# DW Naming Convention Document

## **1. Overview**

This document outlines the naming conventions to be used across the Data Warehouse (DW) implementation. Consistent naming standards ensure clarity, reduce ambiguity, and promote ease of use for developers, analysts, and stakeholders.

The DW will be structured in three layers:

* **Bronze** – Raw, uncleaned data ingested directly from source systems.
* **Silver** – Cleaned, standardized data with additional derived fields.
* **Gold** – Final data model used for business reporting, analytics, and consumption.

## **2. General Guidelines**

* **Case**: All names must be in **lowercase**.
* **Separators**: Use **underscores (\_)** to separate words.
* **Acronyms**: Treat acronyms as lowercase (e.g., tbl\_crm\_client, not tbl\_CRM\_Client).
* **Prefixes**: Use consistent prefixes for tables, views, and stored procedures.

## **3. Schema Naming**

Each layer of the data warehouse has a dedicated schema named after the layer:

|  |  |
| --- | --- |
| **Layer** | **Schema Name** |
| Bronze | bronze |
| Silver | silver |
| Gold | gold |

## **4. Table Naming**

### **Bronze Layer**

* **Format**: tbl\_<source\_system>\_<table\_name>
* **Example**: tbl\_crm\_clients, tbl\_trading\_transactions

### **Silver Layer**

* **Format**: tbl\_<source\_system>\_<table\_name>
* **Additional Columns**: Prefix additional derived or metadata columns with dwh\_
* **Example**: tbl\_crm\_clients (with dwh\_record\_created, dwh\_status\_flag)

### **Gold Layer**

* **Tables**
  + **Format**: tbl\_<domain>\_<table\_name>
  + **Example**: tbl\_client\_profile, tbl\_account\_summary
* **Views**
  + **Format**: v\_<domain>\_<view\_name>
  + **Example**: v\_client\_segmentation, v\_portfolio\_performance

## **5. Column Naming**

* Use lowercase and underscores.
* Prefix internal or derived columns in the **silver** layer with dwh\_.
  + Example: dwh\_load\_timestamp, dwh\_is\_valid
* Avoid ambiguous abbreviations unless widely accepted in context (e.g., id, fk, qty).

## **6. Stored Procedure Naming**

* **Format**: sp\_<layer>\_<function>
* **Layer**: Use the schema/layer name (bronze, silver, gold)
* **Function**: Brief, descriptive action name
* **Example**:
  + sp\_bronze\_load\_crm\_clients
  + sp\_silver\_clean\_transactions
  + sp\_gold\_refresh\_account\_summary

## **7. Other Object Naming**

* **Primary Key**: <table\_name>\_pk
  + Example: tbl\_crm\_clients\_pk
* **Foreign Key**: <table\_name>\_<referenced\_table>\_fk
  + Example: tbl\_accounts\_clients\_fk
* **Indexes**: idx\_<table\_name>\_<column\_name>
  + Example: idx\_tbl\_trading\_transactions\_transaction\_date

## **8. Reserved Prefixes**

|  |  |  |
| --- | --- | --- |
| **Prefix** | **Used For** | **Example** |
| tbl\_ | Tables | tbl\_market\_data |
| v\_ | Views (Gold Layer) | v\_investment\_summary |
| sp\_ | Stored Procedures | sp\_gold\_refresh\_daily\_summary |
| dwh\_ | Internal Columns | dwh\_inserted\_date, dwh\_row\_hash |

## **9. Version Control & CI/CD**

All database scripts must follow the naming conventions defined here and be stored in the version control system using folder structures that reflect the layer (e.g., /bronze/, /silver/, /gold/).