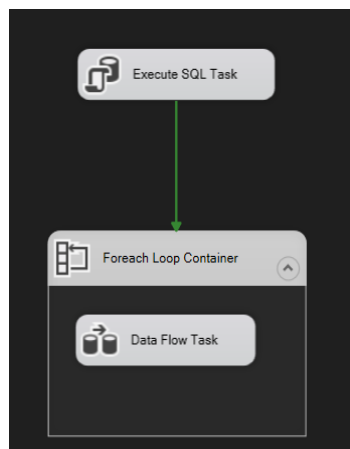# AUTOMATE READING CSV FILES VIA SSIS

Summary
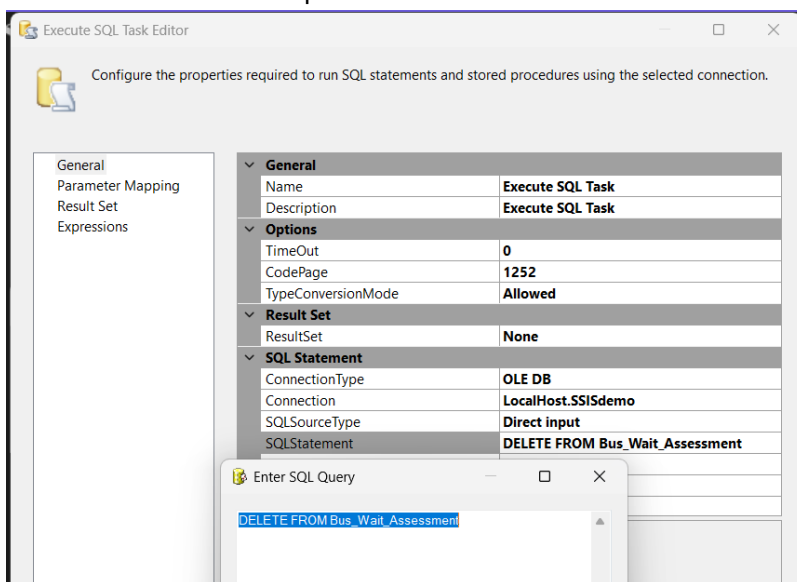
In this scenario we are going to transfer data from read .csv files to SQL database. These are the steps:
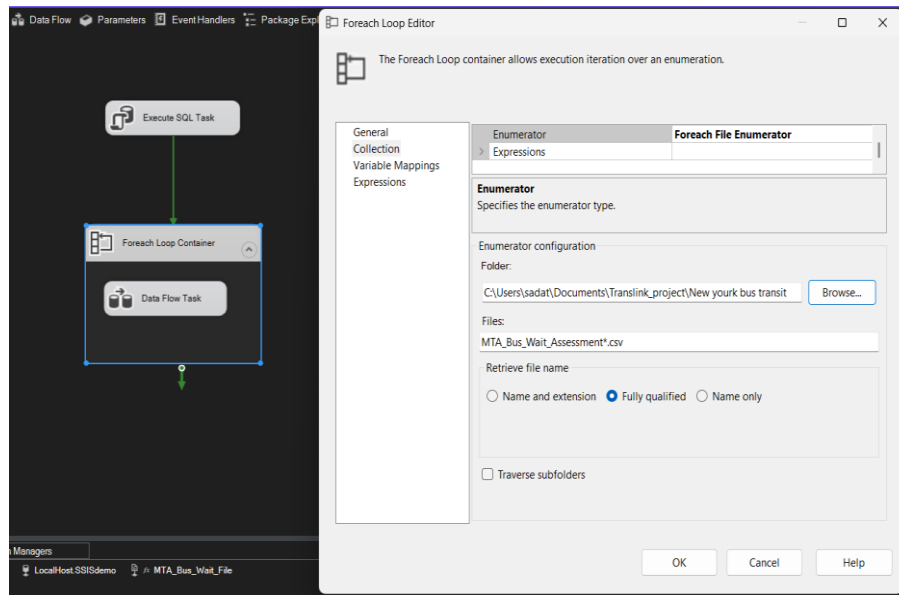
1- Control flow view:
   In Control flow view we need Foreach Loop Container to read the csv files, Data Flow Task to transfer data from files to SQL database and execute SQL Task component to clean the table before inserting data in the database.

By writing T-sql in Execute SQL Task we can manipulate data in database. Dubble click on it and in SQL statement write the script. Here we delete data in table before insertin to clean the table.

Dubble click on Foreach loop Container to determine source files and file name and file type by choosing collection from left menu. You can determine the filename and extension in files option. Using * means any character.in ex. Mta_bus_assessment*.csv select the file from the mentioned source which starts with "Mta_bus_assessment" name and "csv" extension. Choose Fully qualified.
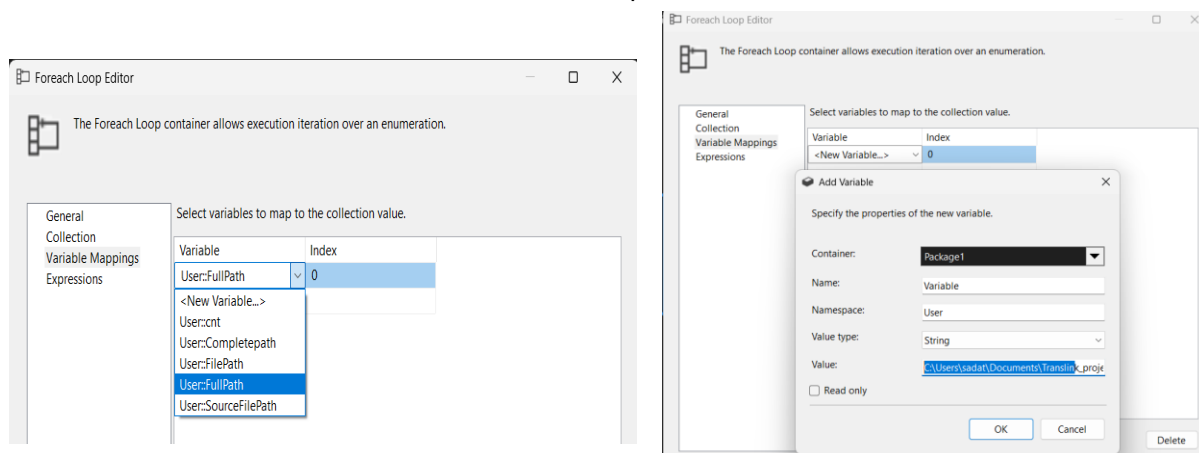

Name and Extension - when you need to move the files from a source location to a destination location, you can setup variables/parameters to define the locations and get just the name and extension and use those in combination with the variable/parameter to define the fully qualified name.
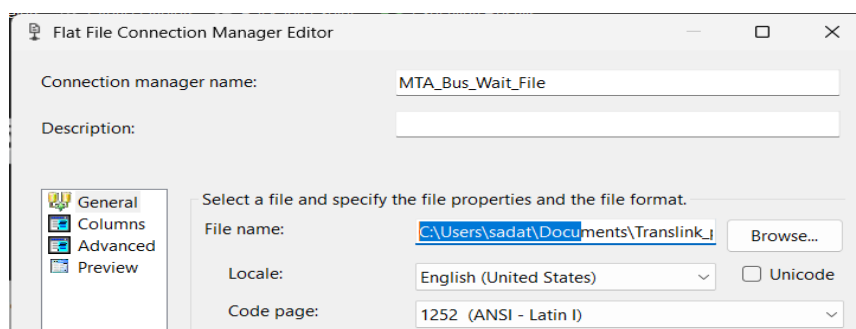**Fully Qualified** - when you don't need to move or copy the files and just need to pass the value as is.
Name Only - when you need to transform from one file type to another, for example - from Excel to CSV

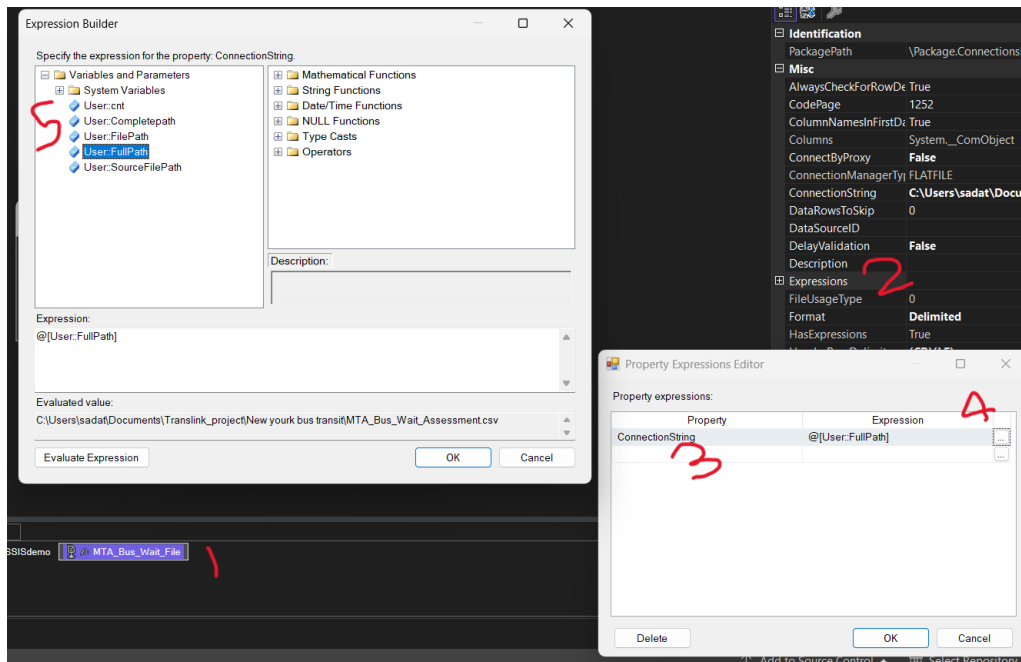A variable should be defined to connect Foreach Loop Container source location:

First double click on the source connection to determine the file source.

To connect source connection to Foreach Loop, the defined variable will be used.
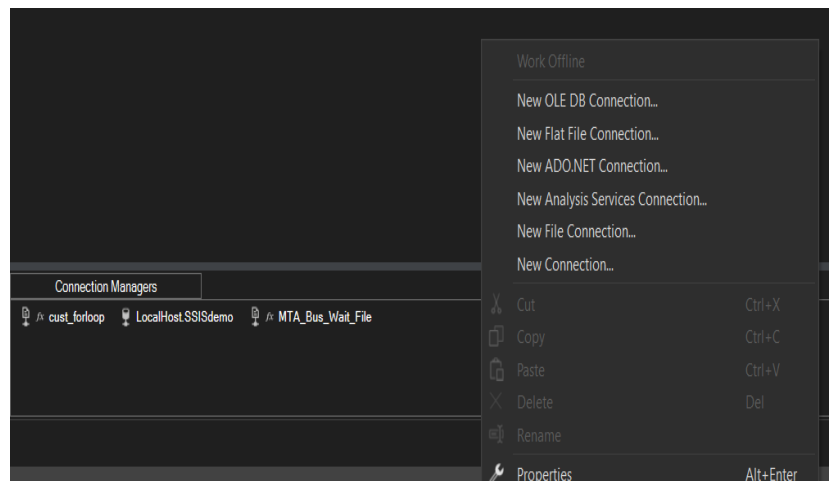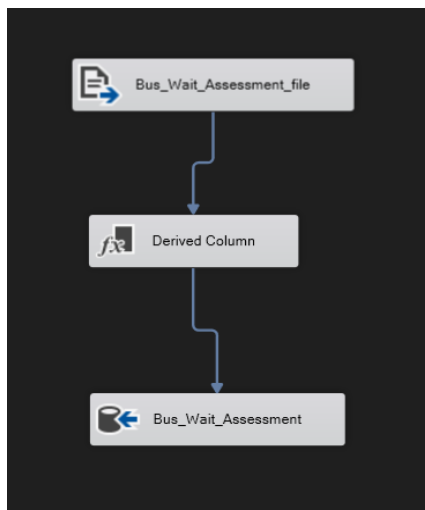
1- Right click on the file connection.

2- select properties

3- click on ... in expression

4- select connection string in property

5- click on ... in Expression

6- Select defined variable (FullPath) and drag it at the bottom in expression area
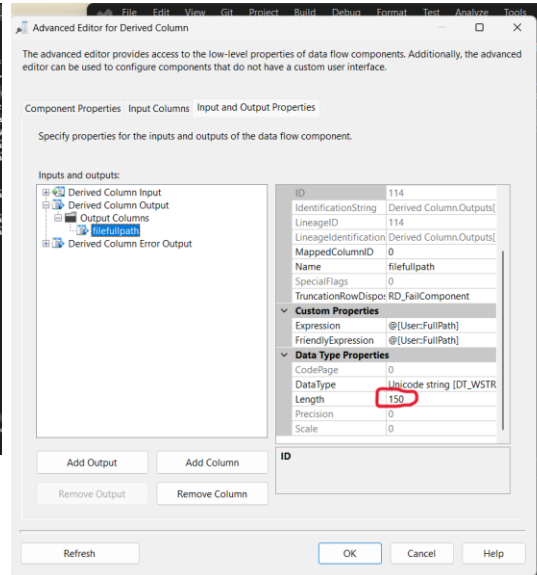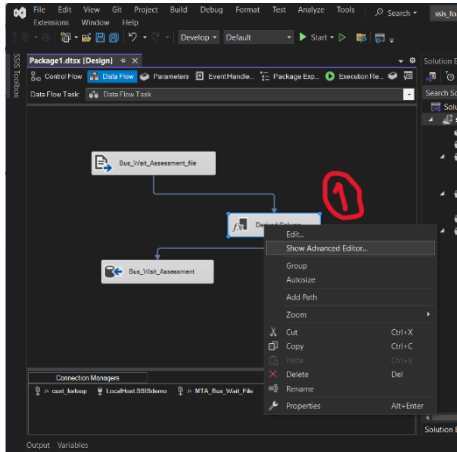

2- Data Flow Task view:

In data flow tasks the source and destination components of data should be considered. Also to specify the source of the transferred data, a column is added to the destination to mention the source file name of data via Derived Column component.

Right click on Connection manager area to define source and destination connections. In this example source connection is "Bus_wait_assessment_file" and will be created by choosing File Flat connection. Destination connection is "Bus_wait_assessment " and will be created by choosing OLE DB Connection.

Note

We might get the error while using Derived Column in our SSIS Package To fix it right click the Derived Column component and select Show Advanced Editor .. Go to Input and Output Properties tab, expand Derived Column Output and select the field and update the length in the properties window.