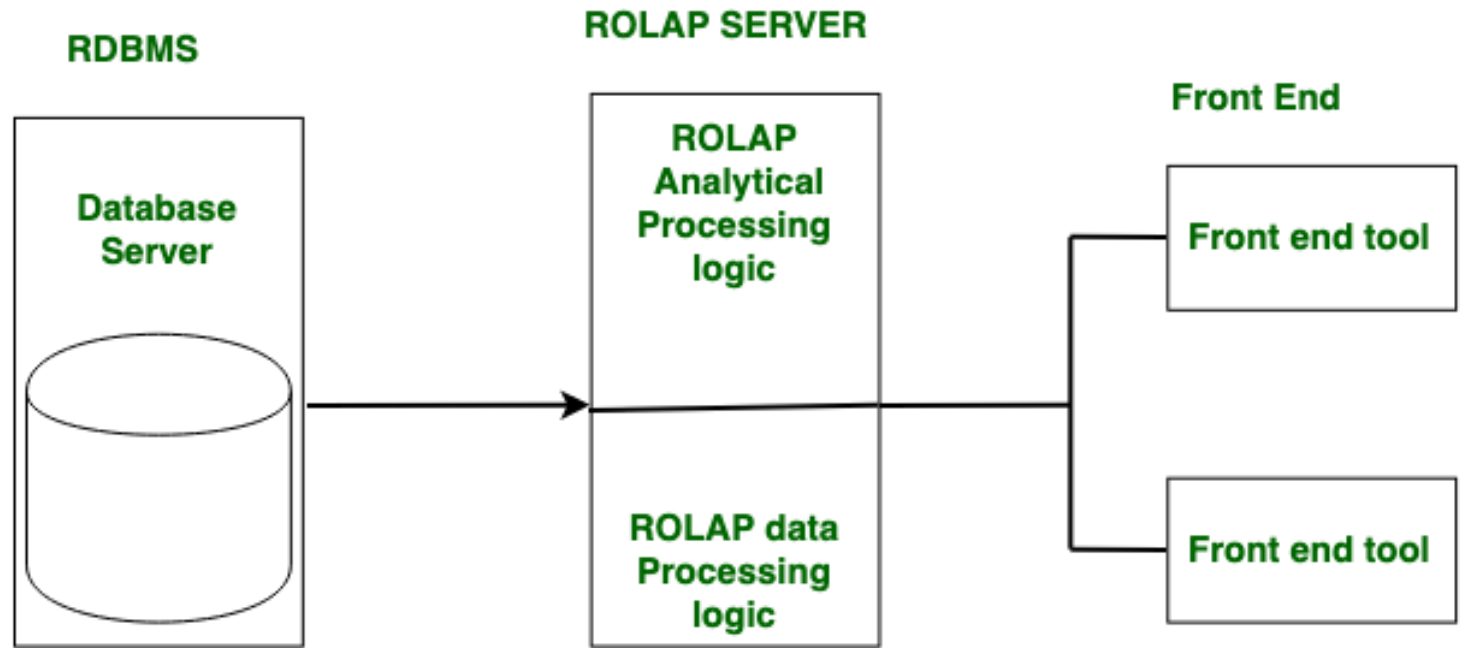


# Comparison of MOLAP and ROLAP Systems

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# ROLAP

= Relational Online Analytical Processing

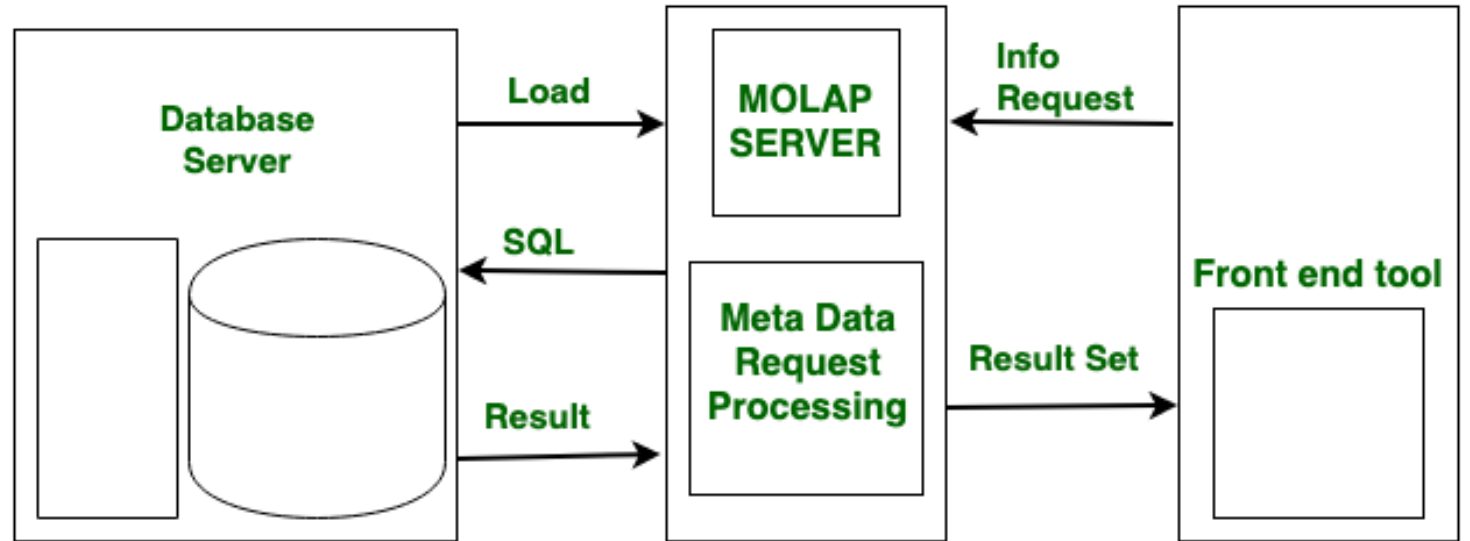


## ROLAP Architecture

<https://www.geeksforgeeks.org/difference-between-rolap-and-molap/>

# MOLAP

= Multidimensional Online Analytical Processing



## MOLAP Architecture

<https://www.geeksforgeeks.org/difference-between-rolap-and-molap/>

# Comparison

ROLAP	MOLAP
+ Usable for large data volumes	- Not suitable for data volumes > 50GB
+ Processing of complex SQL requests	- „Cube“ is required for a specific request
- Slower queries on complex data	+ Faster queries on complex data
- SQL knowledge required	+ Easy to use without in-depth SQL knowledge
+ Updates during operation possible	- Operation must be stopped for updates

→ Since in most cases the stored data exceeds the limit of 50GB, ROLAP is the system of choice. If the data volume is lower than that and a low response time is needed, MOLAP should be considered.

# Sources

Script of „Introduction to Data Warehousing“ lecture

<https://www.geeksforgeeks.org/difference-between-rolap-and-molap/>, retrieved April 12th

<https://techdifferences.com/difference-between-rolap-and-molap.html>, retrieved April 12th