

## Fully Qualified Domain

- User defined data type which are:
  - Can specify data type (INT, VARCHAR, etc)
  - Defined once
  - Defined for the entire database
  - Reusable for entire database tables
    - Like CustomerID in Sales.Customer and Sales.Order (standardized)
  - Creates uniformity with the data
- Standardization leads to consistency → make more sense out of data
- Has constraints such as having a specific character in a string, like a ',' in a FullName column to separate first and last name
- SQL Server: CREATE TYPE,  
ANSI SQL: CREATE DOMAIN
  - Both create rules and constraints; for the purpose of consistency
  - CREATE TYPE used with schema namesapce
- Enforces format

## Taxonomy

- Definition(gen.): involved with the classification of things (ie the classification of the animal kingdom)
- SQL context: creates a structured classification of database
- Grouping logically: Sales, HR
- FQDS will have consistent naming and rules across the database to make it all uniform and understandable
- Standardized domains in a taxonomy are reused across the data (governance)

## Fully Qualified Table Name

- FQTN provides a complete path to a table in a database
- Format: database\_name.schema\_name.table\_name
- Uses:
  - Avoids collision and removes ambiguity. If tables or columns share the same name within a database, a FQTN will help to clear it up
  - Multi-layer precision using: database, schema then table which promotes precision → provides accurate table being queried
  - Precision → pinpoint the exact table a user wants, also doesn't get mixed up with other names
  - Prevent any unexpected results
  - Helps to "document" code
  - FOREIGN key from CHILD table accesses PRIMARY key from PARENT table (referencial integrity)
  - Heterogeneous database: diff systems/platforms
  - FQTN helps by: eliminating conflicts, so you can add additional databases without messing up functionality/be specific about the address