



DW

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Agenda

- What is DW?
- What is DW characteristics?
- OLTP vs OLAP
- What is ETL?



DW

What is DW?

It is a large data repository that aggregates data usually from multiple sources or segments of a business, without the data being necessarily related



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What is DW characteristics?

- Subject oriented
- Time variant
- Non – volatile
- Integrated
- Historical



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OLTP vs OLAP

	OLTP	OLAP
Example	DB	DW



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OLTP vs OLAP

	OLTP	OLAP
Abbreviation	Online transactional processing	Online Analytical processing



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OLTP vs OLAP

	OLTP	OLAP
Support	Day to Day Transactions	Historical data



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OLTP vs OLAP

	OLTP	OLAP
Query	Simple Query	Complex
Speed	Faster	slower



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OLTP vs OLAP

	OLTP	OLAP
Operations	Read , Write	Read Only



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OLTP vs OLAP

	OLTP	OLAP
Joins	High number of joins (normalized)	Low Number of Joins (de-normalized)



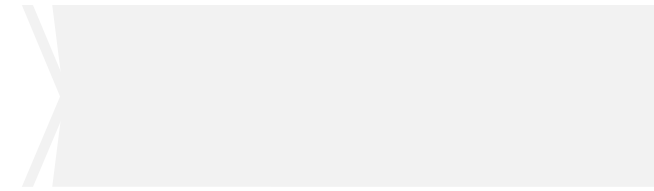
DW

OLTP vs OLAP

	OLTP	OLAP
Type	Structured	Structured , Semi-Structured , unstructured



DW



OLTP vs OLAP

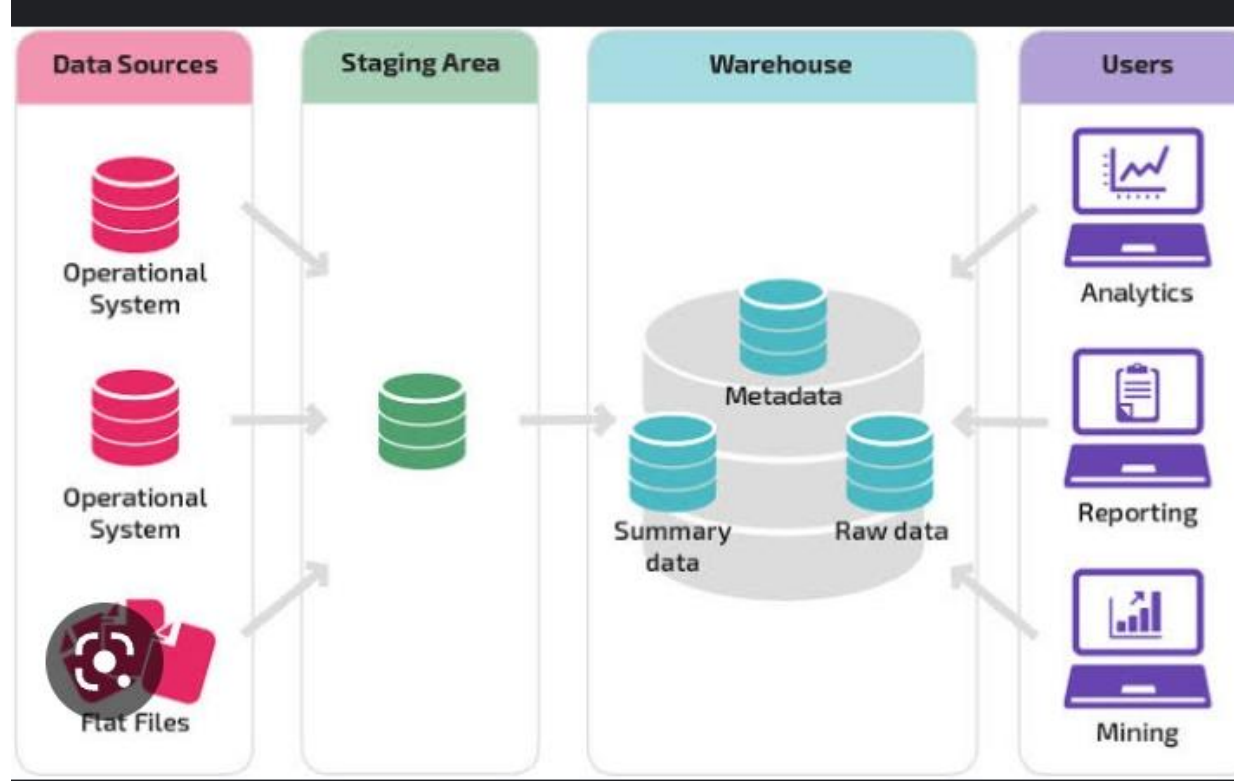
	OLTP	OLAP
Effectiveness	When number of transaction increases in second	When response time decreases



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What is ETL?

ETL stands for Extraction , Transformation and Loading





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What is ETL?

Extraction process is dedicated for extraction data from multiple sources for example flat file , excel file etc..



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What is ETL?

Transformation Process after data has been Extracted some transformation are applied on it like removing duplicates , Trim , Removing recodes with Null IDS Values , Converting data types , Add Or Remove Columns , Reshaping Structure of the data .



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What is ETL?

Loading Process is dedicated to load data after transformation to any destination you choose like DW , Flat file etc..

The image features a blue-tinted background showing silhouettes of several groups of business professionals in a modern office environment. They are standing on a reflective floor, and their reflections are visible below them. In the background, a city skyline with tall buildings is visible through large windows. The overall atmosphere is professional and collaborative.

Thank You