

RDBMS: Pros and Cons Comparison

What is an RDBMS?

A Relational Database Management System (RDBMS) is a type of database management system that stores data in tables. It uses SQL to access and manipulate data and follows ACID properties to ensure reliability.

The Pros (Advantages)

- Data Integrity: Strong ACID compliance ensures data remains consistent.
- Standardization: SQL is a universal language with massive community support.
- Security: Granular permissions allow for high levels of data protection.
- Relationships: Excellent at handling complex queries between different data sets via Joins.

The Cons (Disadvantages)

- Scalability: Difficult to scale horizontally across multiple servers.
- Rigid Schema: Changes to the data structure are difficult and time-consuming.
- Performance: Large-scale joins can lead to significant latency.
- Cost: Enterprise-grade RDBMS can be expensive to license and maintain.