

8. RELATIONAL OLAP

Relational OLAP servers are placed between relational back-end server and client front-end tools. To store and manage the warehouse data, the relational OLAP uses relational or extended-relational DBMS.

ROLAP includes the following:

- ☐ Implementation of aggregation navigation logic
- ☐ Optimization for each DBMS back-end
- ☐ Additional tools and services

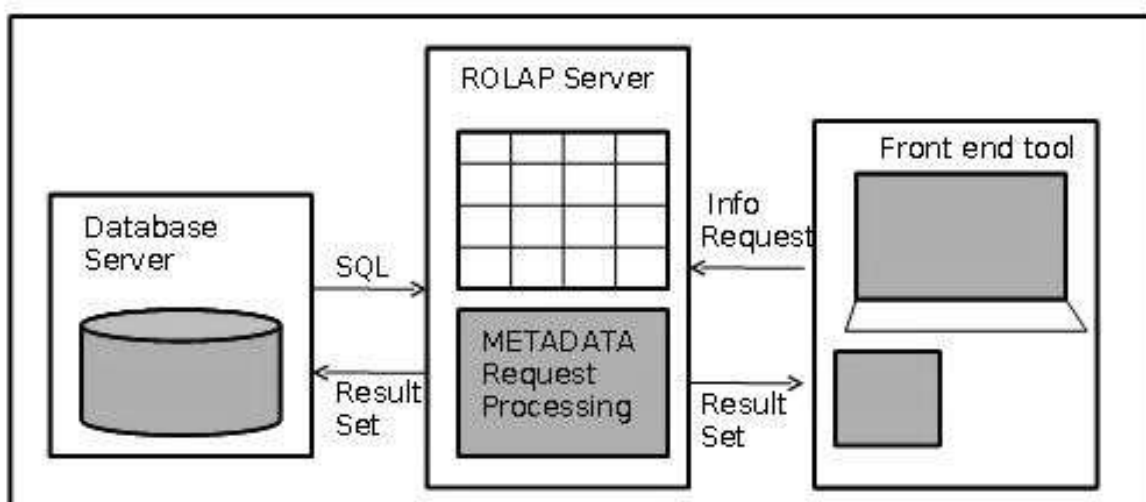
Points to Remember

- ☐ ROLAP servers are highly scalable.
- ☐ ROLAP tools analyze large volumes of data across multiple dimensions.
- ☐ ROLAP tools store and analyze highly volatile and changeable data.

Relational OLAP Architecture

ROLAP includes the following components:

- ☐ Database server
- ☐ ROLAP server
- ☐ Front-end tool



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Advantages

- ☐ ROLAP servers can be easily used with existing RDBMS.
- ☐ Data can be stored efficiently, since no zero facts can be stored.
- ☐ ROLAP tools do not use pre-calculated data cubes.
- ☐ DSS server of micro-strategy adopts the ROLAP approach.

Disadvantages

- ☐ Poor query performance.
- ☐ Some limitations of scalability depending on the technology architecture that is utilized.