

Database Object Naming Standards

BI Projects frequently involve the creation of new database objects for reporting and analysis. These standards apply to database objects created explicitly for Business Intelligence.

BI Database Naming Standards

Quick Reference Guide to the BI Database Naming Standards
Other resources

<u>List of standard abbreviations</u> <u>List of class words (data domain suffixes)</u>



Database Object Naming Standards

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Introduction

Scope

These standards apply to database objects created and maintained for Business Intelligence applications. They apply to objects accessed during reporting and analysis, plus supporting objects such as those used for Extract, Transformation, and Load (ETL) processing.

Purpose

These standards are intended to facilitate the design, implementation, and support of BI applications at NU. They are flexible and extensible. Suggestions for enhancements, and requests for extension to additional object types or DBMS, are always welcome.

A naming standard is a collection of rules, which, when applied to data, results in a set of data objects named in a logical and standardized way. These names convey some information about the named objects; an element name, for example, indicates the set of possible valid values (its data domain), and its usage.

Having naming standards helps to achieve efficient use and reuse of data through better understanding of what data is in the system. Standardized names enhance communications about data within the BI community, from source application developers to BI experts to end users.

Database object naming conventions for BI applications

Relationship of BI names to source application system names

In Business Intelligence applications, many data elements map to a column or field in an operational application system that is the source of the BI data.

Always consider using field and column names from the source application as the basis for creating the column names in BI. This will usually speed ETL development and data modeling by supplying most of the object names ready-made, and facilitate communications between the BI team and the developers supporting the source application.

Guidelines for when to use (and not to use) source system field names as the basis for BI names

The guiding principle is that data names should aid in communication between interested and responsible parties.

Do use source application element names that are understood and used by its developers when discussing the data.

Also use source application element names that are closely related to the names used by developers and/ or users, with minor technical differences like abbreviations and punctuation.

When sourcing data from multiple applications, use source names when there is conformance, in both naming conventions and terminology, across the source applications.

Source application element names that are in general use within the University should be used in BI.

Examples: NETID, CHARTSTRING.

Do not use source application element names that do not describe the data in any meaningful way, such as cryptic names, and ones based on a language other than English.

As a general rule: if developers and application users don't use the application's column and field names when discussing its data content, using those names in the BI application would not be an aid to communications and so should be avoided.

When the source application provides the basis for BI data names:

The source application field and column names are the basis for the data element and column names in the BI system, but they may be changed when creating the BI name, because:

Some changes are for technical reasons. The main BI data store is an Oracle database in where data names are not case-sensitive, and "_" (underscore) is the only word separator permitted.

Example: source names "StudentLastName", "student last name" and "STUDENT-LAST-NAME" would all become "STUDENT_LAST_NAME" in the BI database.

Names that are too short or that don't convey enough meaning may be expanded, such as by adding a suffix, to clarify their usage.

Example: source element "BUILDING" could become "BUILDING_NUM", "BUILDING_ID", or "BUILDING_NAME" depending on the type of data it holds.

For field and column names that are not related to data contents, choose a name in BI that best facilitates communication about the data element. Sometimes a new name should be assigned in BI that describes the actual use of the element.

Examples:

- 1) An application has a column named "ORIGIN_CODE" that is used to store data that would best be described as a "cost category code", due to an application enhancement completed some years ago. Developers and expert users generally call it "origin code". In this case, "ORIGIN_CODE" would also be the name in BI.
- 2) An application has a column named "MGR_TITLE" that contains the manager email address. Users and developers refer to it as "email" or "manager email". A new name would be assigned in BI, based on "manager" and "email".

Tables and other objects other than data elements are assigned new names in BI that draw on the source application's terminology, but are not usually the same as the name of an object such as a file or table in the source application.

When new names are created during BI design

When the source application element names don't make a good basis for the BI names, due to multiple

source applications with incompatible naming, cryptic names, etc., then use this standard to create new names for the BI data.

When the source system names don't describe data contents, then investigate other sources for the terms to be used in forming names. Look for user training materials, and discuss the labels and headings in the application's user interface with both developers and users to identify good terms for the application's data items.

Names in widespread use should be preserved, in the closest equivalent form allowed within technical constraints. Example: "NetID" (becomes "NETID" in BI).

New names are formed as described in this standard.

Adding database objects to BI applications not developed under this standard

When adding database objects to a BI application that was not developed using this standard, their names should use the same naming conventions as used in the existing object names.

This standard may be used together with the existing database objects names to develop new names, whenever that is helpful. The goals when extending the application data are consistency and the promotion of communication among the interested parties, including the vendor or other developer of the BI application.

This applies to purchased applications, and to others developed without using this standard.

Forming names for database objects

Elements of a name

Data object names are formed from one or more prime words, optional qualifier words, and one class word.

Prime words describe the major topic or subject area to which the data refers. Prime words should be taken from terminology commonly used in the University, including terms used in application systems.

Every object name contains at least one prime word.

Examples: student, campus, account, fund, project, building.

Qualifier words describe the role of one particular data element within its subject area. They are optional except when needed to create a set of unique names for similar data items ("project start date", project end date", etc.).

Examples: first, last, begin, end, type.

Class words describe the type of data; they indicate the domain of potential values from which the data item's valid values are drawn.

Examples: name, number, amount, percent.

Sources of the elements that form names

Prime and qualifier words should draw from the terminology in use by the developers and users of the source applications when possible.

This standard does not include an exclusive list of prime and qualifier words.

The list of standard abbreviations (<u>Standard Abbreviations</u>) is a good source for prime and qualifier words, but if there is a word that more effectively communicates the description of a data object than any in the list, it can be used.

Class words and their abbreviations must be taken from the standard list (<u>Class Words (Data Domain Suffixes</u>)).

Forming names from prime, qualifier, and class words

More than one prime word is used when needed to clearly define the data object and to create unique names when similar data items are stored together within a table or view.

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Examples: HOME_COUNTRY_NAME and RESIDENCE_COUNTRY_NAME; HR_JOB_TITLE, DEPARTMENT_JOB_TITLE, and SCHOOL_JOB_TITLE.
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Some data items belong to more than one data category, so the name should include multiple prime words.

Example: a grade refers to the mark received by a student for a course. It describes neither COURSE nor STUDENT, but the relationship between STUDENT and COURSE. So columns with grade-related data have names based on the two prime words STUDENT and COURSE.

Class words may be omitted when they don't add information. Some prime words convey the domain of valid values by themselves. But it's never wrong to

Examples:

- 1) There are no commonly used codes for city names, so a column holding city names can be named CITY_NAME or CITY without raising questions about the possible values stored in the column.
- 2) The same is not true for states, so STATE must be followed by the class word NAME or CODE.

Class words are not used in the names of objects such as tables and views.

Class words are usually abbreviated, even when using the full word doesn't exceed length restrictions. See abbreviations in the standard list (<u>Class Words (Data Domain Suffixes</u>)).

Rules for forming names

Data object names are always singular. This includes the names of tables and views.

Examples: ROOM not ROOMS; ACCOUNT rather than ACCOUNTS; a table containing student information has STUDENT in the name, not STUDENTS.

Abbreviation rules

Use complete words for prime and qualifier words where possible, within restrictions on maximum length.

If spelling out the words in full causes the name to exceed the maximum allowed length, abbreviate starting with the longest word or words.

For any long word (7 letters or more) that is used in multiple names, if it is abbreviated in any name it should be abbreviated the same way wherever it occurs.

The maximum length of names is 30 characters (as of 2008). Table and column names should be at most 26 characters long, if that is possible without sacrificing the clarity of the name's meaning, so that related objects like constraints and indexes can contain the entire name.

Standard abbreviations are listed here: <u>Standard Abbreviations</u>. For words not listed, if the source application has an abbreviation for the word, use it. You can also request a standard abbreviation for words not in the list by contacting Business Intelligence Solutions.

The "class word" or data domain suffix, which is the last element of the name when it is used, is usually abbreviated in names of any length. The abbreviations are listed here: <u>Class Words (Data Domain Suffixes</u>)

Separate terms with an underscore ("_").

Data element names should be concise; the full meaning depends on context. Do not repeat the table name, or an abbreviation for it, in the names of its elements.

Example: a column named COUNTRY_NAME in a "Vendor Address" table doesn't need to have any reference to vendor or address in its name.

Naming standards by object type

Schema names

Schemas generally correspond to the organization (school or department) that owns the source data, or is the user of BI applications built for one specific organization.

Exception: Key applications with users in many organizations may be placed in their own set of BI schemas rather than one based on the organization that is responsible for the data.

Schema names start with a prefix that designates the type of data that the schema holds, followed by an identifying name for the source application or the organization that owns the data.

Standard prefixes for BI schema names: DM for Data Mart, ETL for Data Manager Catalog, and STG for

data staging.

Schema name examples:

- 1) BI data sourced from applications dedicated to the Office for Research Information Systems (ORIS) would have schemas DM_ORIS to hold the Data Mart data (which could consist of multiple logical Data Marts or "stars") and ETL_ORIS for the ETL catalog.
- 2) The College and University Financial System (CUFS) is an application with broad scope and high impact on the University's administration. It is given its own set of BI schemas: ETL_CUFS, STG_CUFS, and DM_CUFS.

Table names

Table names are formed in the same way as the names of columns and views, using prime and qualifier words.

Tables that hold data in its final form, accessed by via reporting applications or used to manage the BI system, have no "class word" data domain suffix.

Tables that are used for intermediate copies of data, used to capture and transform data and not accessed by user-facing applications, are in data class "work", with names suffixed by class word "WRK".

The names of tables that implement a star schema have prefixes that specify the table's role in the star schema model:

"DIM" for dimension and

"FACT" for fact.

Tables that do not play a role in a dimensional star do not have any special prefix.

Source application table and file names are not generally used in BI, though the BI name may be based on a source application table name. Tables that are used to capture application data prior to data transformation, and have a one-to-one correspondence with a table or file in the source application, should have names that include or are based on the source application table.

Table name examples:

DIM_PROTOCOL - Protocol dimension table

DIM ACCOUNT -- Financial account dimension table

FACT_ACCOUNTING_TRANS – Financial accounting transaction fact table (note: this is not a plural name, TRANS is the abbreviation for TRANSACTION)

ORGN_WRK – Staging "work" table for initial capture of data from CUFS application table "ORGN" SECURITY_ACCESS – table used to implement content-sensitive access controls within a Data Mart; its role is like a fact table in some queries ("what does user x have access to?"), and a dimension in others ("return facts a and b, filtered on dimensions x, y, z and security access").

View names

Views are named in the same way as tables. The view name is the same as the name that would be given

to a physical table containing the data presented by the view.

Converting a view to a stored ordinary table or materialized view should be transparent to the applications that read data via the view.

View names must be unique within the set of all tables and views in a schema (this is a technical restriction; views and tables share a single name space in the database).

A view used as a dimension or fact data source in reporting should have a prefix indicating the star schema role, just as with tables (DIM or FACT).

Column names

Names based on field or column names in the source application

For these, there are three types of changes that may need to be made to the original name when forming the equivalent BI name.

1) Technical changes for conformance with the database syntax

Names are made up of letters and numbers and the underscore character ("_"). Replace spaces by underscores, and special characters with a meaningful equivalent. Example: "room & board" becomes "ROOM_AND_BOARD".

Names have maximum length of 30 characters. Abbreviate long words to form valid names.

The only word separator is the underscore character "_".

Names are not case sensitive; by convention they are shown in all upper case in documentation. Internal capitalization used to distinguish words will not be preserved in the BI name. Underscores can be used to make the BI name more understandable, except in cases where the source name is widely used.

Examples: "FacultyLastName" becomes "FACULTY_LAST_NAME"; "NetID" becomes "NETID" (this name is in general use throughout the University without an underscore).

2) Changes to avoid conflicts with reserved words and keywords in the database and supporting tools.

Many words such as DATE, GRANT, GROUP, OPTION, RESOURCE, and SET are special to the database and cannot be used alone as column names. Tools used to manage and access the data often reserve words such as BEGIN, END, and CASE.

Reserved words and special keywords are single words; the set of reserved words can change with new software versions or the installation of new tools. A data domain suffix added to single-word names avoids keyword conflicts with the current and future software versions.

Examples: If BEGIN and END hold dates they become BEGIN_DT and END_DT; to CLASS or GROUP add suffix "CD" (code), "NUM" (number), or "ID" (identifier), depending on the field's contents.

Note: Some single-word column names that do not conflict with database reserved words and are unlikely to do so in the future may be used unchanged in BI.

Examples: CITY, COUNTY.

3) Identifying columns, both those used as keys in the database and those used as important identifiers by end users, should have a data domain suffix added in BI if it is not present in the original name. See "Keys and other identifiers".

Examples: SCHOOL becomes SCHOOL_ID; AREA becomes AREA_NUM.

Naming columns in BI that don't map directly to a source application data item

Keys: the ETL process usually adds new key identifiers (e.g. surrogate keys, concatenated business keys); these are named as described in the next section.

Other columns should be named using the same style and terminology as existing source application field names where possible, else use the BI naming rules.

Column names created for BI

Column names are formed according to the rules given in Forming names for database objects.

Examples: STUDENT_LAST_NAME; EFFECTIVE_END_DT, ACCOUNT_TYPE_ID

Keys and other identifiers

Identifying columns should be named with care as they are usually important to both managing the data and reporting on it.

There are several data domain suffixes ("class words") that apply only to identifying data items:

ID - An identifying field in the source application, especially when referred to as "ID" or "identifier", that holds a code or identifying string. Values come from a key field in the source application, which may be one field of a multi-field key.

Examples: BUILDING_ID, NETID.

NUM - An identifying field in the source application that is stored as a character string, and that has mostly numeric values, or is commonly referred to as "number", even if its values are not mostly numeric digits.

Examples: INVOICE_NUM, CONFIRMATION_NUM.

NBR - An identifying field in the source application that has numeric values that are stored as a number, so that the values are guaranteed to be comprised of numeric digits. Do not use for numeric identifiers that are referred to using the terms "ID", "Identifier", or "Key" by application users or in the application documentation – the term already in use takes precedence.

BKEY - A column used to hold the concatenated values of a multi-field business key. BKEY values are derived in ETL processing and are not used in reports.

Example: A two-field business key composed of BUILDING_ID and ROOM_NUM may require ROOM_BKEY holding a concatenation of building and room identifiers.

SKEY - Surrogate (artificial) key, with numeric values assigned during ETL processing. The key values are used to uniquely identify a row, and have no intrinsic meaning. An SKEY column never maps to a data element in the source application.

KEY – An identifying column that is used to join tables that is not a surrogate key; its values have some meaning.

Example: DAY_DATE_KEY holds integers that either hare formed from dates (in 'YYYYMMDD' format) or take on a few special values to identify date dimension rows used to denote that a date is missing or does not apply.

(See: <u>Class Words (Data Domain Suffixes)</u> for a more formal definition of these data classes)

Primary key column names are formed from the table name plus the data domain suffix SKEY or KEY (the other types of identifying columns are not usually used as primary keys in BI). If the table name begins with one of the special BI prefixes (DIM, FACT), the prefix may be omitted in the primary key column name.

Examples: DIM_DIVISION_SKEY; ORGANIZATION_SKEY.

Foreign key columns are named the same as the referenced primary key, prefixed by additional prime words when there are multiple references within one table to the same primary key.

It is common in the star schemas used in BI for a dimension to be referenced multiple times by one fact table row. An event measured by a fact row may reference several people, such as the responsible person, that person's manager, and a project sponsor. Multiple dates may apply to one fact, implemented as multiple references to a date dimension. Prime words are added at the beginning of the foreign key column name to indicate the role of the referenced dimension.

Example: Dimension table DIM_STAFF with primary key STAFF_SKEY is referenced by three foreign keys: STAFF_SKEY, MANAGER_STAFF_SKEY, and

SPONSOR_STAFF_SKEY. The column named the same as the referenced key is understood to represent the "main" reference, in this case the staff person that was responsible for the event measured by the fact.

Columns that contain descriptive attributes such as name, descriptive text, and physical location have names suffixed by ADDR (address), NAME, CMT (comment), and DESC (description).

Columns that contain quantities (also called measures) use the data domain suffixes that are listed with database data type NUMBER. If the unit of measure is denoted in the column name (see Note) it should precede the suffix, like ITEM_WEIGHT_KG_QTY.

(Note: Denoting units of measure by using values in separate columns provides the most power and flexibility, but in cases where a single unit of measure is used, and this is highly unlikely to change, it's acceptable to either omit the unit of measure or denote it in the column name. Currency amounts in particular are understood to be in U.S. dollars without including a currency indication in the column names (see the description of AMT in Class Words (Data Domain Suffixes)).

Columns that contain time-specific values such as date, time, and date/time stamp should be named according to the accuracy of the values, not the underlying database data type. The Oracle DATE data type, for example, allows for time of day to be stored with the date. Columns stored as DATE with values where the time component is missing or not relevant should have names ending in DATE or DT, not DTTM (date and time).

Index names

Oracle indexes have names of the form prefix_name[suffix].

Prefix values are

PK for primary key indexes

UX for unique indexes other than primary key

FX for function-based indexes (where the function used for building the index can be an arithmetic expression or an expression that contains PL/SQL or SQL functions)

IX for all other indexes

The **name** portion is the first 26 characters of

The table name for PK (primary key) indexes

The name of the first column in the index for UX and IX indexes

For FX indexes: create the column name that would be used for a new table column to hold the results produced by the index function. Use that column name in the "name" part of the index name.

The optional **suffix** is:

Not used if the name formed by *prefix* and *name* is unique within the schema Else Digits 1, 2, 3 etc. for uniqueness.

Naming BITMAP and compressed key indexes,

The index name does not attempt to describe the physical implementation options used to create the index. The name doesn't indicate BITMAP versus NORMAL, or options such as key compression, descending order, etc.

Details regarding use of a suffix for uniqueness

The suffix is used only when the prefix and name produce duplicate index names within a schema. If the duplicate names are known before the first index is created, then the suffix values are 1, 2, 3, and so on. If a new index is being added, and its name conflicts with an existing one that has no suffix, then give the new one suffix 2 (it is not necessary to rename the first index to give it suffix 1). If there are more than 9 conflicting index names within a schema, use suffixes one through nine, then zero, then the letters of the alphabet.

The suffix is only for uniqueness, there is no meaning attached to it. A lower number does **not** mean "more important", "designed earlier than others", or anything else.

Examples:

1) Table "DIM_ACCOUNT_TYPE" has primary key column "ACCOUNT_TYPE_SKEY", unique business key column "ACCOUNT_TYPE_BKEY", and one column frequently used in report filters: "ACCOUNT_TYPE_NAME".

The indexes on this table would be named:

PK_DIM_ACCOUNT_TYPE UX_ACCOUNT_TYPE_BKEY IX_ACCOUNT_TYPE_NAME

2) De-normalization to reduce the number of snowflake joins to table DIM_DEPARTMENT has resulted in several dimension tables in a data mart with column name DEPARTMENT_NUM.

The initial physical implementation includes index IX_DEPARTMENT_NUM built on table DIM_DEPARTMENT, column DEPARTMENT_NUM.

Later on, performance tuning activities reveal the need for an index on DEPARTMENT_NUM in table DIM_FACULTY. Suffix 2 is used to give the new index a unique name: IX_DEPARTMENT_NUM2.

Constraint Names

Primary key constraints are named the same as the primary key index, "PK_" plus the table name (or the first 26 characters of the table name if it's long).

Other constraints are declared without giving them a name; the database will assign a unique name.

Note: The only types of constraints normally used on Business Intelligence data are PRIMARY KEY and NOT NULL. The functionality of constraints used to protect data integrity such as CHECK and FOREIGN KEY is more effectively implemented in the ETL (Extract, Transformation, and Load) processing than by use of database constraints.

How to request additions and extensions to these standards

Any Northwestern University staff member can request changes to this standard, including names of additional object types and support of Database Management Systems that are not currently covered by the standard.

NUIT Business Intelligence Solutions administers the standard, including authoring updates, coordinating review and approval procedures, and publishing new versions.

To initiate a change request, visit <u>NUIT Business Intelligence Solutions</u>. The Chief Architect or Manager can direct your request to the appropriate individual.

References

List of standard abbreviations

Standard Abbreviations

List of data domain suffixes

Class Words (Data Domain Suffixes)

Document History

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Database Object Naming Standards - Quick Reference

This is a condensed form of the BI Database Object Naming Standards.

Database naming standards for BI projects

These standards are intended to facilitate the design, implementation, and support of BI applications at NU.

The guiding principle is that data names should aid in communication among those that are interested in and responsible for the data.

Leverage the names in the source application where possible

Always consider using field and column names from the source application as the basis for creating the column names in BI.

When the source application provides the basis for BI data names:

The column names in BI don't have to be completely revised to follow these naming standards;

Column names may need to be changed in minor ways when creating the BI names, due primarily to technical platform differences.

A BI project will create new data names, not preserving source application names, when

- -- sourcing data from multiple applications that do not share a consistent naming convention
- -- the source application names do not describe the data in a way that's useful (such as extremely cryptic names, or ones based on a language other than English)

Names in widespread use should be preserved, in the closest equivalent form allowed within technical constraints.

Examples: "NetID", "DeptID" (become "NETID" and "DEPTID" in BI).

Forming names for database objects

Data object names are formed from one or more prime words, optional qualifier words, and a "class word" that

indicates the valid values that the data item holds.

Examples: STUDENT_LAST_NAME, CAMPUS_CODE, ACCOUNT_NUM, FUND_ID, PROJECT_BEGIN_DATE, BUILDING_NAME.

Prime words describe the major topic or subject area to which the data refers, and **qualifier words** help to describe a particular data element within its subject area. They are ordinary English words, taken from the terminology used by those that work with the data as much as possible.

The singular form of each word is used: STUDENT, DEPARTMENT, etc.

There is no list of all of the prime and qualifier words that can be used.

The list of standard abbreviations is a good source for these words.

These words are not usually abbreviated unless required to fit within technical limits on name length.

When abbreviations are used, they should be taken from the list of standard abbreviations; see <u>Standard</u> Abbreviations

For data element (column) names, the last part of the name is a "class word", or "data domain suffix".

Class words must come from the standard list, and are usually abbreviated.

Examples: ADDR, AMT, AVG, CODE, ID, NAME

More details, and the standard list, are in Class Words (Data Domain Suffixes)

Naming standards by object type

Column names

Column names are formed as described in "Forming names for database objects", and must consist of at least one prime word and a class word.

Keys and other identifiers

Special care should be taken in naming key columns and other identifiers. There are some data domain suffixes ("class words") that apply only to identifying data items:

ID - An identifying field in the source application,

Examples: BUILDING_ID, NETID.

NUM - An identifier that is commonly referred to as "number", even if its values are not all numeric digits; stored as a character string.

Examples: INVOICE NUM, CONFIRMATION NUM.

NBR - An identifier that is commonly referred to as "number" with values that are always numeric digits; stored as a number.

BKEY – "business key" -- A column used to hold the concatenated values of a multi-field business key. BKEY values are derived in ETL processing and are not used in reports.

SKEY - Surrogate (artificial) key, with numeric values assigned during ETL processing. The key values are used to uniquely identify a row, and have no intrinsic meaning.

KEY – An identifying column that is used to join tables that is not a surrogate key; its values have some meaning.

(See: Class Words (Data Domain Suffixes) for a more formal definition of these data classes)

Primary key column names are formed from the table name plus the data domain suffix SKEY or KEY.

If the table name begins with one of the special BI prefixes (DIM, FACT), the prefix may be left out of the primary key column name.

Examples: DIM_DIVISION_SKEY; ORGANIZATION_SKEY.

Foreign key columns are named the same as the referenced primary key, prefixed by additional prime words when there are multiple references within one table to another table via its primary key.

Example: Dimension table DIM_STAFF with primary key STAFF_SKEY is referenced by three foreign key columns in a fact table: STAFF_SKEY, MANAGER_STAFF_SKEY, and SPONSOR_STAFF_SKEY.

Schema names

Schema names start with a prefix that designates the type of data that the schema holds, followed by an identifying name for the source application or the organization that owns the data.

Standard prefixes for BI schema names: DM for Data Mart, ETL for Data Manager Catalog and STG for data staging.

Table names

Table names are formed in the same way as the names of columns and views, using prime and qualifier words.

Names of tables that are accessed by reporting applications (or are used to manage the BI system), do not have a data domain (or "class word") suffix.

Work tables, used for intermediate copies of data, have names suffixed by class word "WRK".

The names of tables that implement a star schema have prefixes that specify the table's role in the star schema model:

"DIM" for dimension and

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"FACT" for fact.

Tables that do not play a role in a dimensional star do not have any special prefix.

View names

Views are named in the same way as tables. The view name is the same as the name that would be given to a physical table containing the data presented by the view.

Index names

Oracle indexes have names of the form prefix_name[suffix].

Prefix values are

PK for primary key indexes

UX for unique indexes other than primary key

FX for function-based indexes (where the function used for building the index can be an arithmetic expression or an expression that contains PL/SQL or SQL functions)

IX for all other indexes

The **name** portion is the first 26 characters of

The table name for PK (primary key) indexes

The name of the first column in the index for UX and IX indexes

The optional **suffix** is 1, 2, 3 etc. for uniqueness within the schema.

Constraint Names

Primary key constraints are named the same as the primary key index, "PK_" plus the table name (or the first 26 characters of the table name if it's long).

Other constraints are declared without giving them a name; the database will assign a unique name.



Data base object naming standards: Abbreviations

In general, abbreviations should be used only when length restrictions prevent use of fully spelled-out words in object names.

This section contains a list of standard word abbreviations, to be used for consistency when a lengthy name requires words to be abbreviated.

When working with an existing application that consistently uses an abbreviation different than the one shown here, the existing abbreviation should be used. If the application is widely used or otherwise highly visible, this standard can be extended to include these abbreviations.

Abbreviations in bold type are also special suffixes identifying the type of data; see the list of Data Domain Suffixes. Unlike the beginning words of a name, the suffixes are usually abbreviated.

An asterisk (*) indicates and abbreviation used in PeopleSoft. When the data source is PeopleSoft, these abbreviations should be used.

Additions to this list can be made by submitting requests to Business Intelligence Solutions.

Word(s)	Abbreviation	Description
Abbreviate Abbreviation	ABRV	
Academic	ACAD	
Accept Acceptance Accepted	ACPT	
Access	ACCS	
Accident	ACDNT	
Accomplish Accomplishment Accomplishments	ACMP	
Account*	ACCT*	

Accounts Payable Advanced Placement Accounts Receivable Accredited Accrual Accumulated* Accumulation Accumulative Achieve Achievement Act Act Active Activity American College Test Actual	ACCTG* AP AR ACRD ACRL ACCUM* ACUM ACHV ACQ* ACT ACTN* ACTL	
Advanced Placement Accounts Receivable Accredited Accrual Accumulated* Accumulation Accumulative Achieve Achieve Achievement Act Act Active Activity American College Test Actual	AR ACRD ACRL ACCUM* ACUM ACHV ACQ* ACT	
Accredited Accrual Accumulated* Accumulation Accumulative Achieve Achievement Acquisition* Act Act Active Activity American College Test Actual	ACRD ACRL ACCUM* ACUM ACHV ACQ* ACT	
Accumulated* Accumulation Accumulative Achieve Achievement Acquisition* Act Act Active Activity American College Test Actual	ACRL ACCUM* ACUM ACHV ACQ* ACT	
Accumulated* Accumulation Accumulative Achieve Achievement Acquisition* Act Act Active Activity American College Test Actual	ACCUM* ACUM ACHV ACQ* ACT	
Accumulation Accumulative Achieve Achievement Acquisition* Act Act Active Activity American College Test Actual	ACUM ACHV ACQ* ACT	
Accumulative Achieve Achievement Acquisition* Act Act Active Activity American College Test Action* Actual	ACHV ACQ* ACT	
Achievement Acquisition* Act Act Active Activity American College Test Action* Actual	ACQ* ACT ACTN*	
Active Active Activity American College Test Action* Actual	ACTN*	
Active Activity American College Test Action* Actual	ACTN*	
Actual		
	ACTL	
Add Added	ADD	
Additional*	ADDL*	
Address*	ADDR*	Describes a person, place or thing's location
Ad hoc	ADHC	
Adjudicate Adjudicated Adjudication	ADJD	
Adjusted Gross Income	AGI	
Adjustment*	ADJ*	
Administered Administrated Administration	ADM	
Admissible Admission	ADMS	
Admittance Admitted	ADMT	
Accounts Payable	AP	
	ADVC	
Affiliation	AFFL	

After	AFT	
Age	AGE	
Agency	AGCY	
Agent	AGNT	
Aid	AID	
Alien	ALN	
All	ALL	
Allocate Allocation*	ALLOC*	
Alpha	ALPH	
Alter Alternate	ALT	
Alumni Alumnus	ALMN	
AM	AM	"Ante Meridiem" (morning)
American College Test Act Active Activity	ACT	
Amount*	AMT*	Monetary value(s)
Analysis	ANLS	
Annual*	ANNL*	
Anonymous	ANON	
Answer	ANS	
Apartment	APT	
Appeal Appealed	APEL	
Applicant*	APP*	
Application*	APPL*	
Appointment	APPT	
Approval Approve	APRV	
Area	AREA	
Array	ARAY	
Arrears	ARRS	
Ascending	ASC	
Assign Assigned Assignment	ASGN	21

Association	ASSC	
Assumption	ASMP	
Athlete Athletic	ATHL	
Attach	ATCH	
Attempt	ATMPT	
Attend Attendance	ATND	
Attention	ATTN	
Attribute	ATTR	
Audit Audited	ADT	
Authority Authorize	AUTH	
Auxiliary	AUX	
Availability Available	AVL	
Average	AVG	Average (mean).
Average Cumulative Grade	ACG	
Award Awarded	AWRD	
Balance*	BAL*	The net value (balance) of an account
Bank	BNK	
Bargain	BARG	
Base Basic	BAS	
Batch	ВТСН	
Before	BEF	
Begin Beginning	BEGN	
Beginning of Term	BOT	
Benefits	BEN	
Bid	BID	
Bill Billing	BILL	
Billing and Receivables System	BRS	
Birth	BRTH	
Board	BRD	22

Break	BRK	
Budget Budgetable	BUD	
Budget Balance Account	BBA	
Build Building	BLD	
Business	BUS	
Business Unit*	BU*	
Buy Buyer	BUY	
Calculate Calculated Calculation*	CALC*	
Calendar*	CAL*	
Call	CALL	
Campaign	CMPN	
Campus	CMPS	
Cancel Canceled	CAN	
Capacity	CAP	
Capitalization	CPLZ	
Card	CRD	
Career	CAR	
Carrier	CRIR	
Cartridge	CART	
Case	CSE	
Cash	CSH	
Catalog	CTLG	
Category*	CATG*	
Census	CENS	
Center	CTR	
Certificate Certification	CERT	
Change Changed	CHG	
Chapter	СНАР	
Charge	CRG	
Chartfield	CHARTF	

Check Checked	СНК	
Citizen Citizenship	CTZN	
City	CTY	
Class	CLAS	
Clear Cleared	CLR	
CLEP	CLEP	
Close	CLO	
Club	CLB	
COBRA*	CBR*	
Code*	CD*	Code values are assigned to identify something; usually explained by a code table or documentation.
Collection	CLCT	
College	COLG	
Column	CLMN	
Combination Combine	COMB	
Command	CMD	
Comment	СМТ	An explanatory, illustrative or critical note, remark or observation
Committee	CMMTTEE	
Company*	CO*	
Comparative*	COMPA*	
Competitor	CPTR	
Complete Completion Compliance	CMPL	
Component	CMPT	When the meaning is "part", use abbreviation "PRT".
Composite Compensation	COMP	
Conditional	COND	
Confidential	CNFD	
Confirm Confirmation*	CONF*	
Constant	CNST CST	Data which is unchanging or invariable

Contact	CTCT	
Continue Continuing Continuous	CONT	
Contract Contractor	CNTR	
Control*	CNTL*	
Conversation*	CONVR*	
Conversion* Convert* Converted	CNV*	
Correspondence	CRSP	
Cost	COST	
Count Counter	CNT	A number of people or things that have been "counted", such as inventory cycle count
Country	CTRY	
County	CNTY	
Course*	CRSE*	
Coverage*	COVRG*	
Create	CRE	
Credential	CRDL	
Credit*	CR* CRDT	Use "CR" for field names relating to financial data Use "CRDT" for field names relating to academic work
CREF	CREF	
Cross	CRS	
Cross List Cross Listed	XLST	
Cross Reference	XREF	
Cumulative	CUM	
Currency*	CURR*	
Current*	CUR*	
Cursor	CRSR	
Custodian	CSTN	
Customer*	CUST*	
Daily	DLY	
Data	DATA	
Data Mart	DM	
Data Processing	DP	<u> </u>

Date*	DT*	Date or date/time
Date-Time Stamp	DTTM	
Day*	DD* DY*	A day of the week (Sunday, Monday, etc.)
Dead Death Deceased	DEAD	
Debit*	DR*	
Decimal	DEC	
Deduct Deduction*	DED*	
Default*	DFLT*	
Deficit	DFCT	
Definition*	DEFN*	
Degree	DEG	
Delete	DEL	
Deliver Delivery	DLVR	
Demo	DMO	
Dental	DNTL	
Department*	DEPT*	
Department of Motor Vehicles	DMV	
Dependency Dependent* Depends	DEP*	
Deposit	DPST	
Depreciation*	DEPR*	
Description*	DESCR* DESC	Narrative data that describes a code or number
Design	DSGN	
Destination*	DEST*	
Detail*	DETL*	
Develop Development Deviation	DEV	
Difference Differential	DIFF	
Digit	DGT	

Dimension	DIM	Dimension role in dimensional data modeling; a dimension in an implementation of a dimensional model.
Direct Direction Directional	DIR	
Disability Disabled	DISA	
Disbursed Disbursement	DSB	
Discount*	DISC*	
Displacement	DSPL	
Display	DISP	
Disposition	DSP	
Distribute Distribution*	DIST*	
District	DSTR	
Division	DIV	
Division of Continuing Education	DCE	
Document	DOC	
Donor	DONR	
Down	DN	
Drive Driver	DRV	
Drop	DRP	
Due	DUE	
Duplicate* Duplication	DUP*	
Each	EA	
Early	ERLY	
Earn Earned Earnings*	EARN*	
Earned Income Credit	EIC	
Educate Education	EDU	
Effect Effective*	EFF*	
Effective Date*	EFFDT*	

Effective Date Sequence*	EFFSEQ*	
Effort	EFRT	
Elect		
Elected	ELCT	
Elective		
Electronic Data Interchange	EDI	
Electronic Funds Transfer	EFT	
Electronic Mail	EM	
Eligibility* Eligible	ELIG*	
Emergency	EMRG	
Emphasis	EMPH	
Employee*	EE* EMPL	
Employee ID*	EMPLID*	
Employer*	ER*	
Employment	EMPLMT	
Encumber Encumbrance	ENCB	
End Ending	END	
End of Term	EOT	
Endorse Endorsement	ENDR	
Endorsement	ENDR	
Endow Endowment	ENDW	
Engineer Engineering	ENGN	
English	ENGL	
Enrichment	ENRCH	
Enrollment	ENRL	
Enter Entered Entry	ENTR	
Entitle Entitlement	ENTL	

Equal Equality		
Equivalence	EQ	
Equivalent		
'		
Equal Employment	EEO	
Opportunity	EEO	
Equal Opportunity		
Equip	EQP	
Error	ERR	
Establishment	ESTB	
Ethnic	ETHN	
Evaluation	EVAL	
Evaluator	EVAL	
Event	EVNT	
Exam	EXM	
Exception	EXCP	
Exclude	EXCL	
Exclusion	EACL	
Execute	EVEC	
Execution	EXEC	
Exempt		
Exemption	EXMT	
Expect		
Expected	EXPC	
Expected Family		
Contribution	EFC	
Expedite	XPDT	
Expense		
Export	EXP	
Express	EAI	
Experimental	EXPM	
Expiration		
Expire	EXPR	
<u>'</u>		
Export	EXP	
Expense		
Extend		
Extended	EXT	
Extension		
External	EXTR	

Extract, Transformation, and Load	ETL	
Facility	FCLT	
Faculty	FAC	
Family	FMLY	
Family Education Rights and Privacy Act	FERPA	
Fact	FACT	A role in dimensional data modeling; a fact in an implementation of a dimensional model.
Fast	FST	
Father	FATH	
Federal	FED	
Federal Labor and Security Act	FLSA	
Fee	FEE	
Feet Full Time	FT	
FICA	FICA	
Field Fields	FLD	
File	FILE	
Final	FNL	
Financial*	FIN*	
Financial Aid	FA	
Fine	FINE	
First	FRST	
Fiscal	FISC	
Fiscal Year	FY	
Fiscal Year to Date	FYTD	
Fix Fixed	FIX	
Flag	FLG SW	Data which functions as a flag or indicator. Used with only two possible states/conditions, such as "Y" or "N".
Flexible Spending Account	FSA	
Floor	FLR	
For	FOR	
Foreign	FGN	
Foreign Key	FK	

Form	FRM	
Format	FMT	
Former	FORMR	
Free	FREE	
Free Application for Federal Student Aid	FAFSA	
Free on Board	FOB	
Freeze Frozen	FRZ	
Frequency*	FREQ*	
Fresh Freshman	FRSH	
From	FR	
Fulfill Fulfilled	FULF	
Full Time	FT	
Full Time Equivalent	FTE	
Function Functional	FCN	
Fund Funding	FUND	
Future	FUT	
Garnishment*	GARN*	
General	GENL	
General Education Degree	GED	
General Ledger	GL	
Geographic Geography	GEOG	
Gift	GFT	
Global	GLBL	
Government	GOVT	
Grade	GDE GRD	Academic grade (not related to the steepness of a slope).
Grade Point Average	GPA	
Graduate	GRAD	
Grant Granted	GRNT	
Gross	GROS	

Group	GRP	
Guarantee	GUAR	
Guaranteed Student Loan	GSL	
Guest	GST	
Handicap Handicapped	HAND	
Head	HEAD	
Header*	HDR*	
Health	HLTH	
Held Hold	HLD	
Help	HLP	
Hierarchy	HIER	
High	HI	
High School	HS	
High School Services	HSS	
Higher Education	HED	
Highway	HWAY	
Hire	HIRE	
History	HST	
Home	HM	
Honor	HONR	
Honor Society	HSC	
Hospital	HOSP	
Hour	HH	A duration of time expressed in hours
Hourly	HRLY	
Hours*	HRS*	
House Housing	HSE	
How	HOW	
Human Resources	HR	
Human Resource System	HRS	
Identification Identifier* Indicator	ID*	Alphanumeric data which identifies a person, place, or thing
Image	IMG	
Immune Immunization	IMUN	32

Impact	IMPC	
Implementation	IMPL	
Import	IMP	
Import/Export	IMPEXP	
Inch	IN	
Include	INCL	
Income	INCM	
Increase Increment	INCR	
Index	INDX	
Indicator	IND	
Individual	INDV	
Individual Student Information Report	ISIR	
Information	INFO	
Initial Initialize	INIT	
Injury*	INJ*	
Inoculation	INOC	
Input	INPT	
Inquiry	INQ	
Insert	ISRT	
Institution	INST	
Instruction Instructional Instructor	ISTR	
Instructional Need Analysis System	INAS	
Insurance	INS	
Inter-Unit*	IU*	
Interest	INT	
Interface*	INTFC*	
Internal	INTR	
International	INTL	
Interval	INVL	
Interview Interviewer	INTV	
Invent	INVN	

Inventory	INV	
Investment*	INVEST*	
Invitation Invite	INVT	
Invoice	INVC	
Issue Issued	ISS	
Item	ITM	
Job	JOB	
Journal*	JRNL*	
Junior	JR	
Junior Science	JS	
Key	KEY	See data domain suffixes for discussion of types of key (KEY, BKEY, SKEY)
Label	LBL	
Labor	LBR	
Laboratory	LAB	
Language	LNG	
Last List	LST	
Late	LATE	
Latitude	LAT	
Layoff	LAYF	
Leave	LV	
Lecture	LCTR	
Ledger*	LED*	
Legal	LGL	
Lender	LNDR	
Length*	LEN*	
Letter	LTR	
Level	LVL	
Liaison	LISN	
Liberal Education	LBD	
Library	LIB	
License	LIC	
License Plate Number	LIC_PLTE_NBR	
Life	LIFE	

Limit*	LIM*
Line* Loan	LN*
Link Linked	LNK
Liquid	LIQ
List Last	LST
Literal	LTRL
Load	LOAD
Loan Line*	LN
Locate Location*	LOC*
Lock	LK
Locker	LKR
Log	LOG
Log on	LOGON
Long Longest	LONG
Long Term Care	LTC
Long Term Disability	LTD
Longitude	LON
Lot	LOT
Low	LOW
Mail Mailer Mailing	MAIL
Maintenance*	MAINT*
Major	MJR
Make	MK
Manager	MGR
Map	MAP
Marital	MRTL
Message Agent Server	MAS
Mask	MSK
Master Academic Records System	MARS

Match Matching	МТСН	
Math	MTH	
Matriculated		
Matriculation	MTRC	
Maximum*	MAX*	
Medical Medicinal	MED	
Meet Meeting	MT	
Member	MBR	
Membership	MSHP	
Memo Memorandum	ММО	
Memorial	MEMR	
Merchandise	MERCHNDS	
Merchant	MERCH	
Merit	MERT	
Message Messages*	MSG*	
Meter	MTR	
Method	METH	
Microfilm	MFILM	
Middle	MID	
Military	MIL	
Minimum*	MIN*	
Minor	MINR	
Minute	MNT MM	A duration of time expressed in minutes
Miscellaneous	MISC	
Mode	MDE	
Modification Modifier	MOD	
Monetary Money	MONY	
Month*	MM* MN*	A calendar month in numeric form (e.g., 01=January)
Month-to-Date*	MTD*	
More	MORE	36

Mother	MOTH	
Move	MOVE	
Multiple	MULT	
Name	NM	Word(s) by which a person, place or thing is commonly known
National	NATL	
National Association of College and University Business Officers	NACUBO	
National Student Loan Direct System	NSLDS	Commonly known as the "Perkins Loan"
Navigation	NAV	
New	NEW	
Next	NXT	
Next of Kin	NOK	
No Charge	NC	
No Credit	NOCR	
No Print	NPRT	
Nominal	NOM	
Non	NON	
Non-Personal Services	NPS	
Not	NOT	
Not Applicable	NA	
Note Notice Notification Notify	NOTE	
Number* Numeric	NBR* NUM	Numeric data which identifies a person, place, or thing. Use NBR if stored and presented as a number, not a string; use NUM for character data which is commonly called "number" even if some values are not all numbers.
Object Objective	ОВЈ	
Occupation	OCP	
Occurs	OCC	
Offer Offered	OFFR	
Office	OFFC	

Officer	OFCR	
Official	OFCL	
Old	OLD	
Online	ONLN	
Open	OPN	
Operator*	OPR*	
Option Optional Options	ОРТ	
Order	ORDR	
Organization Organize	ORG	
Orientation	ORNT	
Origin Original Origination	ORIG	
Other	OTHR	
Out	OUT	
Over	OVR	
Overhead	ОН	
Override	OVRD	
Overtime	ОТ	
Own Owned	OWN	
Owner	OWNR	
Packaged	PACK	
Paid	PAID	
Paper	PPR	
Parameter*	PARM*	
Parent	PAR	
Parity Priority	PRTY	
Park	PRK	
Part Partial	PRT	
Part Time	PT	
Participation	PRTP	

Pass		
Passed	PASS	
Past	PAST	
Patron	PTRN	
Pay Payable Payment	PAY	
Payroll	PYRL	
Pedestrian	PED	
Pell (Pell Grant)	PEL	
Pending	PEND	
Pension	PENS	
Percent* Percentage Percentile	PCT* PCTL	Part of a whole expressed in hundredths
Period*	PD*	
Period-to-Date*	PTD*	
Perkins Loan	NSLDS	Common name for National Student Loan Direct System
Permanent	PERM	
Permit	PRMT	
Person	PERS	
Personal Personnel	PSNL	
Personal Identification	PIN	
Personnel Action Notification	PAN	
Phone	PHN	
Physics	PHYS	
Place	PLCE	
Plan	PLN	
Plate	PLTE	
Pledge	PLDG	
PM	PM	"Post Meridiem" (afternoon)
Point	PNT	
Policy	PLCY	
Position*	POSN*	
Post Posted	POST	
		39

Postal	PSTL	
Potential	POTN	
Predicted	PRED	
Preference Preferred	PREF	
Prefix	PRFX	
Premium	PREM	
Prerequisite	PREQ	
Prescribed	PSCR	
Presentation	PRST	
President	PRES	
Previous Prior	PREV	
Price	PRC	
Price Level	PL	
Primary	PRIM	
Primary Key	PK	
Principal Principle	PRIN	
Principal Investigator	PI	
Print Printed	PRN	
Prior Previous	PREV	
Priority Parity	PRTY	
Probation Problem	PROB	
Procedure Process	PROC	
Profession Professional	PRFS	
Proficiency	PRFC	
Profile*	PROF*	
Program	PROG	
Project Projected	PROJ	
Promissory	PRMS	
Promotion	PROM	40

Proposal	PRPS	
Prospect	PRSP	
Province	PRVN	
Purchase	PUR	
Purchase Order	PO	
Purge	PRG	
Purpose	PURP	
Qualitative Quality	QAL	
Quantitative Quantity*	QTY*	A number of things other than money
Quantity-to-Date Quarter-to-Date*	QTD*	
Quarter	QTR	
Question	QSTN	
Race	RACE	
Range	RNG	
Rank	RNK	Relative standing or position
Rate*	RT*	Numeric value expressing amount per some unit of coverage
Read Reading	READ	
Real Reallocation	REAL	
Reason*	RSN*	
Recall	RCL	
Receipt	RCPT	
Receive Received*	RECV*	
Receiver	RCVR	
Recharge	RCHG	
Recognition Recognize	RECG	
Recommend	RCMD	
Reconciliation*	RECON*	
Record*	REC*	
Recreate Recreation	RECR	

Recruit	D. GD. II.	
Recruiting	RCRT	
Reduce Reduced Reduction*	RED*	
Refer Reference* Referral Referred	REF*	
Refund	RFND	
Regional	RGNL	
Registrar	REGR	
Registration	REG	
Reject Rejection	RJCT	
Relate Relation Relationship	RLAT	
Release	RLSE	
Religion Religious	RELG	
Remaining	RMNG	
Reminder	RMDR	
Renewal	RNWL	
Repeat Repeatable Repeated	REPT	
Replace Replaced	REPL	
Reply	RPLY	
Report*	RPT*	
Request* Requested Require Required* Requisition*	REQ*	
Requirements*	RQMT*	
Research	RES	
Reserve Reserved	RSRV	

Reserve Officers Training Corps	ROTC	
Residence Residency Resident	RSDT	
Resign	RSGN	
Resource	RSRC	
Responsible	RESP	
Response	RESP	
Restart	RST	
Restock	RSTK	
Restrict Restricted Restrictions	RSTR	
Result	RSLT	
Retire* Retirement*	RET*	
Retroactive	RETR	
Return	RTN	
Revenue	REV	
Review	RVW	
Revision	REVS	
Revoke	REVK	
Roll	RL	
Roll up	RLUP	
Room	RM	
Route	ROUT	
Row	ROW	
RSVP	RSVP	French abbreviation meaning "please reply"
Run	RUN	
Run Control	RUNCTL	
Salary*	SAL*	
Sale	SALE	
Salutation	SLTN	
Same	SM	
Save	SAVE	
Scale	SCAL	

Schedule*		
Scheduled	SCHED*	
Scheduling		
Scholar Scholarship	SCHLR	
Scholastic School	SCHL	
Scholastic Aptitude Test	SAT	
Science	SCI	
Score	SCR	A number that expresses merit or performance
Screen	SCRN	
Search	SRCH	
Second	SCND SS	Use "SCND" for field names relating to number two in a countable series Use "SS" for field names relating to a duration of time expressed in seconds
Section	SCTN	
Secure Security*	SEC*	
Segment	SEG	
Select* Selection Selective	SEL*	
Semester	SEM	
Semi Finalist	SEMF	
Senate Senator	SEN	
Send	SND	
Senior	SR	
Sent	SNT	
Separate	SEPR	
Sequence*	SEQ*	
Serial	SERL	
Service	SERV	
Session*	SESSN*	
Sex	SEX	
Sharing	SHR	
Sheet	SHET	
Shelter	SHLT	44

Shift	SHFT	
Shipping	SHIP	
Short	SHRT	
Sign	SGN	
Simulated	SIM	
Site	SITE	
Size	SZ	
Skill	SKL	
Skip	SKP	
Social Society	SOC	
Social Security Number	SSN	
Soft	SFT	
Solid	SLID	
Sophomore	SOPH	
Sort	SRT	
Source	SRC	
Special Specialty	SPCL	
Specific Specification	SPEC	
Sponsor Sponsored	SPON	
Sports	SPRT	
Spouse	SPSE	
Square	SQ	
Stack	STCK	
Staff	STF	
Stage	STG	
Stamp	STMP	
Standard	STD	
Standard Deviation	STDV	
Start Starting	STRT	
State	ST	
Statement	STMT	
Static	STC	
Statistics*	STAT*	45

Status	STS	
Step	STP	
Stipend	STPD	
Stock	STK	
Stop	STOP	
Street	STR	
String	STRG	
Structure	STRC	
Student	STU	
Student Academic Records	SAR	
Student Credit Hour	SCH	
Study	STDY	
Subcampaign	SCMP	
Subject	SUBJ	
Subordinate	SUB	
Subsidiary	SUBS	
Suffix	SFX	
Summation Summary*	SUM*	
Supervisor* Support	SUP*	
Supplement Supplemental*	SUPL*	
Survey	SRVY	
Suspense	SUSP SUSPN	
Switch	FLG SW	Data which functions as a flag or indicator. Used with only two possible states/conditions. Data should normally be "Y" or "N".
System	SYS	
Table Tables	TBL	
Taken	TKN	
Tape	TAPE	
Target	TRGT	
Taught	TGHT	
Tax Taxable	TX	

Tax ID Number	TIN	
Team	TEAM	
Temperature	TEMP	
Template*	TMPL*	
Temporary	TMP	
Tenure	TENR	
Term	TRM	
Terminal	TRML	
Terminate	TRMT	
Test	TST	
Text	TXT	Narrative informational data such as a message or error text
Thermidor	THERM	13th Month
TIAA	TIAA	
Ticket	TKT	
Time	TM	Hours and minutes. May include seconds, hundredths of seconds.
Time keeping	TMKP	
Time-stamp	TS	A system generated Time-stamp
Title	TITL	
Today	TDY	
Total*	TOT*	
Tour	TOUR	
Town	CTY	
Track Tracking	TRK	
Traditional	TRAD	
Training*	TRN*	
Transact Transaction*	TRANS*	
Transcript	TSCP	
Transfer*	XFER*	
Translate Translation	XLT	Meaning "Crosswalk Table"
Transmit Transmittal	XMIT	
Travel	TRVL	
Tuition*	TUIT*	
Type	TYP	47

Undergraduate	UGRD
Unemployment	UNEMPL
Unit	UNIT
Unit of Measure*	UOM*
Universal	UNVRSL
University	UNIV
Unpaid	UNPD
Unsecure Unsecured	UNSEC
Up To	MAX
Update Updated	UPDT
Upper	UPR
US Department of Education	USDE
Use Used	USE
User	USR
Vacation*	VACN*
Valedictorian	VLDC
Valid Validate Validation	VLD
Value	VAL
Variable	VAR
Vehicle*	VEH*
Vendor	VEND
Verbal	VRBL
Verify Verified	VERF
Veteran	VET
Vice President	VP
Violation	VIO
Visa	VISA
Visit	VST
Voucher	VCHR
W2	W2
W4	W4
W9	W9

Waived	WVED	
Week	WK	
Width	WID	
With	W	Normally used as part of a compound word (i.e., Withdrawl abbreviated as "WDRL").
Withdrawal	WDRL	
Withhold Withholding	WHLD	
Women	WMN	
Work[ing] Worked Worker(s)	WRK	Intermediate results or "working copies" can be so named; also the normal English meaning of work.
Worksheet	WKST	
Write Written	WRT	
Year*	YR* YY* YYYY	A calendar year, including century (e.g., 1997)
Year-to-Date*	YTD*	
Zip	ZIP	
Zone	ZN	



Business Intelligence Solutions

Database object naming standards: Class Words

Data Domain Suffixes for Column Names

Column names end with a suffix that describes the data domain from which the column's values are drawn. Suffixes supplement the information conveyed by the root name plus the database data type, and they can also be used to supply a set of related names based on a common root, for example: ASSET_ORD_DESC, ASSET_ORD_UNIT_COST . . .

A "class word" in the form of a data domain suffix can be used in every column name, but is not always required. For example, there are no common abbreviations or codes for CITY and COUNTY, so CITY, CITY_NAME, COUNTY, and COUNTY_NAME are acceptible columns names. If there is any doubt about whether the name without a suffix denotes the kinds of valid values it might hold, a suffix should be added.

Suffixes may be used for readability and to avoid reserved word conflicts. For example, a column named "END" with a database data type of "DATE" is self-defining without a suffix, but should be named "END_DT" both for readability and because "END" is a reserved word in many databases and other software systems.

Suffixes should not be used in a way that makes the meaning of the column name less clear or ambiguous. For example, consider multi-part addresses. These are often de-normalized as three or four columns, with logical names like "primary address line 1", "primary address line 2", etc. If we require an "ADDR" suffix here, we get poor column names such as the redundant "PRIMARY_ADDR_LINE1_ADDR" or the ambiguous "PRIMARY_LINE1_ADDR" (is this the address of a "primary line" or line 1 of the primary address?), when "PRIMARY_ADDR_LINE1" etc. make much better names.

The database data types listed here are generic, independent of the implementation in a database system. NUMBER means numeric (integer or decimal indicated, in cases where it matters), and CHAR means character, including fixed- and variable-length types in the target database, DATE refers to time-specifying values, which may be implemented using various database data types including ones that store both date and time.

Items in **bold** are used on the names of identifying elements that are either keys or primary identifiers to end users. Key and identifying column names should always have one of these suffixes.

Suffix	Data Domain	Database data type	Description
ADDR	Address	CHAR	Address, either of physical location, or virtual (email, URL, etc.)
AMT	Monetary amount	NUMBER(p,s)	An amount of money, in a specific currency either as specified by a currency code, or in the
		with s at least 2	well-known base currency used by the enterprise.
AVG	Average	NUMBER	Average; the arithmetic mean.
BAL	Balance	NUMBER(p,s)	A net value, financial balance. A monetary amount, see AMT.
		with s at least 2	50

ВКЕҮ	Business Key	CHAR	Business key, concatenating multiple fields of a multi-part key. Padding, justification, and data type conversion where necessary are used to develop a single string where key fields map consistently to predefined positions in the BKEY.
CODE, CD	Code	CHAR or an integer NUMBER	Letters and/or numbers used in a code system to mark, represent, or identify something. Code meanings are defined in a look-up table, or documented, or defined by some external agency (e. g. state and ZIP codes maintained by the U.S. Post Office).
CMT, COMMENT	Comment	CHAR	An explanatory, illustrative or critical note, remark or observation.
CNT	Count	Integer NUMBER	A tally (count) of something, usually of information system objects. See QTY.
COST	Cost	NUMBER(p,s) with s at least 2	Cost. A monetary amount, see AMT.
DESC	Description	CHAR	Text describing a coded value. A more complete description than NAME, preferably in complete sentences. See CD, ID, NBR, NAME, and TEXT. Example: DEPT_ID='BME', DEPT_DESC='Department of Biomedical Engineering in the McCormick School of Engineering and Applied Science'.
DT, DATE	Date	DATE	Time specified at the day level. Includes columns that have a time-of-day component that is not used (e.g. Oracle DATE with time portion defaulted to 00:00:00).
DTTM	Date-Time, timestamp	DATE	Time specified at the time-of-day level. Used only when the time part of the values is significant.
FLG, FLAG	Flag	CHAR or an integer NUMBER	A code with a very small number of values that are well-known to the users, not defined in a look-up table. Flag possible values and their meanings are described in metadata rather than a data table. Often used where most values are Boolean (Y/N or T/F), but the values are missing or not applicable in some cases. See CD, IND, and SW.
FY	Fiscal Year	CHAR or an integer NUMBER	Fiscal year.
GRADE	GRADE	CHAR or NUMBER	Academic mark.
ID	Identifier	CHAR or an integer NUMBER	Values that uniquely identify the referenced object. Use for identifiers that are alphanumeric, and ones that are already called "ID" or "identifier" (e.g. NetID).
IND	Indicator	BOOLEAN, CHAR or an integer NUMBER	A flag or switch that is called an "indicator" by users. Used to align names with user terminology. See FLG and SW. Usually
KEY	Identifier	CHAR or NUMBER	A system-assigned key that has some meaning (contrast to surrogate key; see SKEY). Though the values may be meaningful, this is a key used to link (join) data objects, not visible to end users. See BKEY, SKEY.
NBR	Identifying number	integer NUMBER	An identifying number to the business or end user, stored as a number. See NUM.
NM, NAME	Name	CHAR	The name of a person, or that of an object referenced by a code or identifier. Name is more concise than its description (if a description column exists). Example: DEPT_ID='BME', DEPT_NAME='Biomedical Engineering'
NUM	Identifier	CHAR	Used to correlate with the user term for an identifier. If the users say "student number" or "invoice number" then this suffix is used on the column names, even if the actual values are not numeric. See ID, NBR.
PCT	Percent	NUMBER(5,2)	Percentage

PCTL	Percentile	NUMBER	Percentile.
QTY	Quantity	Integer NUMBER	A number of things other than money. Generally measures quantities of things that are external to the information systems (see CNT); for the number of items that have both a representation in the system and an external existence, use QTY for numbers that are input and CNT for numbers that are calculated within the system.
SKEY	Surrogate key	NUMBER	Surrogate key, also called an artificial key. Contains values assigned by the system to uniquely identify a row. The values themselves have no meaning in relation to the data in the row; they are generally sequentially assigned as rows are added.
SW	Switch	BOOLEAN, CHAR or an integer NUMBER	There are exactly 2 possible values, usually meaning Yes and No. Should be used on NOT NULL columns only, as NULL introduces 3-valued logic. As with FLG, there is not usually a look-up table describing the values. See FLG and IND.
UM	Unit of Measure	CHAR	Used to denote the unit of measure of one or more numeric data items; the data values can be standard abbreviations like USD (U.S. dollar), KG (kilogram), etc. or whole words.
WRK	Working copy	Any	Used when an intermediate form of data needs to be stored. Used on table names, can also be used on other object names where it clarifies the nature of the object.