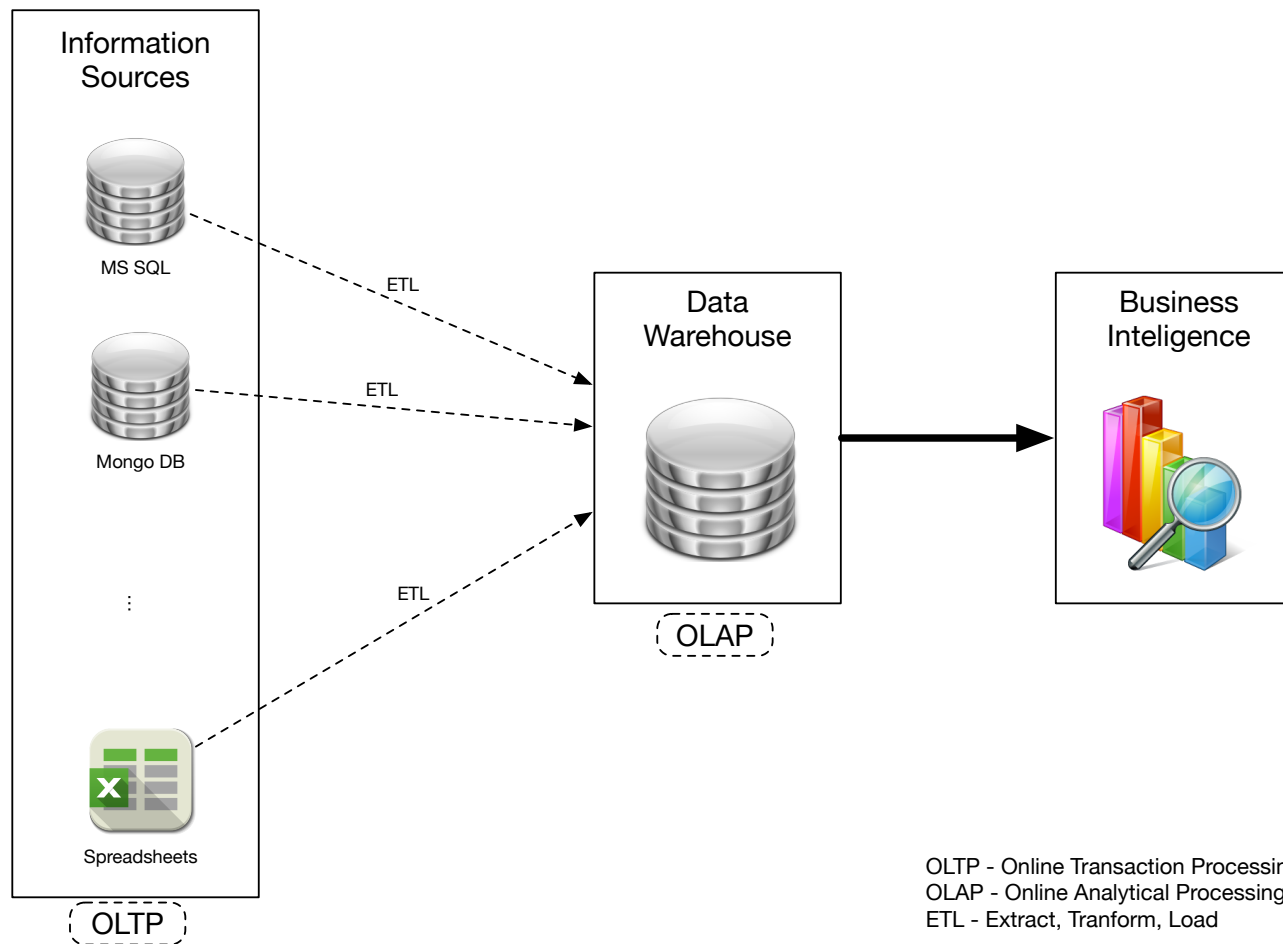


Análise de Dados

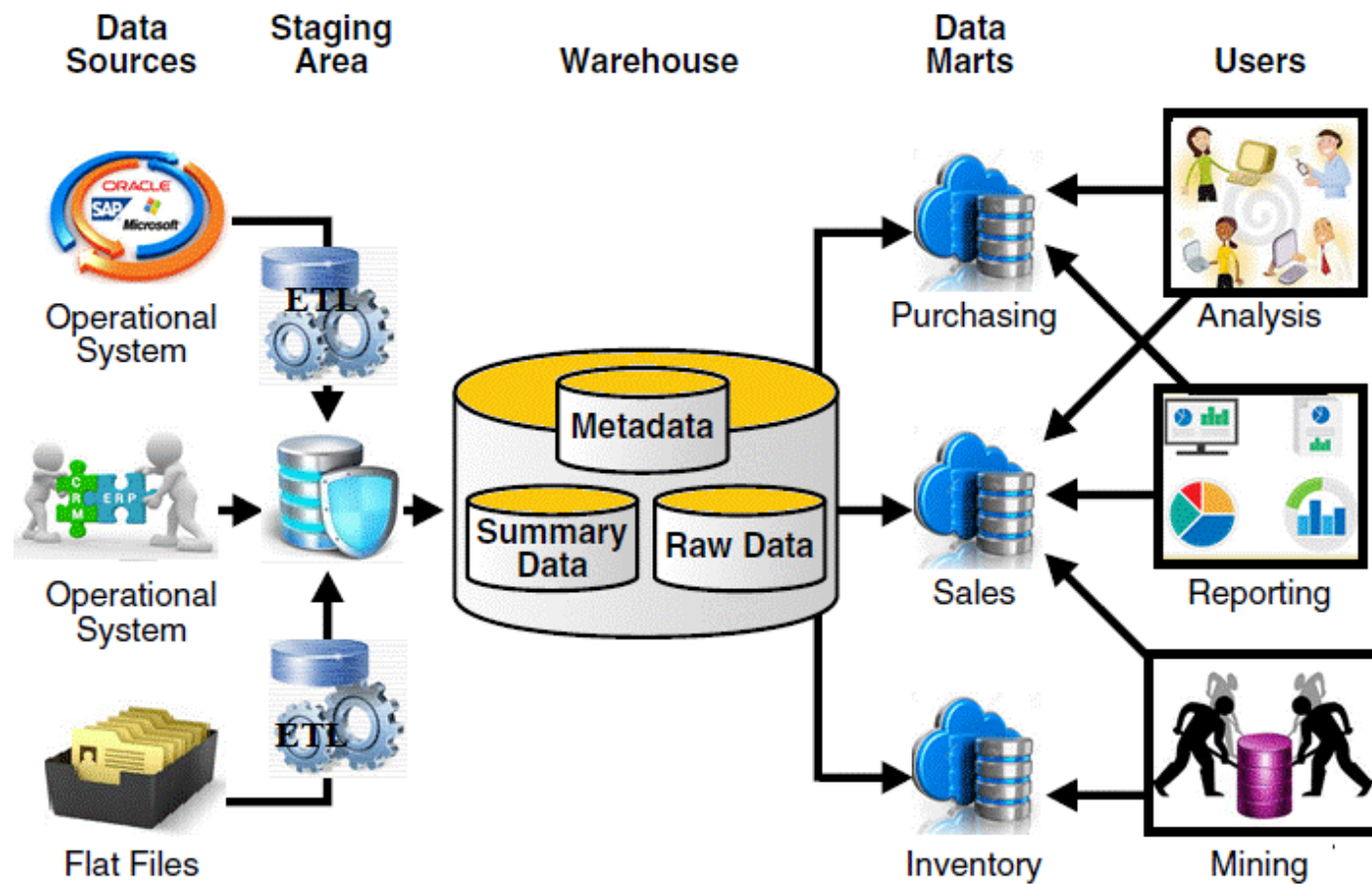
MESTRADO INTEGRADO EM ENGENHARIA INFORMÁTICA



Data Analysis System



Data Warehousing



DataWarehouse

- Why to use?

- a separate system that won't interrupt business critical operational systems.
- a single point of access for all analytical queries.
- a unified and consistent view of underlying data (even data from external systems).
- a straightforward way to analyze trends (such as monthly sales comparisons).

- DIMENSIONS

- Used to filter, categorize, and label **facts**.
- A fact such as "Sales in US Dollars" might have dimensions for *Date*, *Customer*, *Store*, and *Movie*

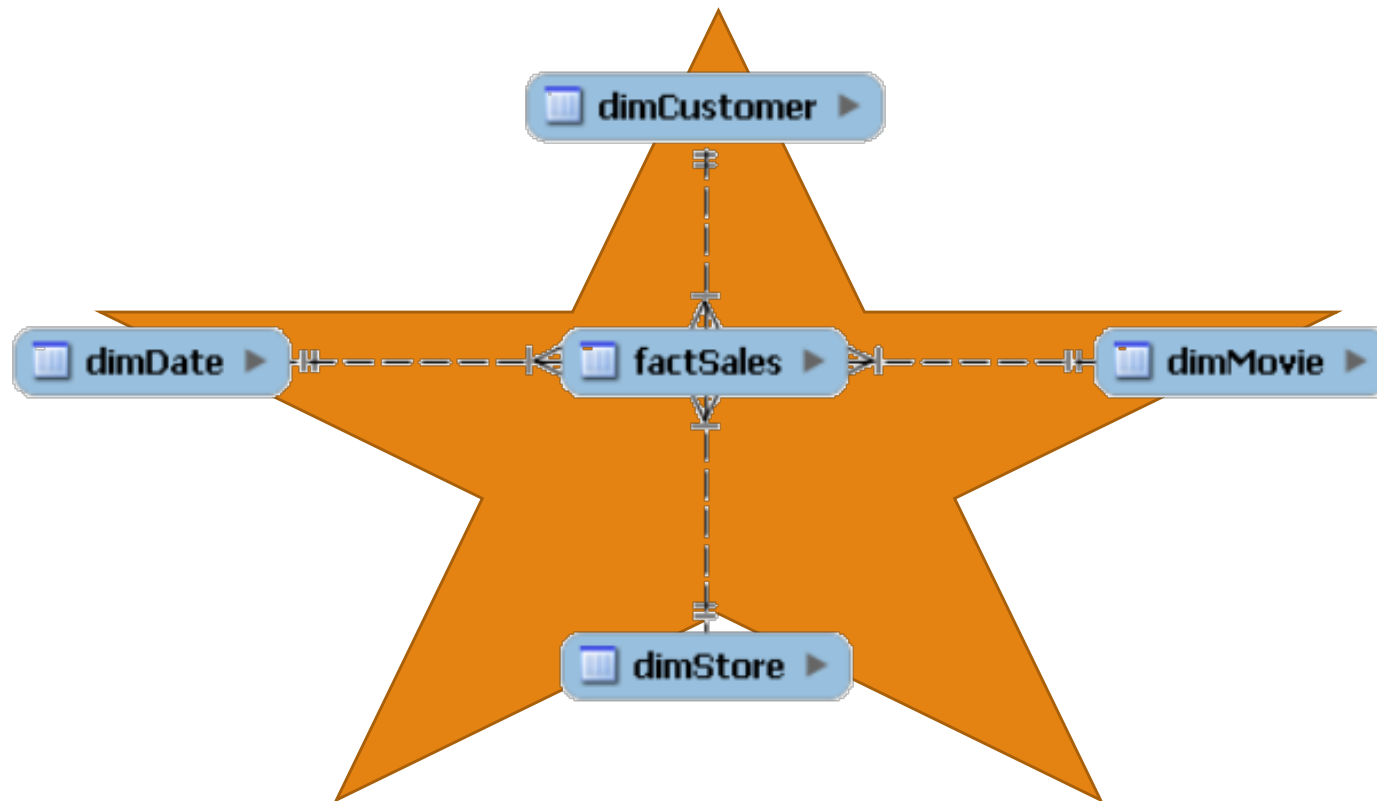
- FACTS

- Numbers, and are sometimes referred to as measures
- A fact relating to sales could be "Sales in US Dollars" or "Sales in Euros." Other facts could be "Hours of Work," or "Times Rented."

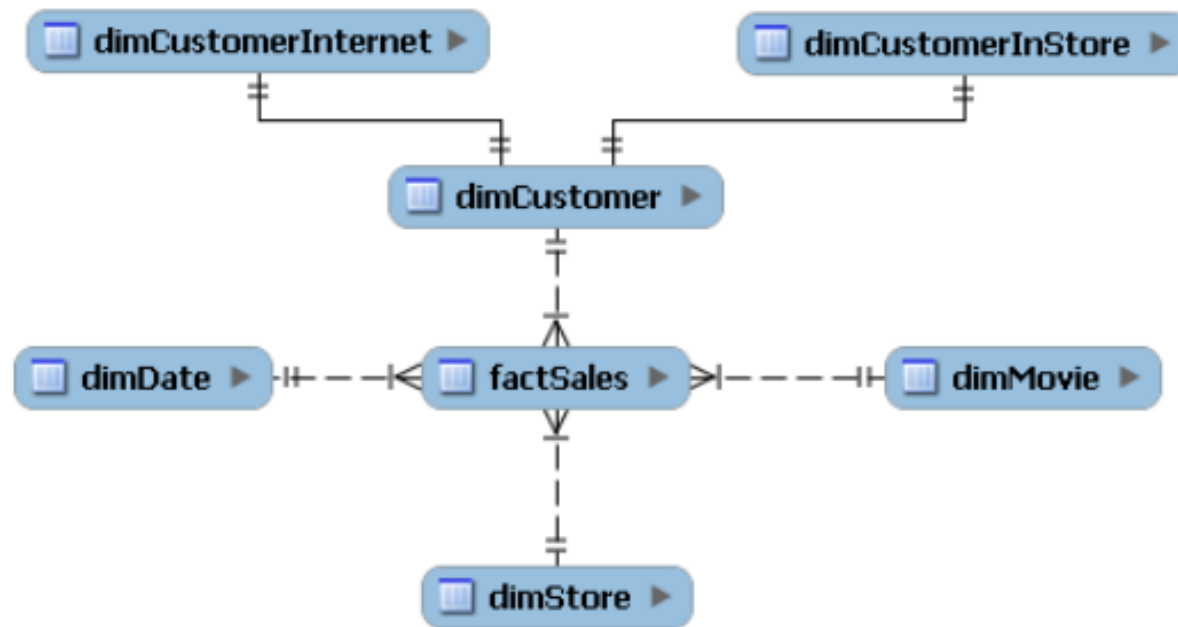
Dimensional Model – Selecting Data

1. How much sales did we do **by month**?
2. How much sales did we do, **by store and by month**?
3. How many new customers did we add **by quarter**?
4. How many times were DVDs rented, **by DVD and by month**?
5. How many times were DVDs rented, **by month and by movie popularity**?
6. How many times were DVDs rented, **by customer, month and store**?

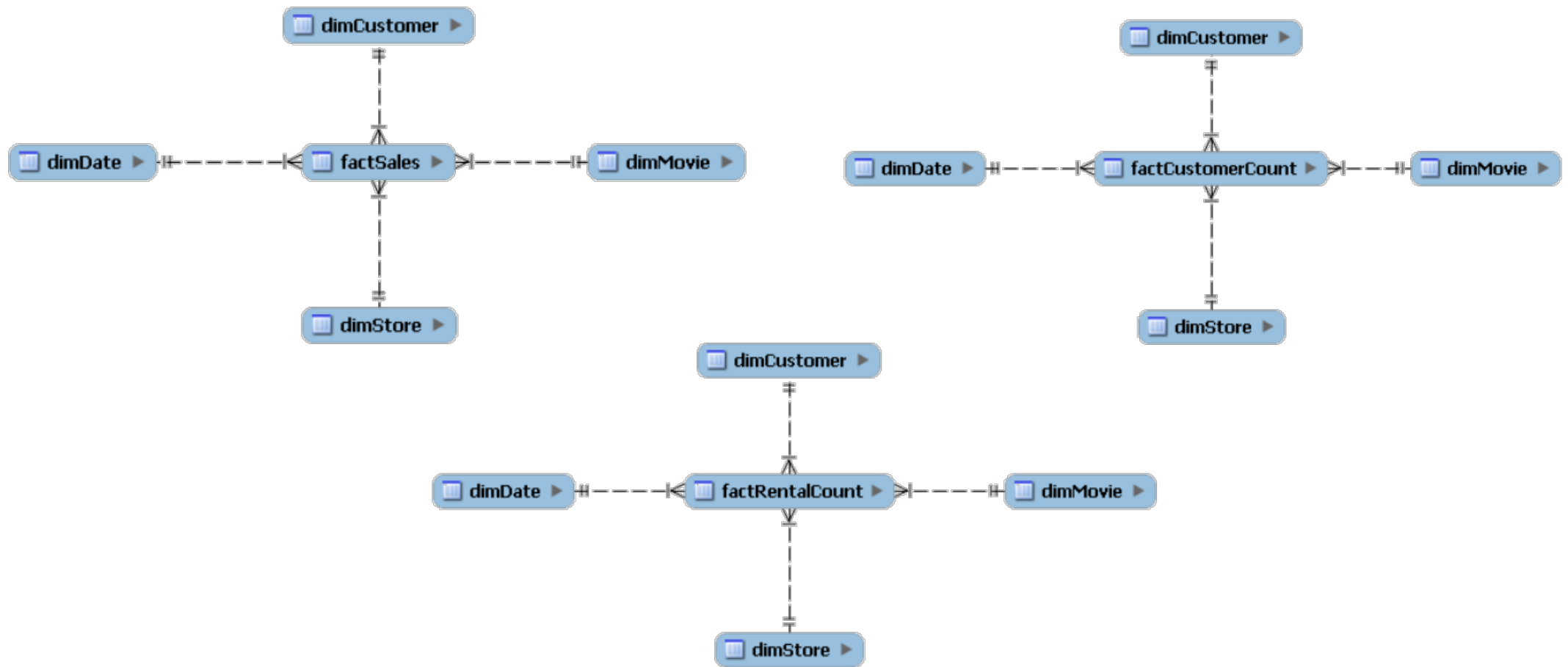
Dimensional Model – Star Schema



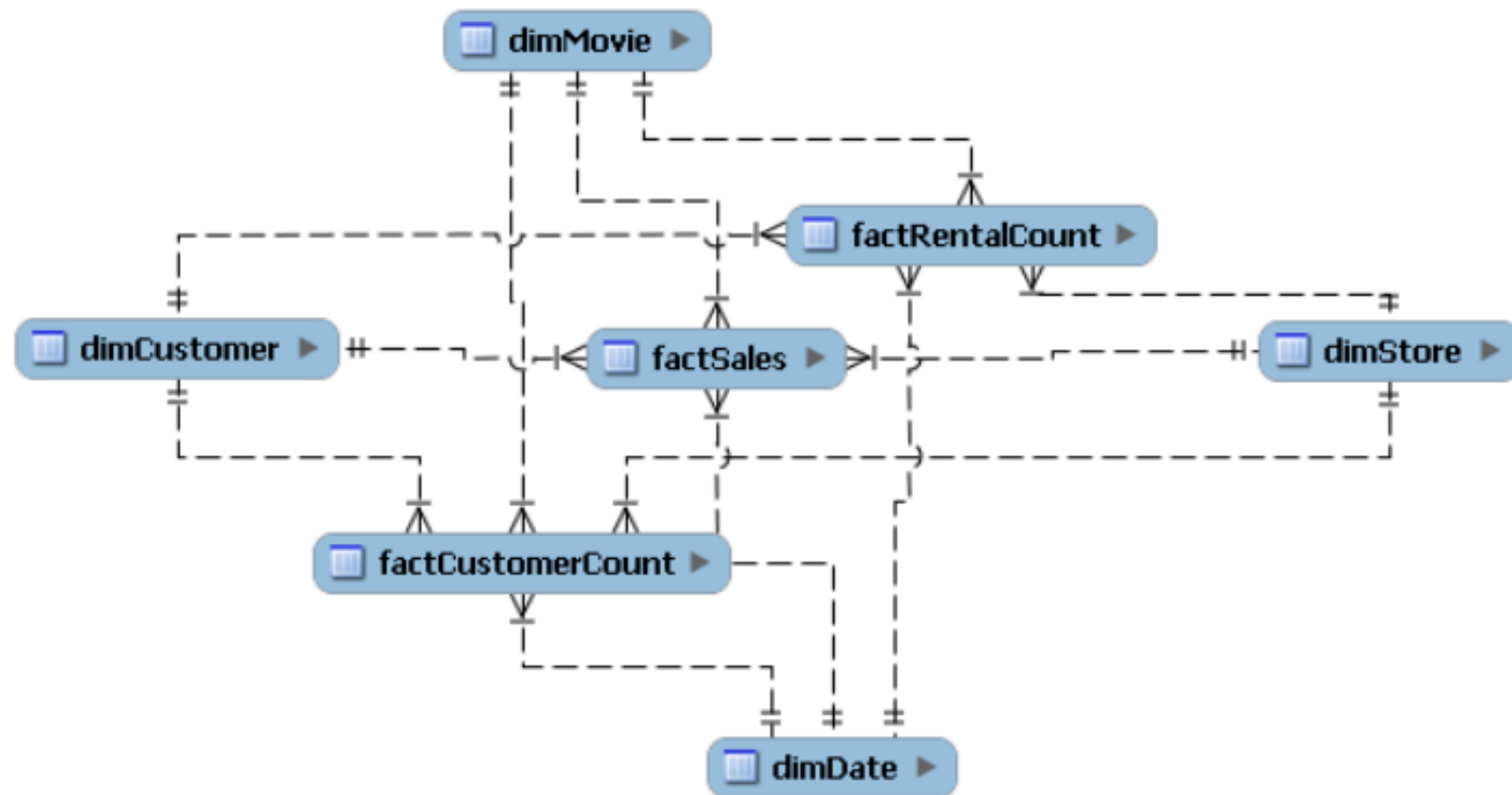
Dimensional Model – Snow Flake

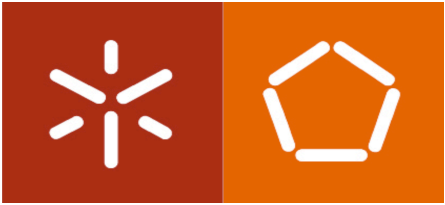


Data Marts



Shared Dimensions





Análise de Dados

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