

# Naming Conventions

## General Principles:

- **Naming Conventions:** Use snake\_case, with lowercase letters and underscores (\_) to separate words.
- **Language:** Use English for all names.
- **Avoid Reserved Words:** Do not use SQL reserved words as object names.

## Table Naming Conventions:

### Bronze Rules

- All names must start with the source system name, and table names must match their original names without renaming.
- **<sourcesystem>\_<entity>**
  - **<sourcesystem>:** Name of the source system (e.g., crm, erp).
  - **<entity>:** Exact table name from the source system.
  - Example: crm\_customer\_info → Customer information from the CRM system.

### Silver Rules

- All names must start with the source system name, and table names must match their original names without renaming.
- **<sourcesystem>\_<entity>**
  - **<sourcesystem>:** Name of the source system (e.g., crm, erp).
  - **<entity>:** Exact table name from the source system.
  - Example: crm\_customer\_info → Customer information from the CRM system.

### Gold Rules

- All names must use meaningful, business-aligned names for tables, starting with the category prefix.
- **<category>\_<entity>**
  - **<category>:** Describes the role of the table, such as dim (dimension) or fact (fact table).

- `<entity>`: Descriptive name of the table, aligned with the business domain (e.g., customers, products, sales).
- Examples:
  - `dim_customers` → Dimension table for customer data.
  - `fact_sales` → Fact table containing sales transactions.

### Glossary of Category Patterns

Pattern	Meaning	Example(s)
<code>dim_</code>	Dimension table	<code>dim_customer</code> , <code>dim_product</code>
<code>fact_</code>	Fact table	<code>fact_sales</code>
<code>report_</code>	Report table	<code>report_customers</code> , <code>report_sales_monthly</code>

### Column Naming Conventions:

#### Surrogate Keys

- All primary keys in dimension tables must use the suffix `_key`.
- `<table_name>_key`
  - `<table_name>`: Refers to the name of the table or entity the key belongs to.
  - `_key`: A suffix indicating that this column is a surrogate key.
  - Example: `customer_key` → Surrogate key in the `dim_customers` table.

#### Technical Columns

- All technical columns must start with the prefix `dwh_`, followed by a descriptive name indicating the column's purpose.
- `dwh_<column_name>`
  - `dwh`: Prefix exclusively for system-generated metadata.
  - `<column_name>`: Descriptive name indicating the column's purpose.
  - Example: `dwh_load_date` → System-generated column used to store the date when the record was loaded.

## Stored Procedure

- All stored procedures used for loading data must follow the naming pattern:
- **load\_<layer>.**
  - <layer>: Represents the layer being loaded, such as bronze, silver, or gold.
  - Example:
    - load\_bronze → Stored procedure for loading data into the Bronze layer.
    - load\_silver → Stored procedure for loading data into the Silver layer.