Subset Of Database

• Suppose: Large corporate database
• Single user or type of user sees SUBSET of CONCEPTUAL DATABASE
  – Security Reasons
  – User Convenience
• Called an EXTERNAL VIEW
• Built on CONCEPTUAL LEVEL.
Construction from Conceptual View.

- Include only some fields
  - Secretary: phone number but not salary
- Connect two tables
  - Employee table show only Dept Number
  - A View could show Dept Name too
- Include only some rows
  - Boss sees only employees he supervises
- Calculate some totals
  - Count employees in department

External-Conceptual Mapping

- Each view needs a mapping:
- USER VIEW ↔ CONCEPTUAL SCHEMA
- Tells how to build the view from conceptual tables.
- Possibly: how to change the conceptual tables when the user changes information in the view.
EXTERNAL LEVEL

External-Conceptual Mapping

CONCEPTUAL LEVEL

Conceptual-Internal Mapping

INTERNAL LEVEL