## Data Warehouses and Data Integration Services

- Data Integration
  - Virtual Views
  - Materialized Views
- Data Warehousing
  - Motivation
    - \* decision support (data mining, OLAP)
    - \* common mental model
  - Challenges
    - \* modeling and design
      - architecture and semantic mapping
    - \* maintenance
      - $\cdot$  creation and refreshing
    - \* operation
      - $\cdot$  query languages and processing
      - $\cdot$  storage and indexing

