

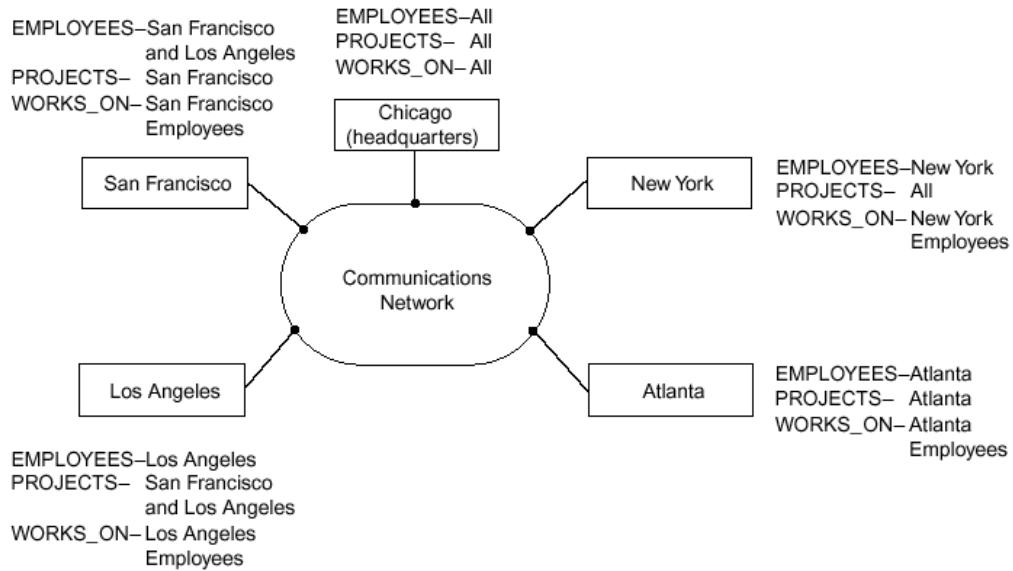
Hints for Assignment 1

Task1: Distributed Database Design

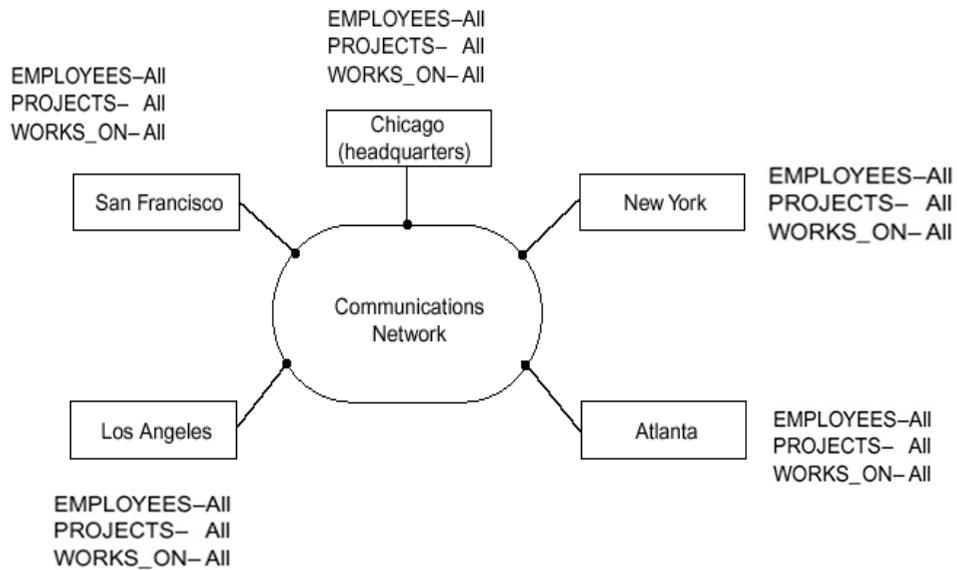
a) Data Distribution Evaluation: Option with reasons

- Homogeneous or Heterogeneous DDBMS (refer to lecture notes)
 - o System Implementation
 - o Data Management in location distribution
 - o Future Business Growth
 - o Cost and Maintenance
- Data can be stored
 - o Central
 - o Replicated
 - o Partitioned
 - o Hybrid

b) Data Distribution Scheme (Sample Template)

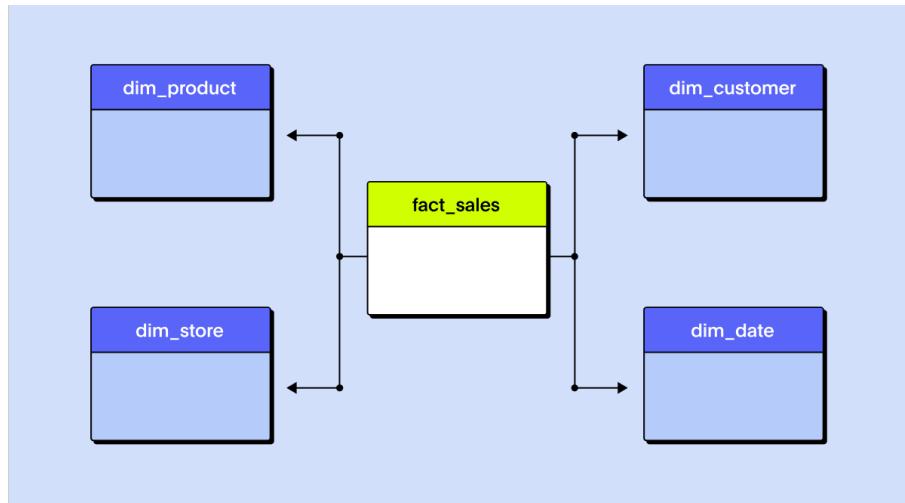


(or Replicated Database if you choose replicated – Sample Template)



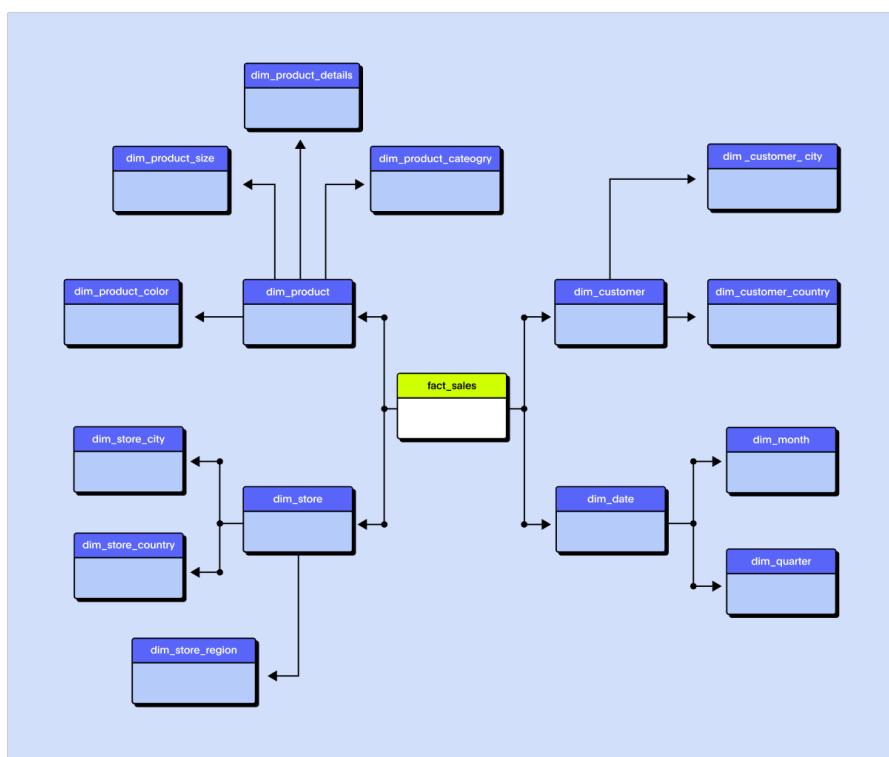
Task2: Data Warehouse Design (layout sample)

a) Star Schema (Demoralization)



Highlight PK. Name FACT table and dimension tables

b) Snowflake Schema (Normalization)



Task 3a) Grade Report :

After normalization tables, you can give some samples of data into different tables. You can prepare Grade Report by using PL/SQL procedure with IN/OUT parameters:

- 1) List of procedure codes
 - 2) Sample of procedure call
 - 3) Output Layout of reports
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- I) Final Mark Sheet for Students
 - II) Statistical Report on Courses
 - III) Location-based Analysis
 - a. Student Enrolment in specific course by different location (state/city/postcode)
 - b. Student performance by different location (state/city/postcode)

Task 3b) Active Rules using triggers:

- 1) List of trigger codes
 - 2) Sample outputs when triggers are fired or not fired
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- I) Trigger to protect any changes (insert/update/delete) on student and enrolment tables from Friday 5pm to Monday 8am. Display appropriate messages.
 - II) Trigger to stop enrolment if capacity limit reaches. Display appropriate messages.