

# SISTEMAS DE APOIO À DECISÃO

Engenharia Informática, 3º Ano / 1º Semestre

Plataforma ETL^2 - Mapa Lógico de Dados

| TARGET DIMENSION: T_DIM_PRODUCT |          |      |    |     | SOURCE    |              |                 |                   | Transformation |
|---------------------------------|----------|------|----|-----|-----------|--------------|-----------------|-------------------|----------------|
| Column                          | datatype | size | PK | SCD | source    | data element | column          | datatype          |                |
| product_key                     | NUMBER   | 12   | PK | 1   | -         | -            | -               | -                 | Surrogate key  |
| product_natural_Key             | NUMBER   | 10   | -  | 1   | sales_src | database     | view_produtos   | src_id            | integer        |
| product_name                    | VARCHAR2 | 30   | -  | 1   | sales_src | database     | view_produtos   | src_name          | varchar2(30)   |
| product_brand                   | VARCHAR2 | 30   | -  | 1   | sales_src | database     | view_produtos   | src_brand         | varchar2(30)   |
| product_category                | VARCHAR2 | 20   | -  | 1   | sales_src | database     | view_produtos   | src_category_id   | char(5)        |
|                                 |          |      |    |     | sales_src | database     | view_categorias | src_id            | char(5)        |
|                                 |          |      |    |     | sales_src | database     | view_categorias | src_name          | varchar        |
| product_size_package            | VARCHAR2 | 20   | -  | 2   | sales_src | database     | view_produtos   | src_height        | integer        |
|                                 |          |      |    |     | sales_src | database     | view_produtos   | src_width         | integer        |
|                                 |          |      |    |     | sales_src | database     | view_produtos   | src_depth         | integer        |
| product_type_package            | VARCHAR2 | 30   | -  | 2   | sales_src | database     | view_produtos   | src_pack_type     | varchar2(30)   |
| product_diet_type               | VARCHAR2 | 15   | -  | 2   | sales_src | database     | view_produtos   | src_calories_100g | integer        |
| product_liquid_weight           | NUMBER   | 8,2  | -  | 2   | sales_src | database     | view_produtos   | src_liq_weight    | number(8,2)    |

  

| TARGET DIMENSION: T_DIM_PROMOTION |          |      |    |     | SOURCE    |              |                |                | Transformation |
|-----------------------------------|----------|------|----|-----|-----------|--------------|----------------|----------------|----------------|
| Column                            | datatype | size | PK | SCD | source    | data element | column         | datatype       |                |
| promo_KEY                         | NUMBER   | 12   | PK | 1   | -         | -            | -              | -              | Surrogate key  |
| promo_natural_Key                 | NUMBER   | 10   | -  | 1   | sales_src | database     | view_promocoos | src_id         | integer        |
| promo_name                        | VARCHAR2 | 100  | -  | 1   | sales_src | database     | view_promocoos | src_name       | varchar2(100)  |
| promo_red_Price                   | NUMBER   | 3,2  | -  | 1   | sales_src | database     | view_promocoos | src_reduction  | number(3,2)    |
| promo_advertise                   | VARCHAR2 | 3    | -  | 1   | sales_src | database     | view_promocoos | src_on_tv      | number(1)      |
| promo_board                       | VARCHAR2 | 3    | -  | 1   | sales_src | database     | view_promocoos | src_on_outdoor | number(1)      |
| promo_start_date                  | DATE     | -    | -  | 1   | sales_src | database     | view_promocoos | src_start_date | date           |
| promo_end_date                    | DATE     | -    | -  | 1   | sales_src | database     | view_promocoos | src_end_date   | date           |

  

| TARGET DIMENSION: T_DIM_STORE |          |      |    |     | SOURCE    |                  |                  |                      | Transformation |
|-------------------------------|----------|------|----|-----|-----------|------------------|------------------|----------------------|----------------|
| Column                        | datatype | size | PK | SCD | source    | data element     | column           | datatype             |                |
| store_KEY                     | NUMBER   | 5    | PK | 1   | -         | -                | -                | -                    | Surrogate key  |
| store_name                    | VARCHAR2 | 40   | -  | 2   | lojas.xls | spreadsheet file | sheet_lojas      | Nomeação da loja     | varchar        |
| store_natural_key             | CHAR     | 6    | -  | 1   | lojas.xls | spreadsheet file | sheet_lojas      | Referência da loja   | char(6)        |
| store_full_address            | VARCHAR2 | 250  | -  | 1   | lojas.xls | spreadsheet file | sheet_lojas      | Nome do edifício     | varchar        |
|                               |          |      |    |     | lojas.xls | spreadsheet file | sheet_lojas      | Endereço             | varchar        |
|                               |          |      |    |     | lojas.xls | spreadsheet file | sheet_lojas      | Código Postal        | char(8)        |
|                               |          |      |    |     | lojas.xls | spreadsheet file | sheet_lojas      | Localidade           | varchar        |
| store_location                | VARCHAR2 | 40   | -  | 1   | lojas.xls | spreadsheet file | sheet_lojas      | Localidade           | varchar        |
| store_district                | VARCHAR2 | 30   | -  | 1   | lojas.xls | spreadsheet file | sheet_lojas      | distrito             | varchar        |
| store_zip_Code                | CHAR     | 8    | -  | 1   | lojas.xls | spreadsheet file | sheet_lojas      | Código Postal        | char(8)        |
| store_main_phone              | CHAR     | 9    | -  | 3   | lojas.xls | spreadsheet file | sheet_lojas      | Telefones            | varchar        |
| store_fax                     | CHAR     | 9    | -  | 3   | lojas.xls | spreadsheet file | sheet_lojas      | Fax                  | varchar        |
| store_manager_name            | VARCHAR2 | 100  | -  | 2   | lojas.xls | spreadsheet file | sheet_lojas      | Referência da loja   | char(6)        |
|                               |          |      |    |     | lojas.xls | spreadsheet file | sheet_directores | Director da loja     | varchar        |
|                               |          |      |    |     | lojas.xls | spreadsheet file | sheet_directores | Referência da loja   | varchar        |
| store_manager_since           | DATE     | -    | -  | 1   | lojas.xls | spreadsheet file | sheet_directores | Data de entrada      | date           |
| store_state                   | VARCHAR2 | 8    | -  | 2   | lojas.xls | spreadsheet file | sheet_lojas      | Data de encerramento | date           |

| TARGET DIMENSION: T_DIM_DATE |          |      |    |     | SOURCE    |              |        |               | Transformation |
|------------------------------|----------|------|----|-----|-----------|--------------|--------|---------------|----------------|
| Column                       | datatype | size | PK | SCD | source    | data element | column | datatype      |                |
| date_key                     | NUMBER   | 6    | PK | 1   | dates.csv | text file    | -      | (first)       | Surrogate key  |
| date_full_date               | CHAR     | 10   | -  | 1   | dates.csv | text file    | -      | day_full      | DATE           |
| date_month_full              | CHAR     | 7    | -  | 1   | dates.csv | text file    | -      | month_full    | char           |
| date_month_name              | VARCHAR2 | 12   | -  | 1   | dates.csv | text file    | -      | month_name    | char           |
| date_month_short_name        | CHAR     | 3    | -  | 1   | dates.csv | text file    | -      | month_short   | char(3)        |
| date_month_nr                | NUMBER   | 2    | -  | 1   | dates.csv | text file    | -      | month_nr      | number(2)      |
| date_quarter_nr              | CHAR     | 1    | -  | 1   | dates.csv | text file    | -      | quarter       | number(1)      |
| date_quarter_full            | CHAR     | 7    | -  | 1   | dates.csv | text file    | -      | quarter_full  | char(7)        |
| date_semester_nr             | NUMBER   | 1    | -  | 1   | dates.csv | text file    | -      | semester      | number(1)      |
| date_semester_full           | CHAR     | 7    | -  | 1   | dates.csv | text file    | -      | semester_full | char(7)        |
| date_day_nr                  | NUMBER   | 2    | -  | 1   | dates.csv | text file    | -      | day           | char           |
| date_is_holiday              | VARCHAR2 | 3    | -  | 1   | dates.csv | text file    | -      | is_holiday    | char           |
| date_event                   | VARCHAR2 | 100  | -  | 1   | dates.csv | text file    | -      | event         | char           |
| date_year                    | NUMBER   | 4    | -  | 1   | dates.csv | text file    | -      | year          | number(4)      |

  

| TARGET DIMENSION: T_DIM_TIME |          |      |    |     | SOURCE   |              |        |                  | Transformation |
|------------------------------|----------|------|----|-----|----------|--------------|--------|------------------|----------------|
| Column                       | datatype | size | PK | SCD | source   | data element | column | datatype         |                |
| time_key                     | NUMBER   | 6    | PK | 1   | time.csv | text file    | -      | (first)          | Surrogate key  |
| time_full_time               | CHAR     | 8    | -  | 1   | time.csv | text file    | -      | time_full        | DATE           |
| time_period_of_day           | VARCHAR2 | 20   | -  | 1   | time.csv | text file    | -      | period_of_day    | char           |
| time_minutes_after_midnight  | NUMBER   | 4    | -  | 1   | time.csv | text file    | -      | minutes_after_00 | char           |
| time_hour_nr                 | NUMBER   | 2    | -  | 1   | time.csv | text file    | -      | hour             | char           |
| time_minute_nr               | NUMBER   | 2    | -  | 1   | time.csv | text file    | -      | minute           | char           |
| time_second_nr               | NUMBER   | 2    | -  | 1   | time.csv | text file    | -      | second           | char           |

  

| TARGET FACT: T_FACT_LINEOFSALE |          |      |    |  | SOURCE    |          |                     |                     | Transformation  |
|--------------------------------|----------|------|----|--|-----------|----------|---------------------|---------------------|---|
| Column                         | datatype | Size | PK |  | source    | table    | column              | datatype            |   |
| date_key                       | NUMBER   | 5    | -  |  | sales_dw  | database | t_dim_date          | date_key            | WHERE date_full_date = TO_CHAR(line_date, 'dd-mm-yyyy') |
|                                |          |      |    |  | sales_dw  | database | t_dim_date          | date_full_date      |   |
|                                |          |      |    |  | sales_dsa | database | t_clean_linesofsale | line_date           |   |
| time_key                       | NUMBER   | 6    | PK |  | sales_dw  | database | t_dim_time          | time_key            | WHERE time_full_time = TO_CHAR(line_date, 'hh24:mi:ss') |
|                                |          |      |    |  | sales_dw  | database | t_dim_time          | time_full_time      |   |
|                                |          |      |    |  | sales_dsa | database | t_clean_linesofsale | line_date           |   |
| product_key                    | NUMBER   | 12   | -  |  | sales_dw  | database | t_dim_product       | product_key         | WHERE product_natural_key = product_id                  |
|                                |          |      |    |  | sales_dw  | database | t_dim_product       | product_natural_key |   |
|                                |          |      |    |  | sales_dsa | database | t_clean_linesofsale | product_id          |   |
| store_key                      | NUMBER   | 5    | -  |  | sales_dw  | database | t_dim_store         | store_key           | WHERE store_natural_key = store_id                      |
|                                |          |      |    |  | sales_dw  | database | t_dim_store         | store_natural_key   |   |
|                                |          |      |    |  | sales_dsa | database | t_clean_sales       | store_id            |   |
| promo_key                      | NUMBER   | 12   | -  |  | sales_dw  | database | t_dim_promotion     | promo_natural_key   | WHERE promo_natural_key=promo_id                        |
|                                |          |      |    |  | sales_dsa | database | t_clean_linesofsale | promo_id            |   |
|                                |          |      |    |  | sales_dw  | database | t_dim_promotion     | promo_key           |   |
| sale_id_dd                     | NUMBER   | 10   | PK |  | sales_dsa | database | t_clean_linesofsale | sale_id             | -   |
| sold_quantity                  | NUMBER   | 5,2  | -  |  | sales_dw  | database | t_clean_linesofsale | quantity            | -   |
| ammount_sold                   | NUMBER   | 7,2  | -  |  | sales_dw  | database | t_clean_linesofsale | ammount_paid        | -   |