**SQL, SSIS and DW Standard Naming Conventions**

**Version - Draft**

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|  | **Prepared By** | **Reviewed by** | **Approved By** |
| **Name** | Sai Datla |  |  |
| **Role** | KPI Team Member |  |  |
| **Signature** |  |  |  |
| **Date** | 28/02/2024 |  |  |

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# Purpose

# The main goal of adopting a naming convention for database objects is so that you and others can easily identify the type and purpose of all objects contained in the database. This article describes one of the possible naming standards, undoubtedly there are other standards that were also followed by many but the below were the ones found mostly used. The purpose of this document is to provide information on the standard naming conventions to be followed during the design and development of DW / SSIS package.

# 2.0 Scope

# The scope of the document is to identify or set standard naming conventions to database objects during the design and development work while working on DWP WPS project work.

# 3.0 Intended Audience

The intended audience is DWP WPS KPI Team

# 4.0 TSql Naming Conventions

In general, all object names are singular and based on US English. It is understood that schemas contain multiple objects, tables contain multiple columns, and columns contain multiple rows.

The primary reason for object names to be singular is based in language semantics, any language’s semantics. Every word, in every language has a singular form. However, not every word has a plural form. Additionally, abbreviations and acronyms are singular and do not have plural forms.

Based on some investigations from Microsoft website, some generalized standardized naming convention has been discussed to the below objects and all of the below been tabulated down the document.

**Database** : All database names are singular, without any prefix or suffix.

**Schema** : All schema names are singular, without any prefix or suffix and with descriptive name which tells reader

**Table** : All table names are singular, without any prefix or suffix.

**Column** : All column names are singular to reflect specific piece of data being stored.

**View** : Prefix with Vw followed by purpose of view

**Foreign Keys** : Prefix with fk followed by <ParentTable>To<ChildTable>on<ColumnName>

**Primary Keys** : Prefix with pk followed by <TableName>

**Default Constraint**: Prefix with df followed by <ColumnName>\_<descriptive name which tells reader>

**Check Constraint**: Prefix with ck followed by <ColumnName>\_<descriptive name which tells reader>

**Unique Constraint**: Prefix with uc followed by <ColumnName>\_<descriptive name which tells reader>

**Index** : Prefix with Ix followed by Type of index

|  |  |
| --- | --- |
| **Index** | |
| **Prefix** | **Type** |
| Ix\_U | Unique Index |
| Ix\_C / CI\_ | Clustered |
| Ix\_N / NCI\_ | Non Clustered |
| Ix\_CS | Column Store |

**Stored Procedure**: Stored procedures have a prefix specific to their purpose. Some examples as below.

|  |  |
| --- | --- |
| **Stored Procedure** | |
| **Prefix** | **Purpose** |
| Sp\_ | Tsql Stored procedure |
| Sp\_a | Stotred Procedure for application purposes |
| Sp\_s | Stored procedure for security or auditing |
| Sp\_ssis | Soted procedure used in SSIS |
| Sp\_adf | Stored procedure used in adf |
| Sp\_Admin | Stored procedure used for DBA / Admin Processes |

**Trigger** : Depending on type of trigger, triggers named as below.

|  |  |
| --- | --- |
| **Trigger** | |
| **Prefix** | **Purpose** |
| T\_DML | DML triggers for tables or views |
| T\_DDL | DDL Triggers |
| T\_L | Logon Triggers |

**Function** : Functions will be prefixed with fn\_ followed by a descriptive name. While you can have four different styles of function: scalar, table valued, multi-statement table valued, and CLR where functions are used and what they are applied to do not change. Therefore, the naming convention will not distinguish between the different types of function.

|  |  |
| --- | --- |
| **Function** | |
| **Prefix** | **Purpose** |
| Fn\_ | Any function |

**Linked Server** : Prefixed with L\_

**SQL Agent** : All Sql server agent objects should be prefixed as below based on the requirements followed by meaningful naming conventions which reflect the purpose of the job.

|  |  |
| --- | --- |
| **Index** | |
| **Prefix** | **Purpose** |
| Jb\_ | Native Tsql jobs |
| ETL\_ | ETL Job |
| DBA | Admin / DBA jobs |
| Hourly\_ | Hourly Schedules |
| Daily\_ | Daily Schedules |
| Monthly\_ | Monthly Schedules |

# 4.0 Data Warehouse Naming Conventions

Although majority of naming conventions used in data warehouse were like what we use in Tsql, some commonly use DWH objects listed below along with standard naming conventions.

|  |  |
| --- | --- |
| **Object Type** | **Naming Convention** |
| Dimension | dim\_ |
| Fact | fact\_ |
| View | vw\_ |
| Materialised Views | mv\_ |
| Aggregates | agg\_ |

# 4.0 SSIS Naming Conventions

Standard most used naming conventions grouped together for major SSIS tasks that we use on regularly.

|  |  |
| --- | --- |
| **REGULAR SSIS TASKS** | |
| **Task** | **Prefix** |
| For Loop Container | FLC |
| Foreach Loop Container | FELC |
| Sequence Container | SEQC |
| Bulk Insert | BLK |
| Data Flow | DFT |
| Execute SQL | EST |
| FTP | FTP |
| File System | FSYS |
| Script | SCR |
| Send Mail | SMT |

|  |  |
| --- | --- |
| **REGULAR SSIS SOURCE AND DEST** | |
| **Task** | **Prefix** |
| Excel Source | EX\_SRC |
| Excel Destination | EX\_DST |
| Flat File Source | FF\_SRC |
| Flat File Destination | FF\_DST |
| OLEDB Source | OLE\_SRC |
| OLEDB Destination | OLE\_DST |
| Raw File Source | RF\_SRC |
| Raw File Destination | RF\_DST |
| XML Source | XML\_SRC |
| XML Destination | XML\_DST |

|  |  |
| --- | --- |
| **REGULAR SSIS TRANSFORMATION** | |
| **Task** | **Prefix** |
| Aggregate | AGG |
| Character Map | CHM |
| Conditional Split | CSPL |
| Copy Column | CPYC |
| Data Conversion | DCNV |
| Data Mining Query | DMQ |
| Derived Column | DER |
| Export Column | EXPC |
| Fuzzy Grouping | FZG |
| Fuzzy Lookup | FZL |
| Import Column | IMPC |
| Lookup | LKP |
| Merge | MRG |
| Merge Join | MRGJ |
| MultiCast | MLT |
| Pivot | PVT |
| Row Count | CNT |
| Row Sampling | RSMP |
| Sort | SRT |
| Union All | ALL |