**Snowflake Model Standards**

**Every time you bring a new source to Snowflake, please review the data types at the source, and compare against the supported data types in Snowflake:**

<https://docs.snowflake.com/en/sql-reference/intro-summary-data-types.html>

**ETL schema rules.**

1. Table name nomenclature, table name in upper case to comply with Snowflake conversion standard
   1. <source>\_<table\_name\_in\_source>\_L
   2. Example: ETL.SMART\_DIM\_CLASS\_L
   3. Where \_L stands for “Landing”
2. File name
   1. Only one table per table DDL script
   2. <source>\_<table\_name>\_L.sql
   3. Example: SMART\_DIM\_CLASS\_L.sql
3. DDL
   1. Table comments and fields comments should be defined
   2. Column names should match to the source table, in upper case
   3. If the source table contains Foreign Key constraints, they are removed in the ETL layer DDL
   4. If the source table contains default values constraints in any of the columns, they are removed in the ETL DDL. For example, DW\_INSERTED\_DATETIME and DW\_UPDATED\_DATETIME have a default definition as CURRET\_TIMESTAMP, since those are audit fields from the source system, we don’t need to keep those defaults as we want to maintain the original timestamp from the source system.
   5. When the source table contains NOT NULL definitions, we keep them in the ETL layer DDL
   6. Primary Key and Unique Key definitions in the source table, are carried over as is into to the ETL layer DDL
   7. Primary Key and Unique Key nomenclature
      1. For primary keys: PK\_<table\_name>\_<column\_name\_list>
      2. For unique keys: UK\_<table\_name>\_<column\_name\_list>
   8. Data types
      1. VARCHAR2 and CHAR are converted to VARCHAR, keep the same length from the source
      2. NUMBER and DECIMAL types are converted to VARCHAR(50)
      3. DATE and DATETIME types are converted to VARCHAR(35)

**FOUNDATION schema rules**

1. All foundation tables should have corresponding logical/physical model defined
2. Table name nomenclature, table name in upper case to comply with Snowflake conversion standard
   1. <table\_name\_in\_source>
   2. Example: FOUNDATION.DIM\_CLASS
3. File name. Please add \_CT (create table) to avoid script name duplication that could interfere with the deployment scripts, as one table in the FOUNDATION may need multiple scripts for proper handling.
   1. Only one table per table DDL script
   2. <table\_name>\_CT.sql
   3. Example: DIM\_CLASS.sql
4. DDL
   1. Table comments and fields comments should be defined
   2. Column names should match to the source table, in upper case
   3. If the source table contains Foreign Key constraints, keep the definition.
   4. If the source table contains default values constraints in any of the columns, keep the definition
   5. When the source table contains NOT NULL definitions, keep the definition
   6. Primary Key and Unique Key definitions in the source table, are carried over as they are into to the FOUNDATION layer DDL
   7. Key nomenclature
      1. Primary keys: PK\_F\_<table\_name>\_<column\_name\_list> (F stands for FOUNDATION)
      2. Unique keys: UK\_F\_<table\_name>\_<column\_name\_list>
      3. Foreign keys: FK\_<table\_name>\_<column\_name>
   8. Data types
      1. VARCHAR2 and CHAR are converted to VARCHAR, keep the same length from the source
      2. NUMBER types are converted to INTEGER
      3. DECIMAL(*x,y*) should be defined as NUMBER(*x,y*) as long as *y* is greater than zero.
      4. DATE and DATETIME remain with the same definition
   9. Audit fields - Add 3 audit fields at the end of the table definition:
      1. SF\_INSERT\_DATETIME DATETIME DEFAULT CURRENT\_TIMESTAMP
      2. SF\_UPDATE\_DATETIME DATETIME DEFAULT CURRENT\_TIMESTAMP
      3. SF\_PROCESS\_ID VARCHAR(36)

TCOC schema rules

1. This schema is exclusive to view definitions
2. View name nomenclature, view name in upper case to comply with Snowflake conversion standard
   1. <table\_name> same name as the table the view is pointing to
   2. Example: TCOC.DIM\_CLASS
3. File name. Please add \_VIEW (to identify the script as containing a view) to avoid script name duplication that could interfere with the deployment scripts.
   1. Only one query per view DDL script
   2. <table\_name>\_VIEW.sql
   3. Example: DIM\_CLASS\_VIEW.sql
4. DDL
   1. PII fields – the view definition must hide PII fields per the data mapping requirements