

# DW design

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With Indycos Builder

# What is Indyco Builder

Indyco Builder is a commercial software from Iconconsulting

- Supports the conceptual design of a DW
- Provides DFM validation functionalities and evaluation metrics
- Provides a web GUI for DW exploration
- Automatically generates the logical model (not supported by edu license)
- Reverse-engineering (not supported by edu license)

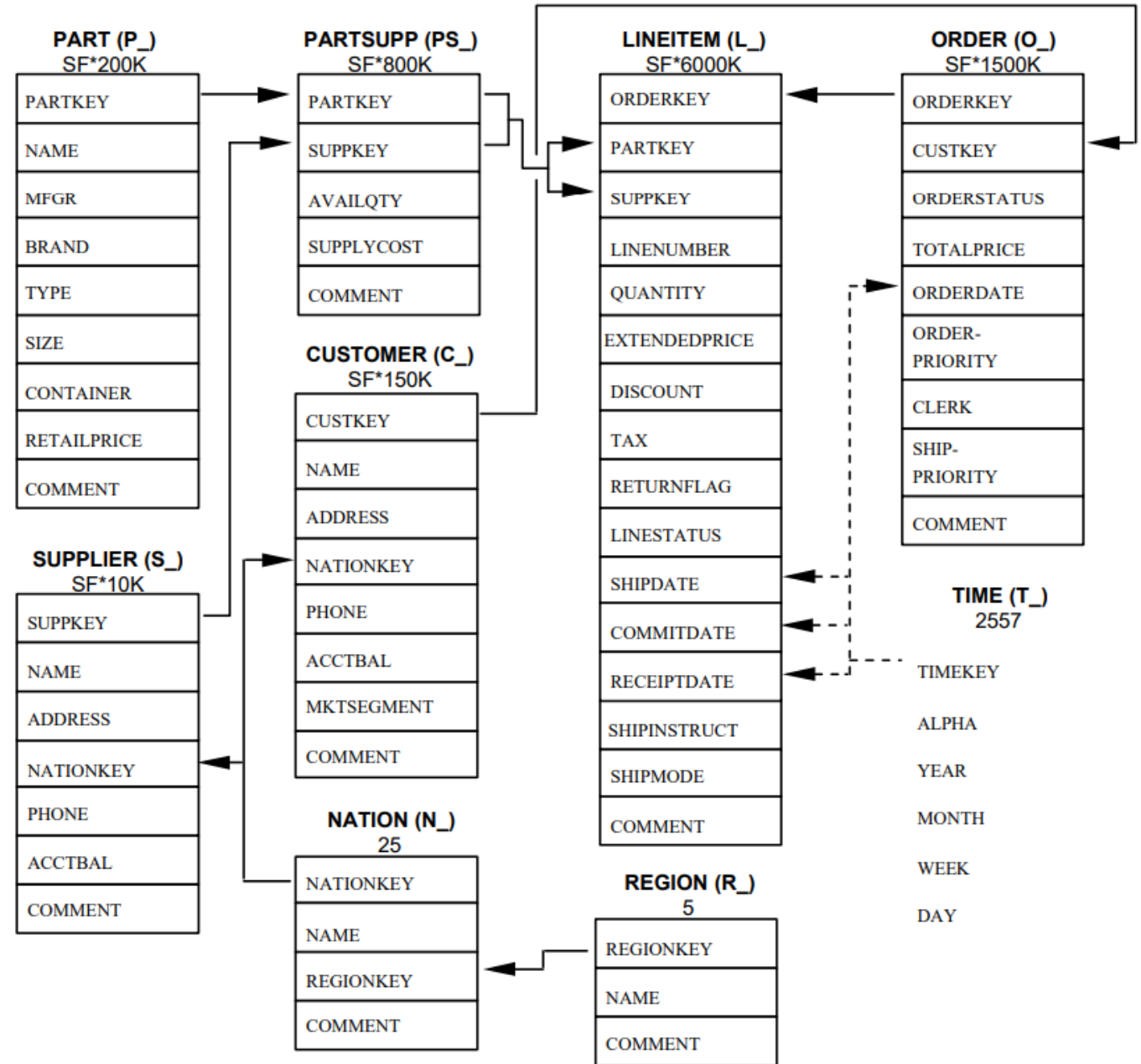
(DEMO)

# What we are going to do

Define the conceptual (DFM) and logical models

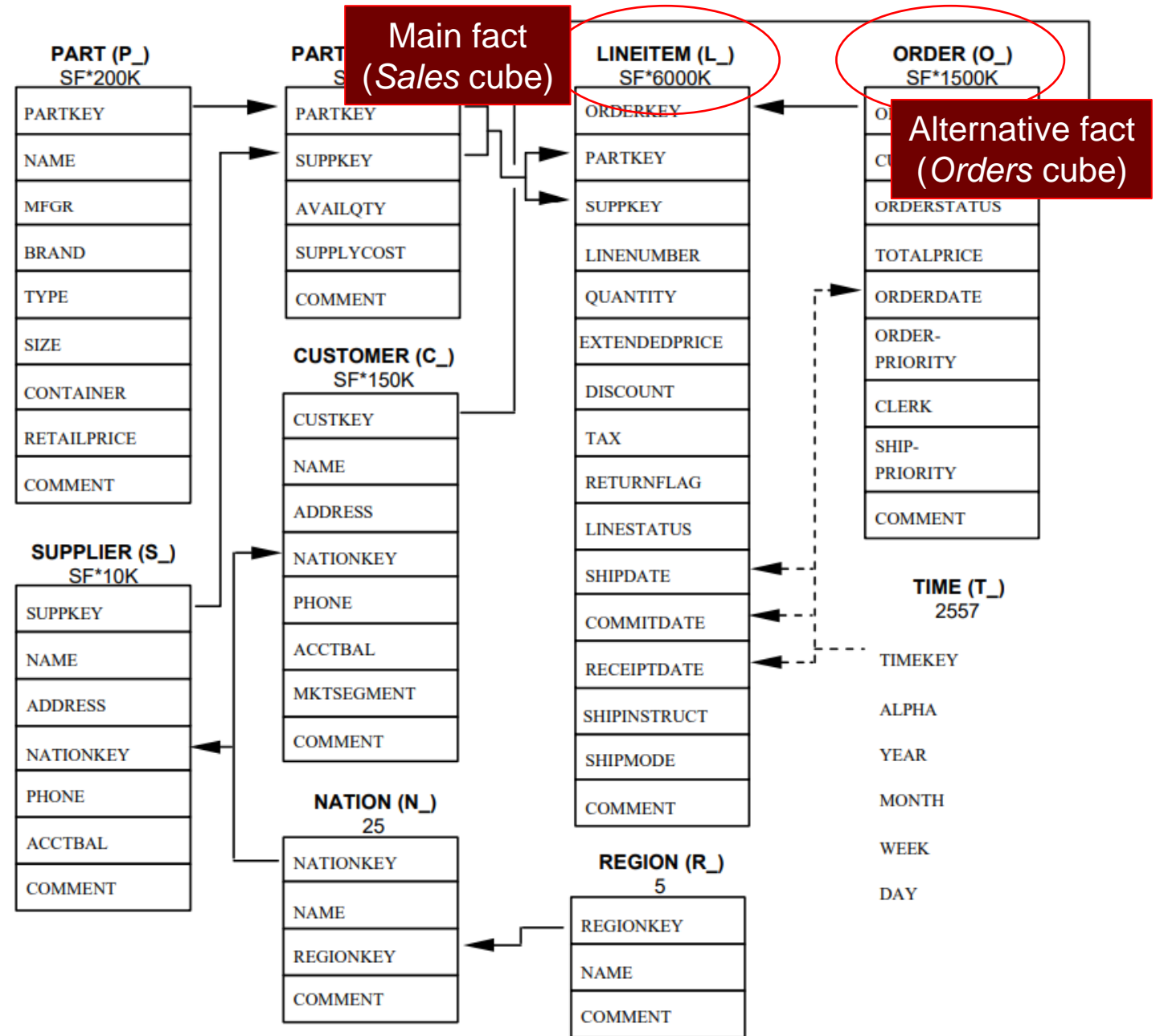
# Case study: TPC-D

- The parentheses following each table name contain the prefix of the column names for that table
- The arrows point in the direction of the one-to-many relationships between tables
- Dashed lines represent optional tables and relationships
- The number/formula below each table name represents the cardinality of the table

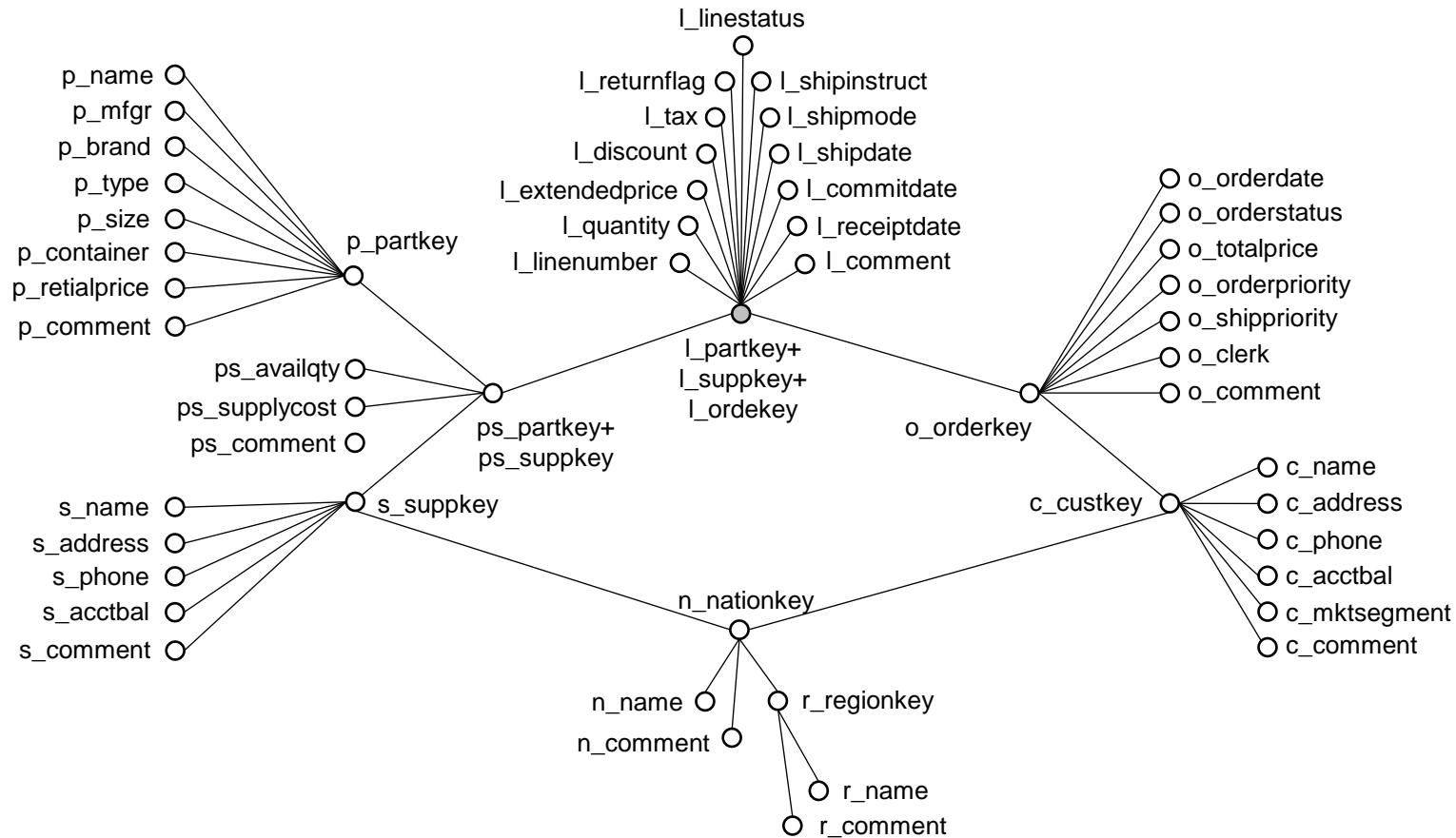


# Case study: TPC-D

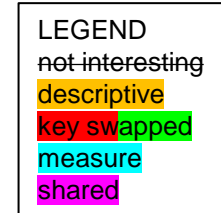
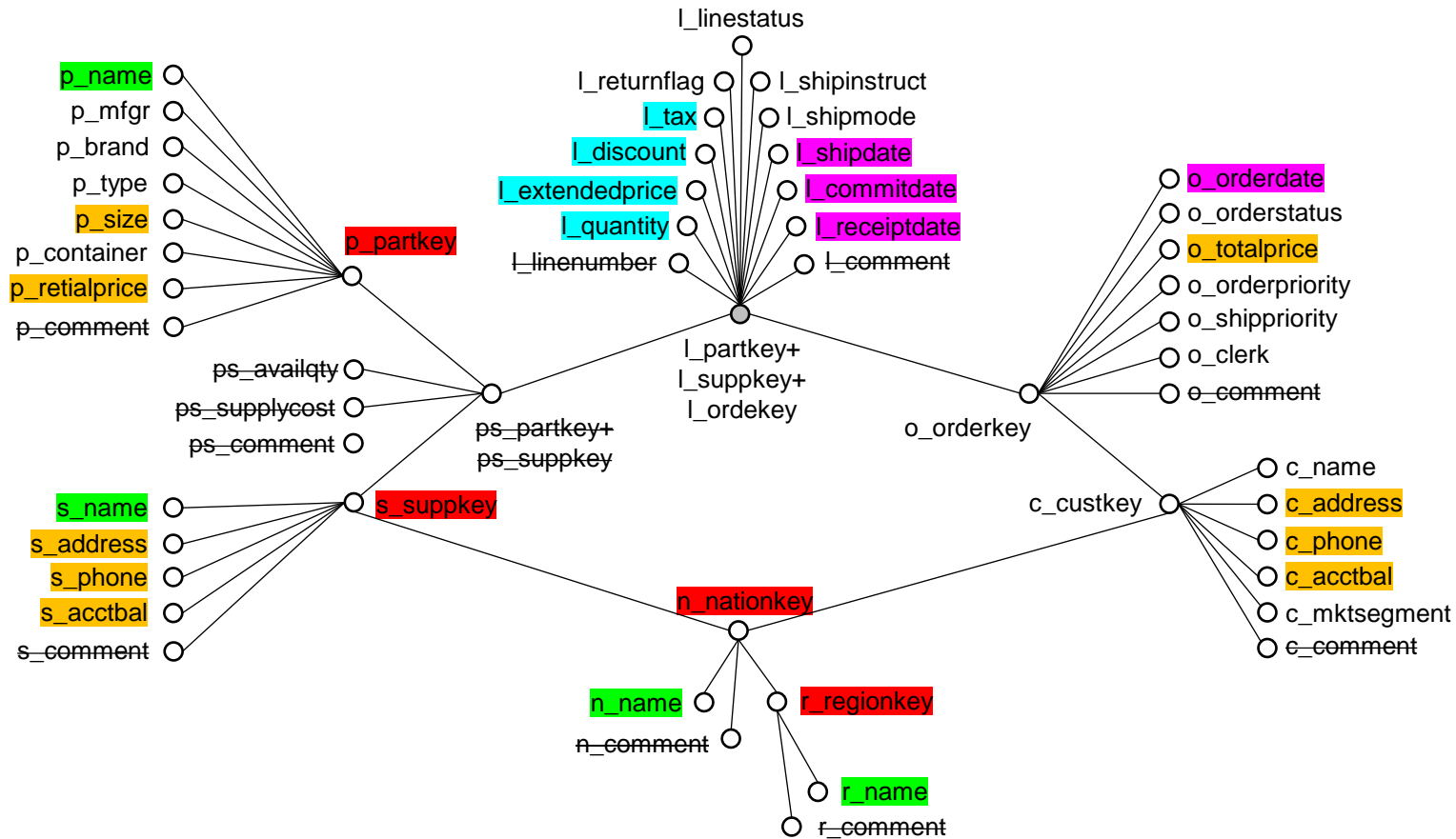
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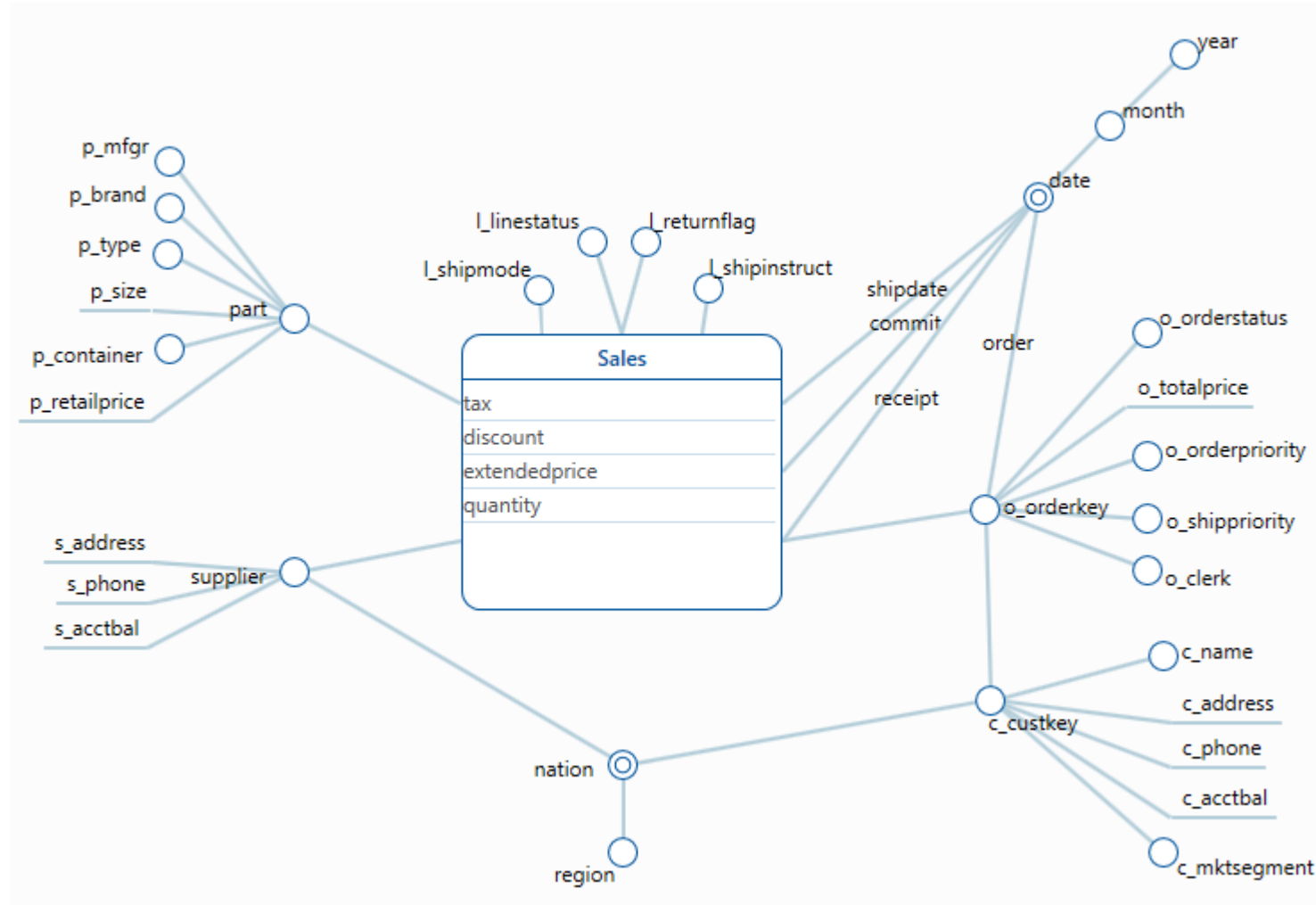
# Attribute tree (Sales)



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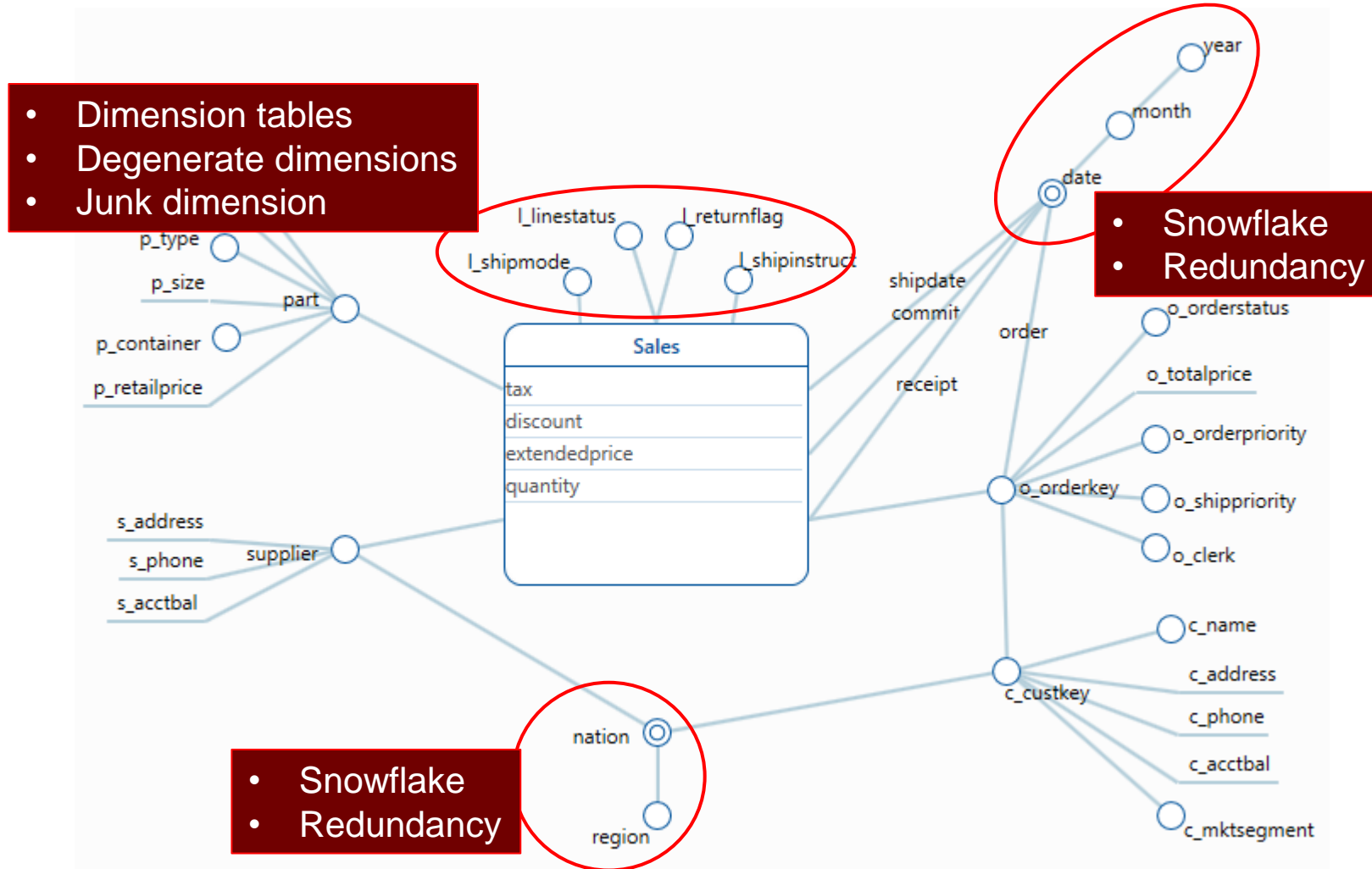


# Conceptual design (Sales)



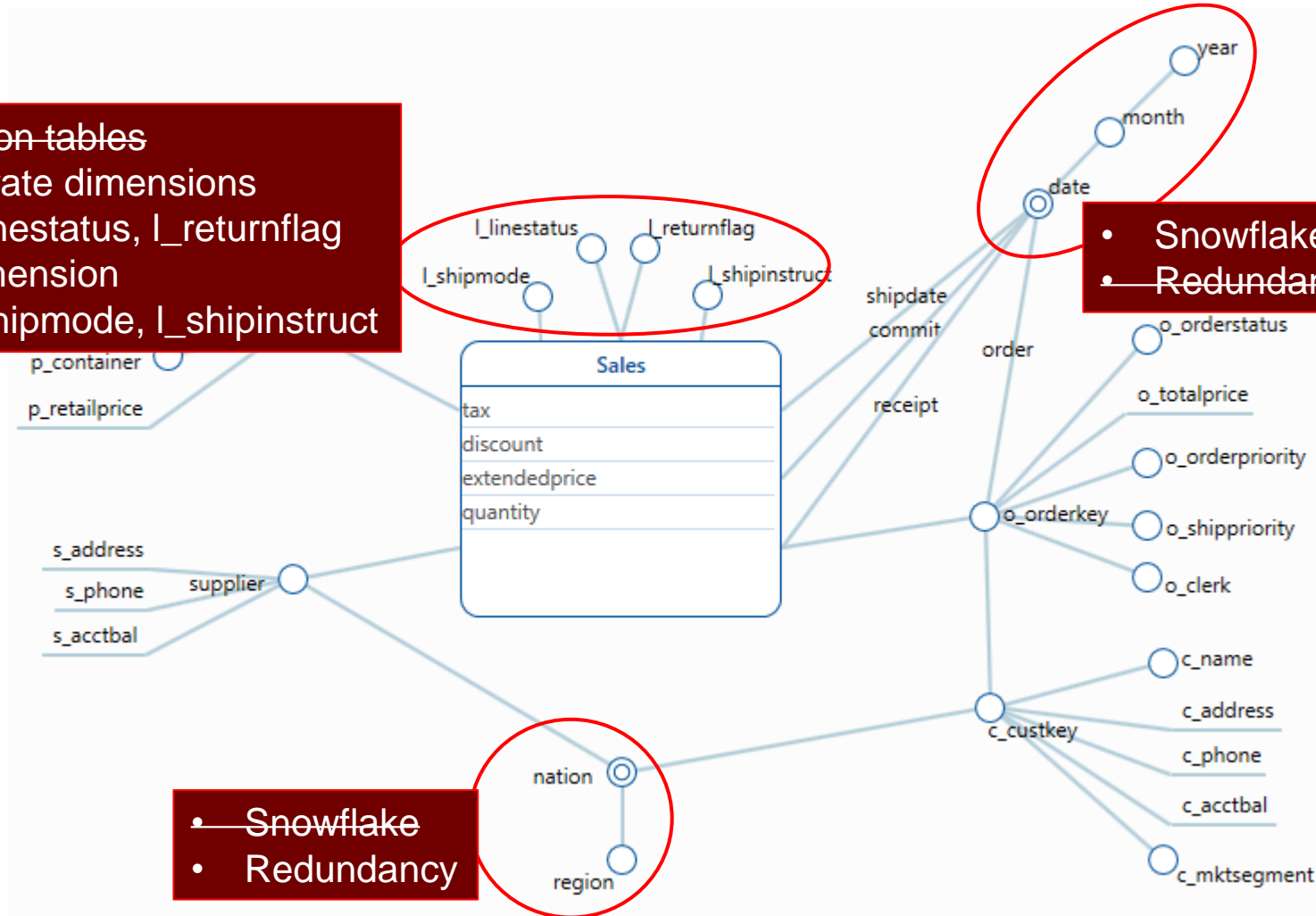


# Logical design (Sales)



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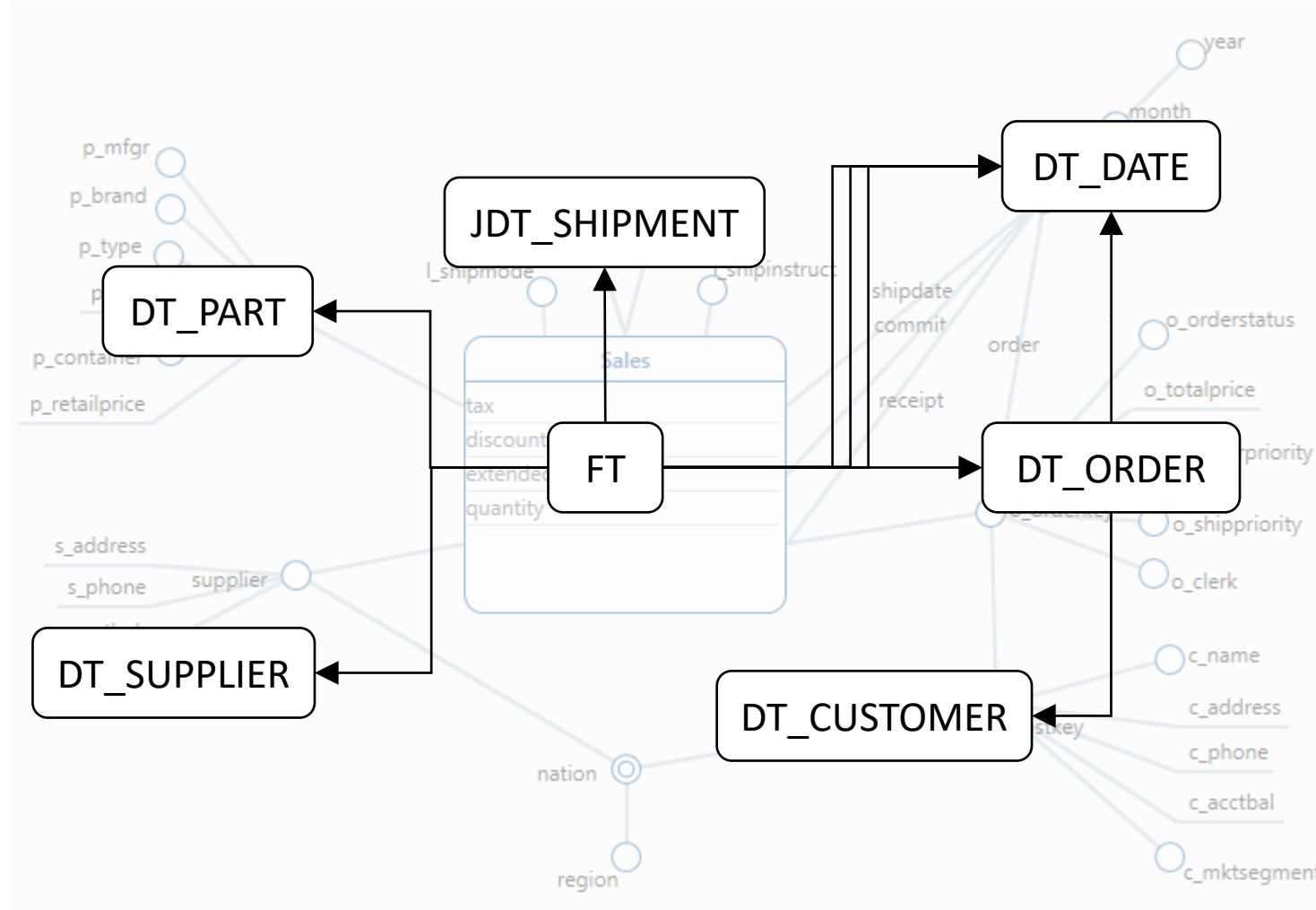
- Dimension tables
- Degenerate dimensions
  - l\_linestatus, l\_returnflag
- Junk dimension
  - l\_shipmode, l\_shipinstruct



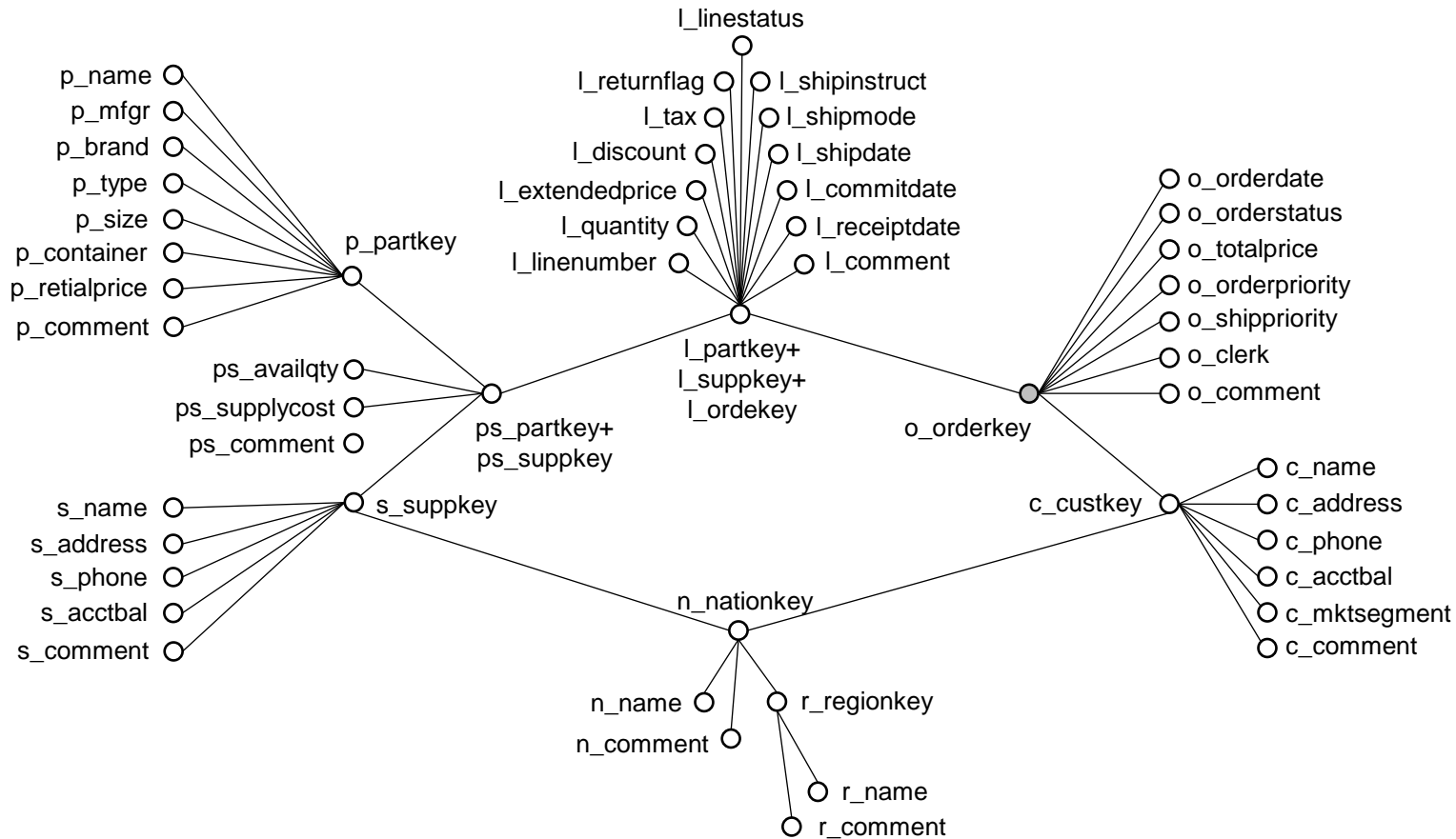
- Snowflake
- Redundancy

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- Redundancy

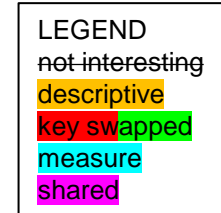
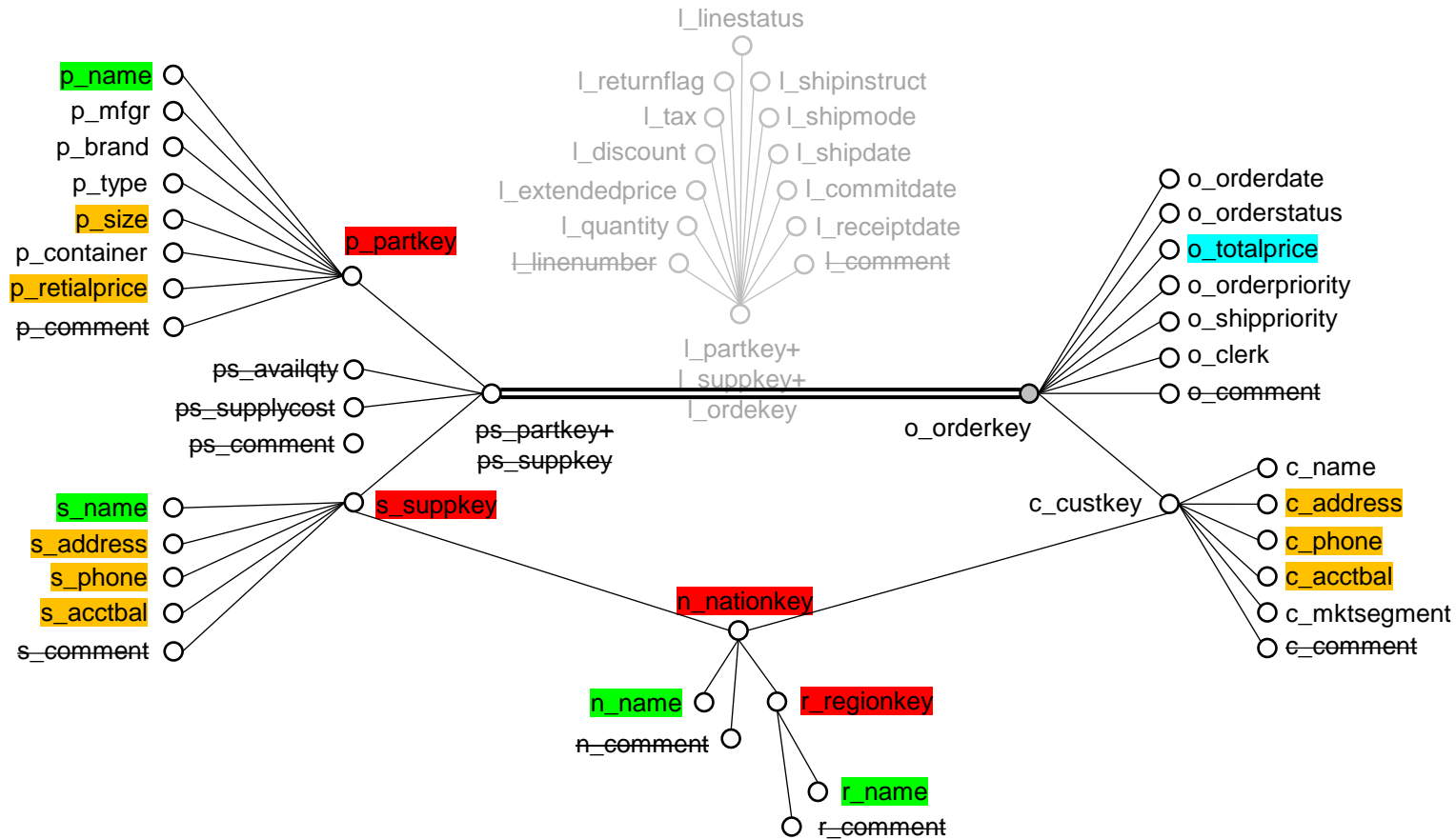
# Logical design (Sales)



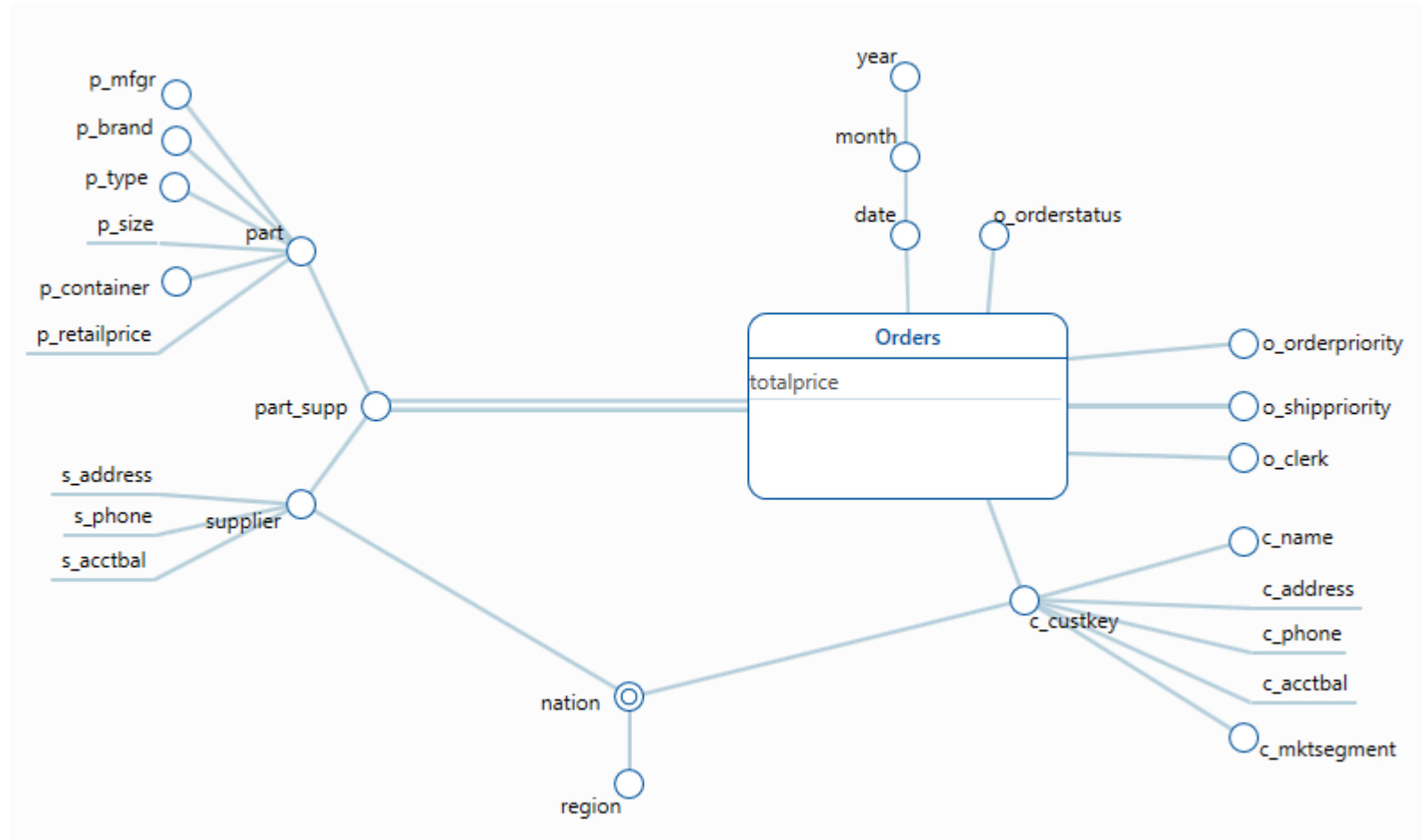
# The attribute tree (Orders)



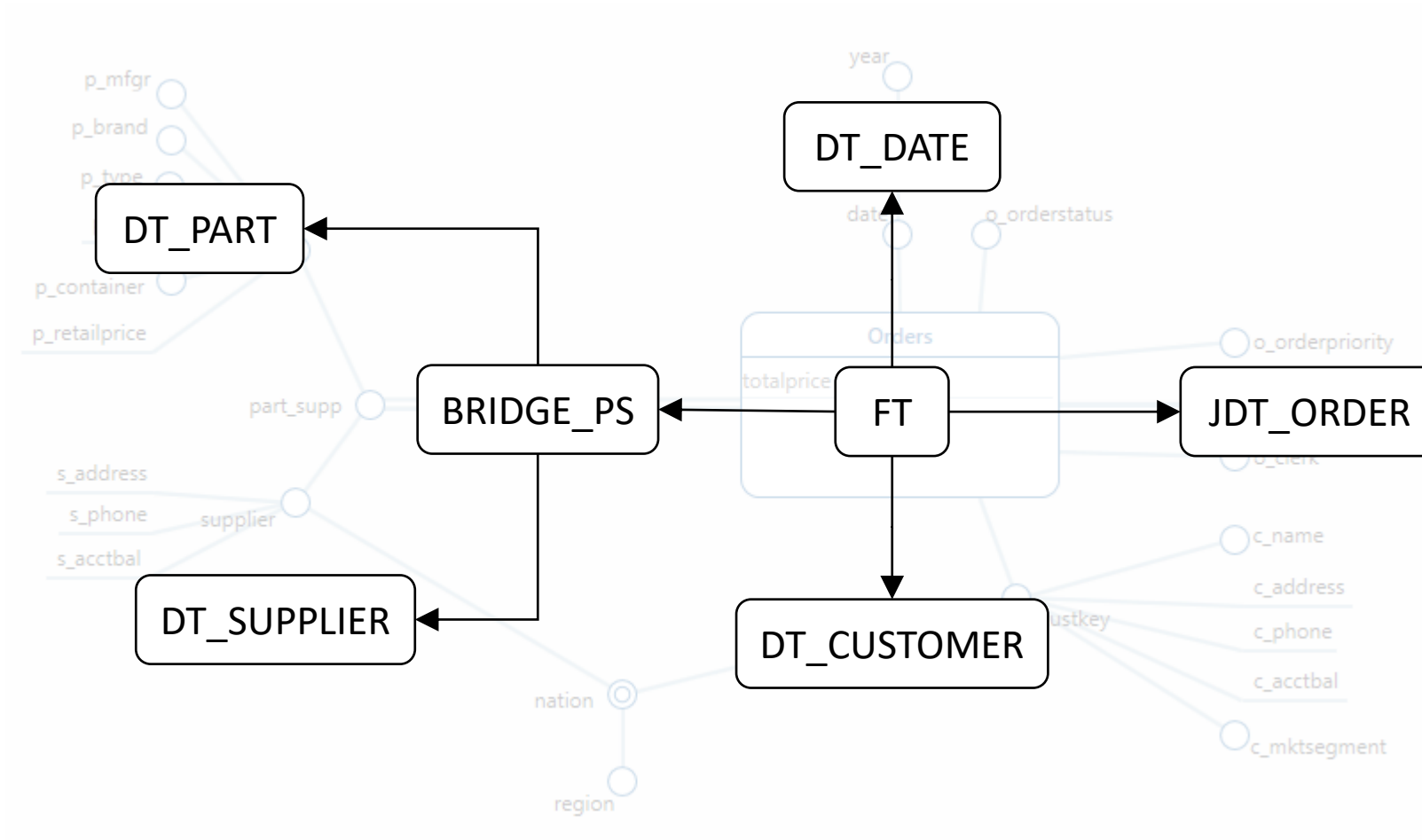
# The attribute tree (Orders)



# Conceptual design (Orders)



# Logical design (Orders)



# Physical design

Tables have already been created for everyone

DDL scripts available in Virtuale (*ddl\_sales.sql* and *ddl\_orders.sql*)

- No DDL necessary for the exam