

Data Catalog for Gold Layer

Overview

The Gold Layer is the business-level data representation, structured to support analytical and reporting use cases. It consists of **dimension tables** and **fact tables** for specific business metrics.

1. gold.dim_customers

- **Purpose:** Stores customer details enriched with demographic and geographic data.
- **Columns:**

| Column Name | Data Type | Description |
|-----------------|-------------|---|
| customer_key | INTEGER | Surrogate key uniquely identifying each customer record in the dimension table. |
| customer_id | INTEGER | Unique numerical identifier assigned to each customer. |
| customer_number | VARCHAR(50) | Alphanumeric identifier representing the customer, used for tracking and referencing. |
| first_name | VARCHAR(50) | The customer's first name, as recorded in the system. |
| last_name | VARCHAR(50) | The customer's last name or family name. |
| country | VARCHAR(50) | The country of residence for the customer (e.g., 'Australia'). |
| marital_status | VARCHAR(50) | The marital status of the customer (e.g., 'Married', 'Single'). |
| gender | VARCHAR(50) | The gender of the customer (e.g., 'Male', 'Female', 'n/a'). |
| birthdate | DATE | The date of birth of the customer, formatted as YYYY-MM-DD (e.g., 1971-10-06). |
| create_date | DATE | The date and time when the customer record was created in the system |

2. gold.dim_products

- **Purpose:** Provides information about the products and their attributes.
- **Columns:**

| Column Name | Data Type | Description |
|-------------|-----------|--|
| product_key | INTEGER | Surrogate key uniquely identifying each product record in the product dimension table. |
| product_id | INTEGER | A unique identifier assigned to the product |

| | | |
|----------------------|--------------|--|
| | | for internal tracking and referencing. |
| product_number | VARCHAR(50) | A structured alphanumeric code representing the product, often used for categorization or inventory. |
| product_name | VARCHAR(50) | Descriptive name of the product, including key details such as type, color, and size. |
| category_id | VARCHAR(50) | A unique identifier for the product's category, linking to its high-level classification. |
| category | VARCHAR(50) | The broader classification of the product (e.g., Bikes, Components) to group related items. |
| subcategory | VARCHAR(50) | A more detailed classification of the product within the category, such as product type. |
| maintenance_required | NVARCHAR(50) | Indicates whether the product requires maintenance (e.g., 'Yes', 'No'). |
| cost | INTEGER | The cost or base price of the product, measured in monetary units. |
| product_line | VARCHAR(50) | The specific product line or series to which the product belongs (e.g., Road, Mountain). |
| start_date | DATE | The date when the product became available for sale or use, stored in |

3. gold.fact_sales

- **Purpose:** Stores transactional sales data for analytical purposes.
- **Columns:**

| Column Name | Data Type | Description |
|---------------|-------------|--|
| order_number | VARCHAR(50) | A unique alphanumeric identifier for each sales order (e.g., 'S054496'). |
| product_key | INTEGER | Surrogate key linking the order to the product dimension table. |
| customer_key | INTEGER | Surrogate key linking the order to the customer dimension table. |
| order_date | DATE | The date when the order was placed. |
| shipping_date | DATE | The date when the order was shipped to the customer. |
| due_date | DATE | The date when the order payment was due. |
| sales_amount | INTEGER | The total monetary value of the sale for the line |

| | | |
|----------|---------|--|
| | | item, in whole currency units (e.g., 25). |
| quantity | INTEGER | The number of units of the product ordered for the line item (e.g., 1). |
| price | INTEGER | The price per unit of the product for the line item, in whole currency units (e.g., 25). |