable for large workloads
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>