SSIS IMPORT AND EXPORT WIZARD TUTORIAL

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Microsoft SQL Server Integration Services (SSIS)

- Platform for building high performance data integration solutions, including Extraction, Transformation, and Loading (ETL) packages for Business Intelligence (BI)
- Platform includes:
 - Graphical tools and wizards for building and debugging packages
 - Tasks for performing workflow functions such as executing SQL statements, FTP operations and sending e-mail messages
 - Data sources and destinations for extracting and loading data
 - Transformations for cleaning, aggregating, merging, and copying data

SSIS Import and Export Wizard

- SQL Server Integration Services (SSIS) provides the SQL Server Import and Export Wizard for building packages that perform data transfers.
- These packages can extract data from a source and load it into a destination, but the package can perform only minimal data transformation in the transfer process.
- In addition, the wizard is a quick way to create basic packages that can then be enhanced in SSIS Designer.

SSIS Import and Export Wizard Tutorial

- In this tutorial you will learn how to use the SQL Server Import and Export Wizard to create a basic package.
- The package selects and extracts data from an Excel spreadsheet and writes that data to a new table in the AdventureWorksDW2022 database.
- The new table is defined as one of the steps in the wizard and then created dynamically when the package is run.
- Latter, the package will be expanded to include a data flow that sorts the data, creates a new column, and populates that column with values.
- Based on the "Creating a Basic Package Using a Wizard" available at "https://technet.microsoft.com/en-us/library/ms365330(v=sql.105).aspx"

Visual Studio 2022

Open recent



■ This week



C:\Temp\PL2\SSIS ETL Tutorial

■ Older



C:\Users\PauloOliveira\source\repos\Teste

9/25/2023 7:47 PM

11/10/2022 5:23 PM

Let's start by creating a new project for the tutorial in *Visual Studio*.

Get started



Clone a repository

Get code from an online repository like GitHub or Azure DevOps



Open a project or solution

Open a local Visual Studio project or .sln file



Open a local <u>f</u>older

Navigate and edit code within any folder



Create a <u>n</u>ew project



Choose a project template with code scaffolding to get started

Continue without code →

Create a new project

Recent project templates



Integration Services Project

Select the *Integration* Services Project template.

Search for templates (Alt+S)

All languages

All platforms

All project types

multidimensional on an Analysis Services server.



Integration Services Project (Azure-Enabled)

This project may be used for building high performance data integration and workflow solutions that can also be run/debugged on SSIS Platform-as-a-Service (PaaS) in Azure Data Factory.



Integration Services Project



Integration Services Project

This project may be used for building high performance data integration and heaving an SSIS catalog, including extraction, transformation, and loading (ETL) operations for data warehousing.



Integration Services Import Project Wizard

A wizard that assists you in creating a new Integration Services (SSIS) project that is based on an existing one. Import from a project deployment file (.ispac extension) or from an Integration Services catalog on an instance of SQL Server.



Analysis Services Tabular Project

An Analysis Services project for creating tabular models.



Import from Server (Tabular)

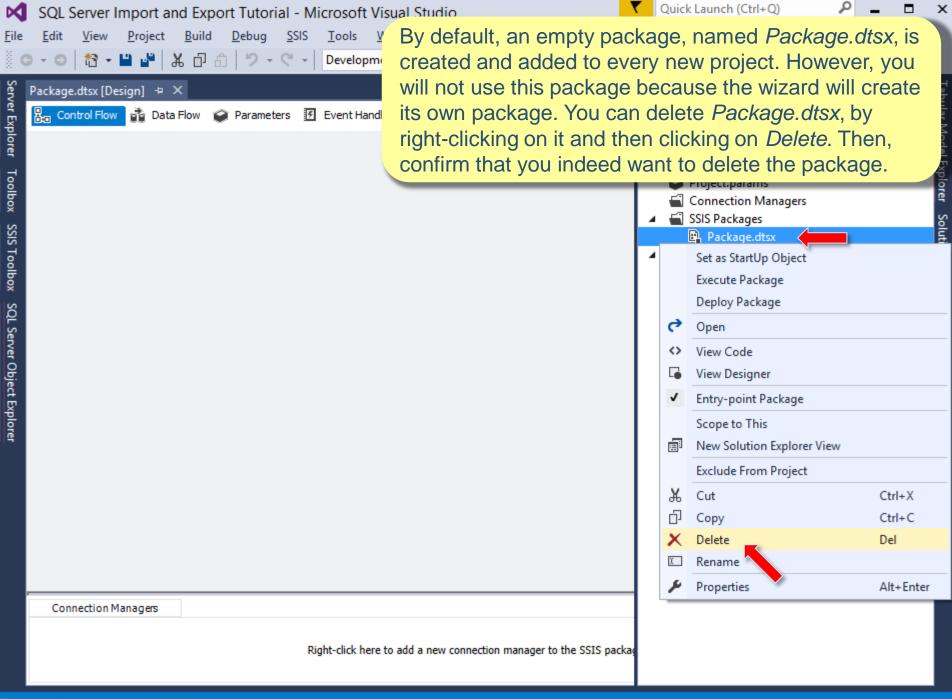
Creates a tabular project by extracting the metadata from an existing tabular database on an Analysis Services server.

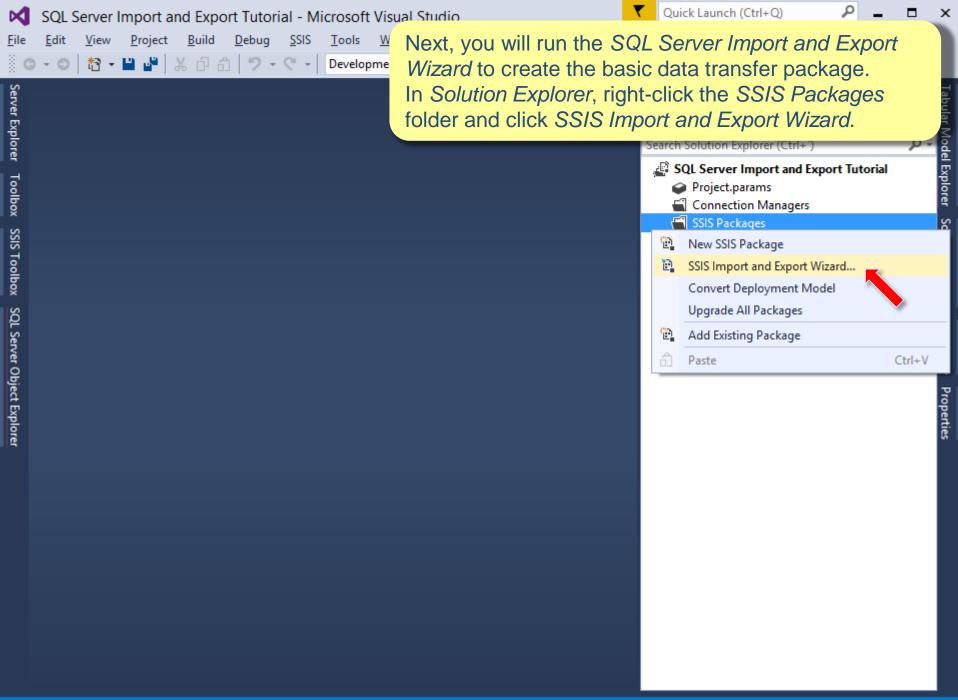
Configure your new project

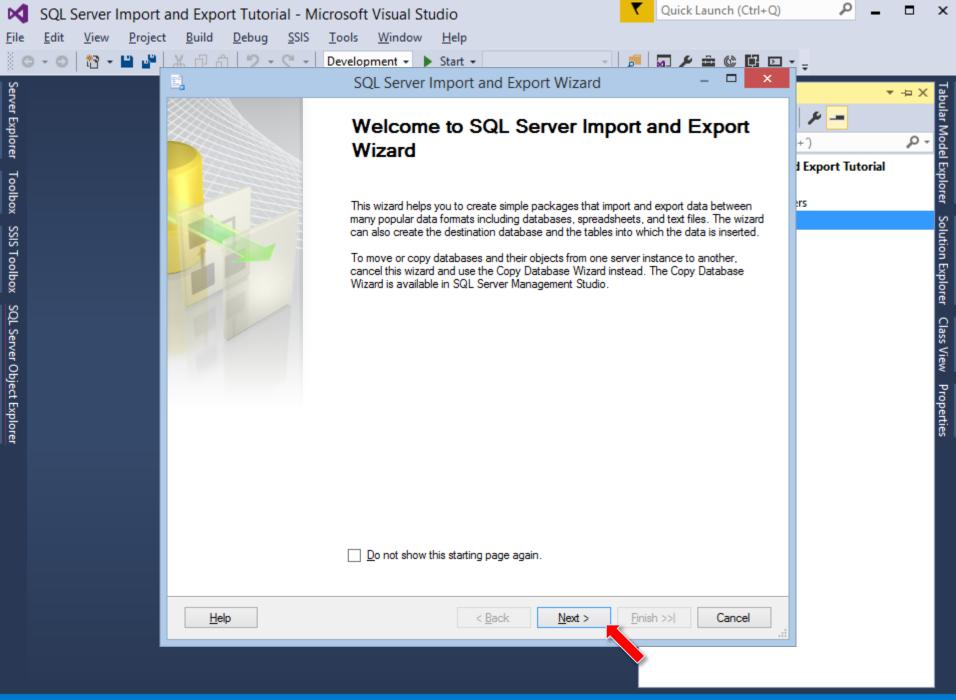
Integration Services Project

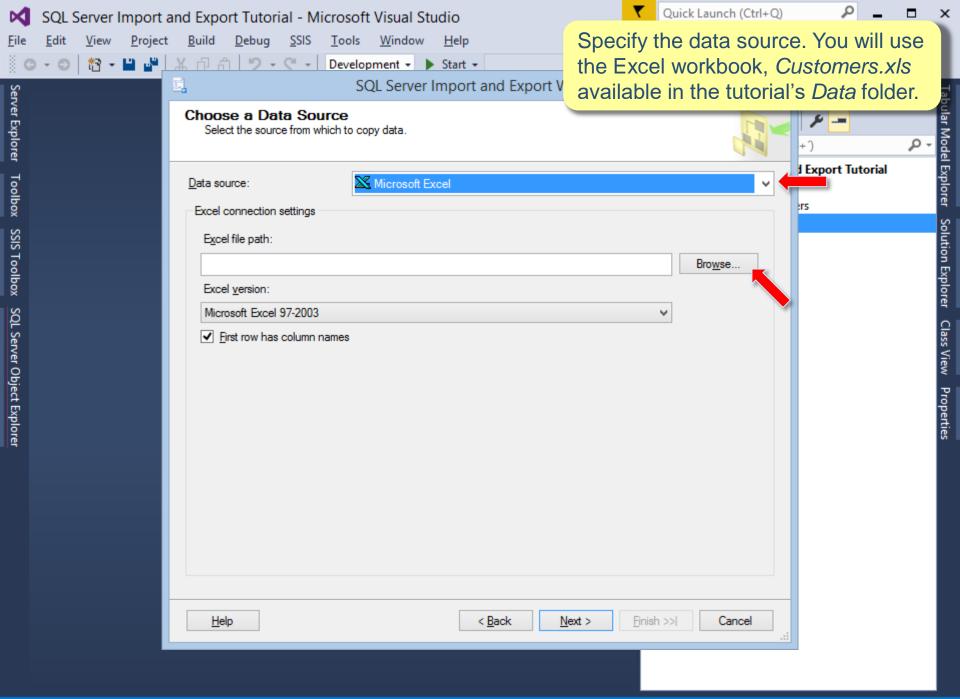
Name the project as *SQL Server Import* and *Export Tutorial*. The location can be anywhere you want.

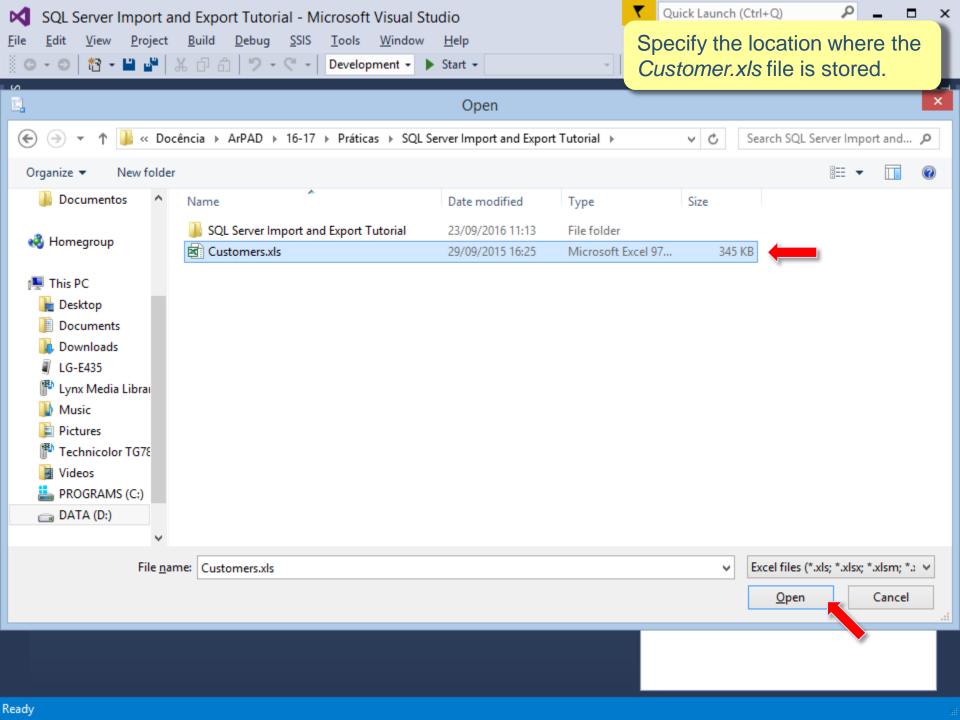
Project name	
SQL Server Import and Export Tutorial	
<u>L</u> ocation	
C:\Temp\PL3\	2
Solution name ①	
SQL Server Import and Export Tutorial	
Place solution and project in the same <u>d</u> irectory	
Project will be created in "C:\Temp\PL3\SQL Server Import and Export Tutorial\SQL Server Import and Export Tutorial\"	











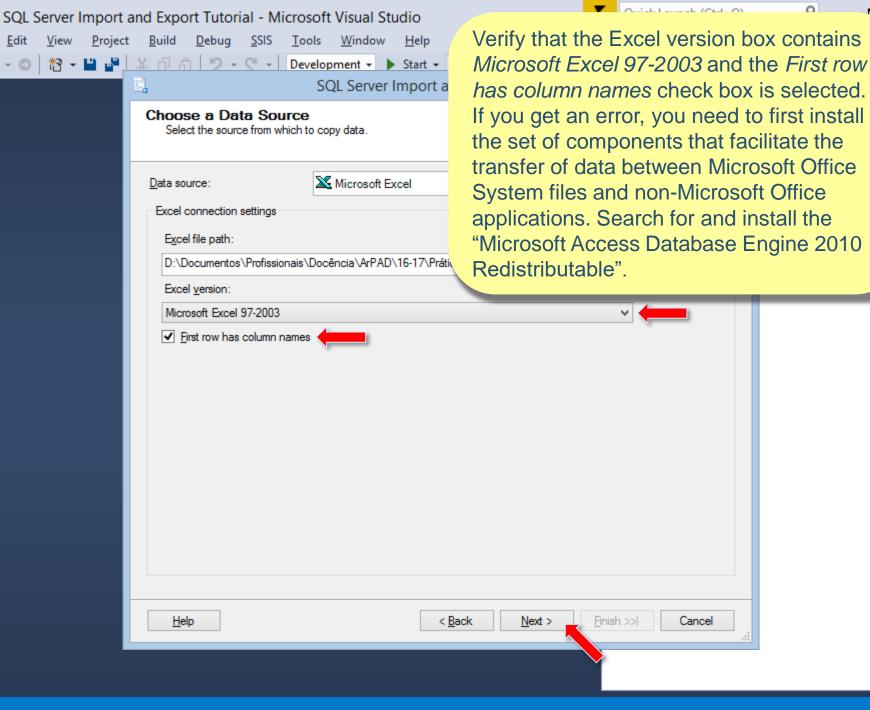


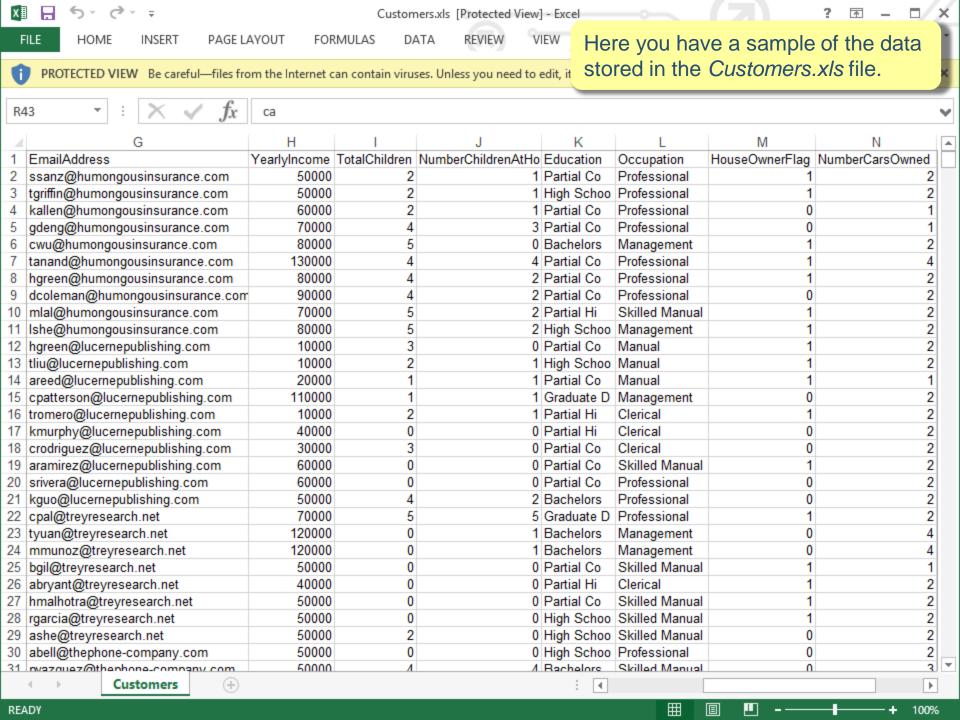
SQL Server Object Explorer

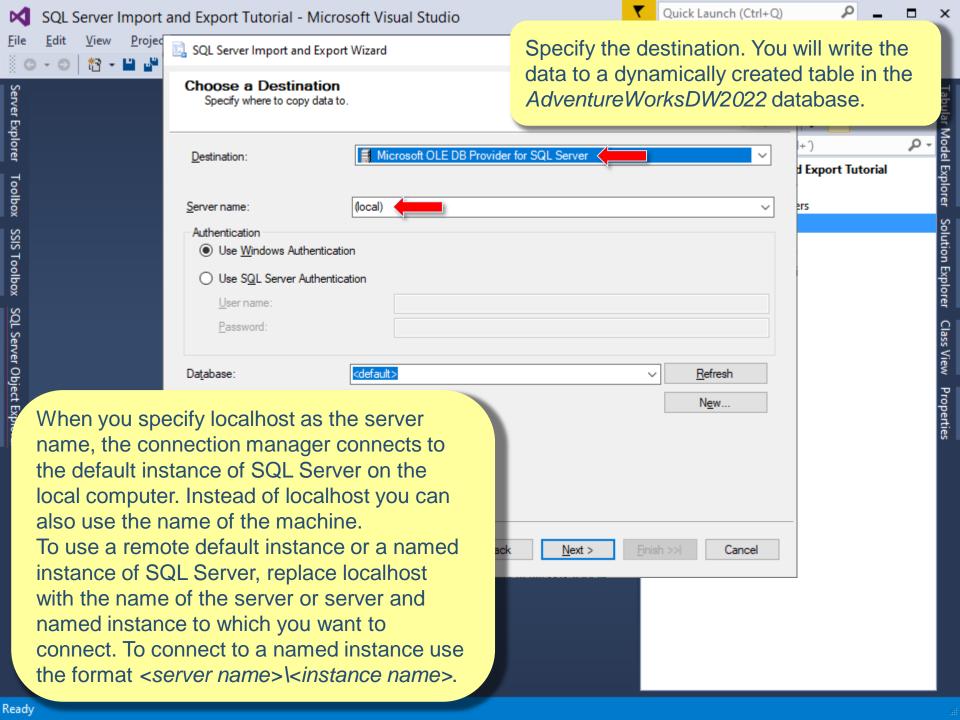
Server Explorer

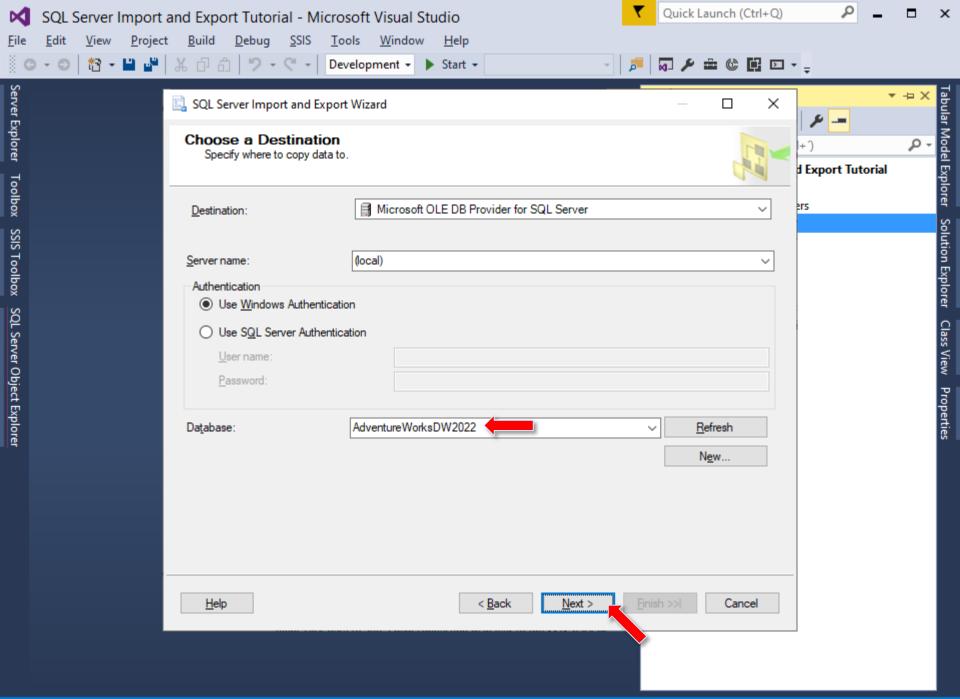
Toolbox

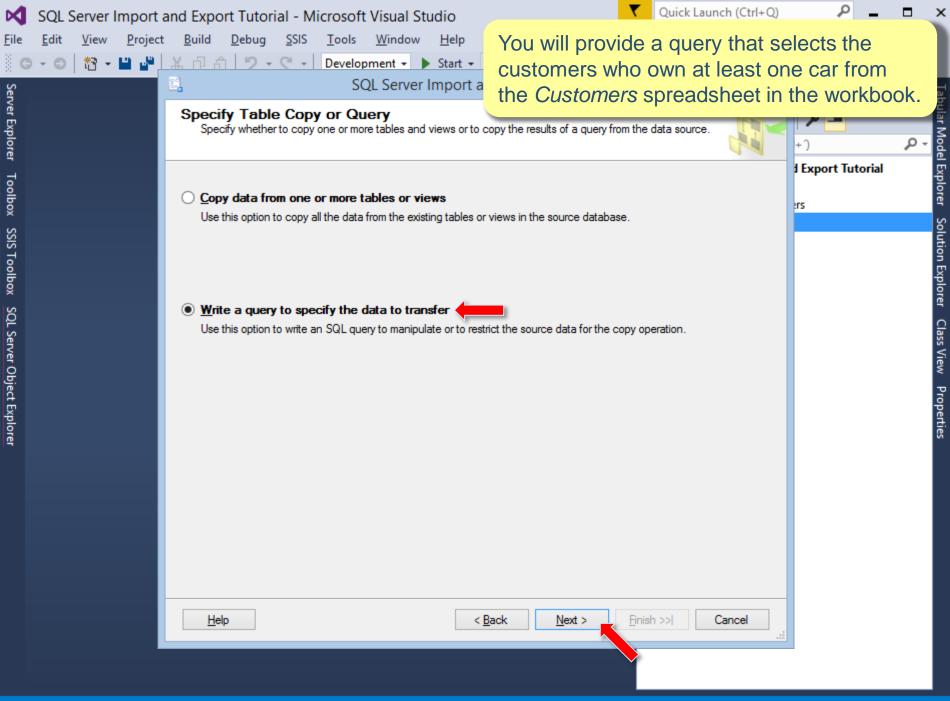
SSIS Toolbox

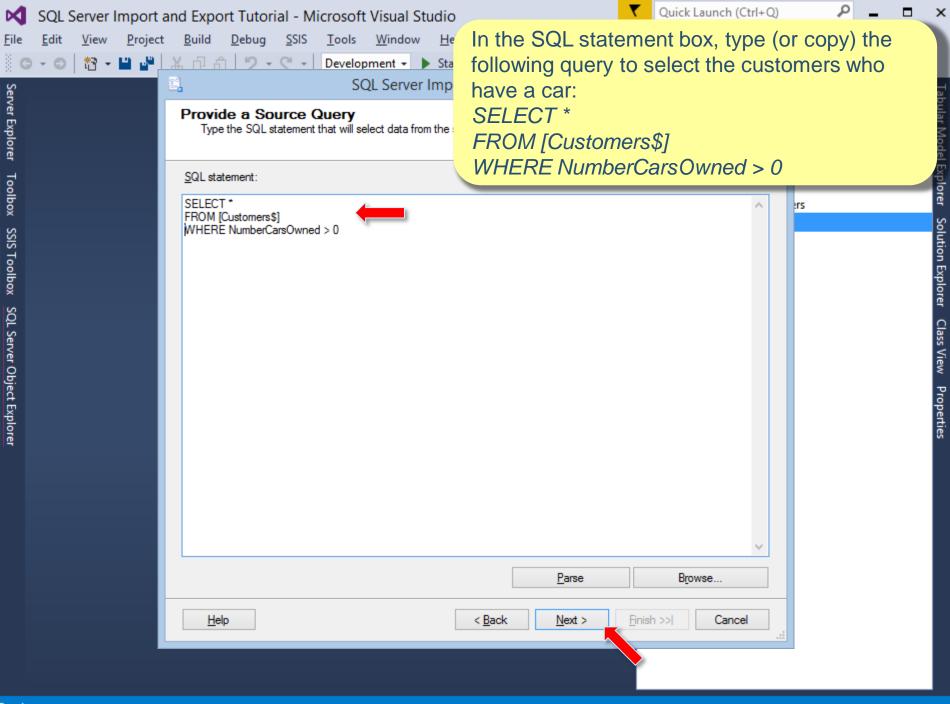


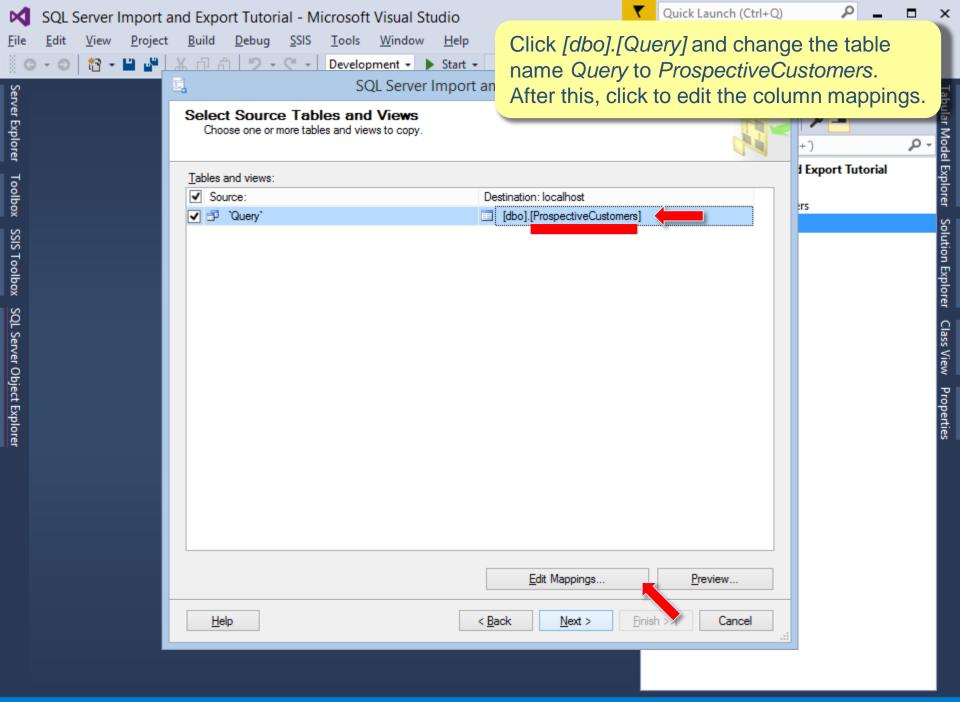


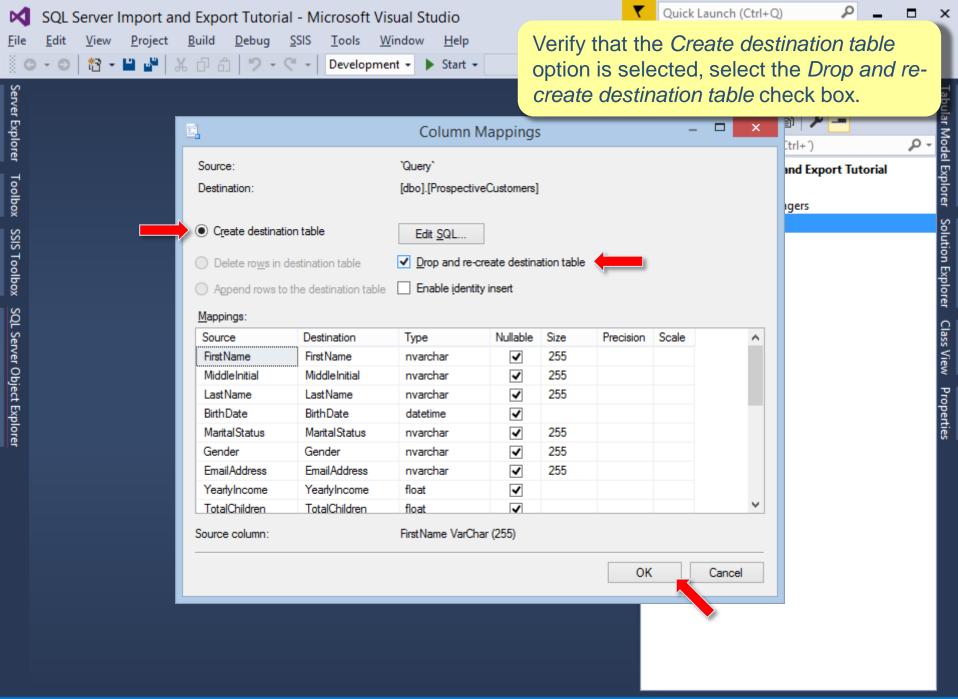


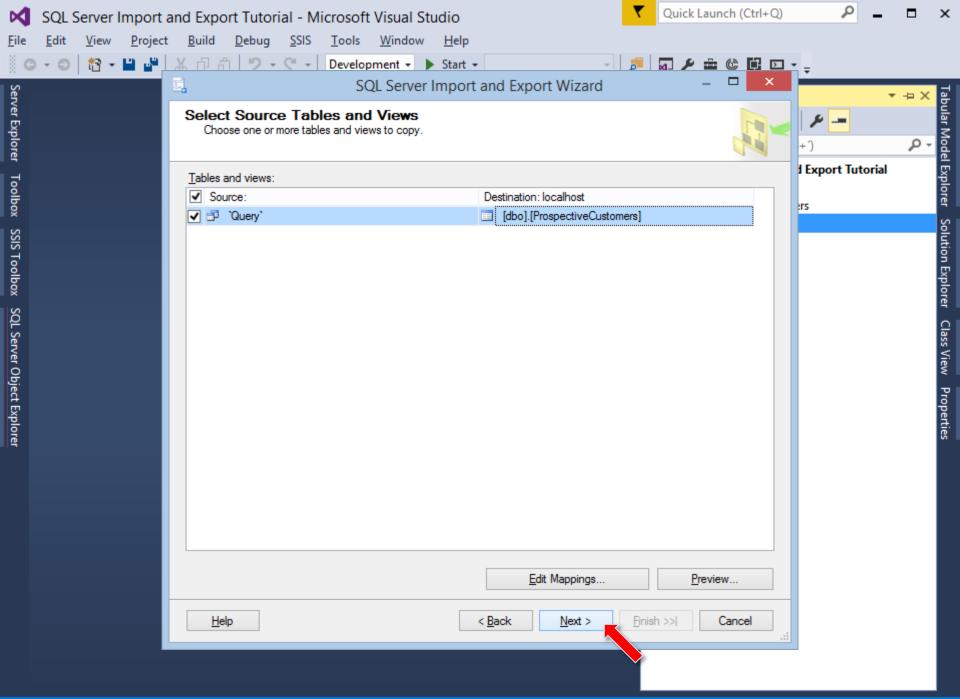


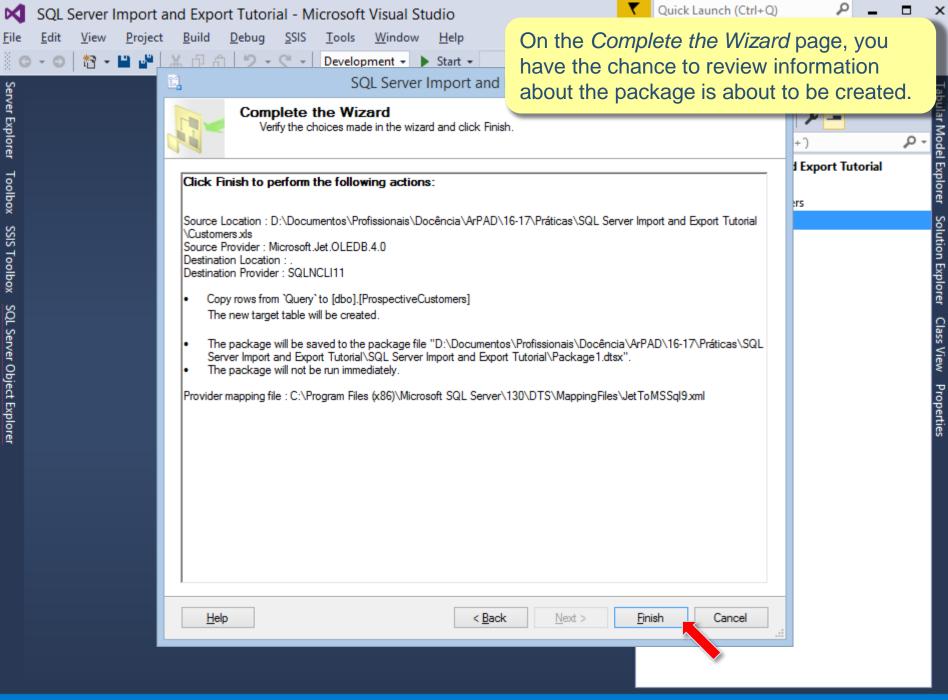


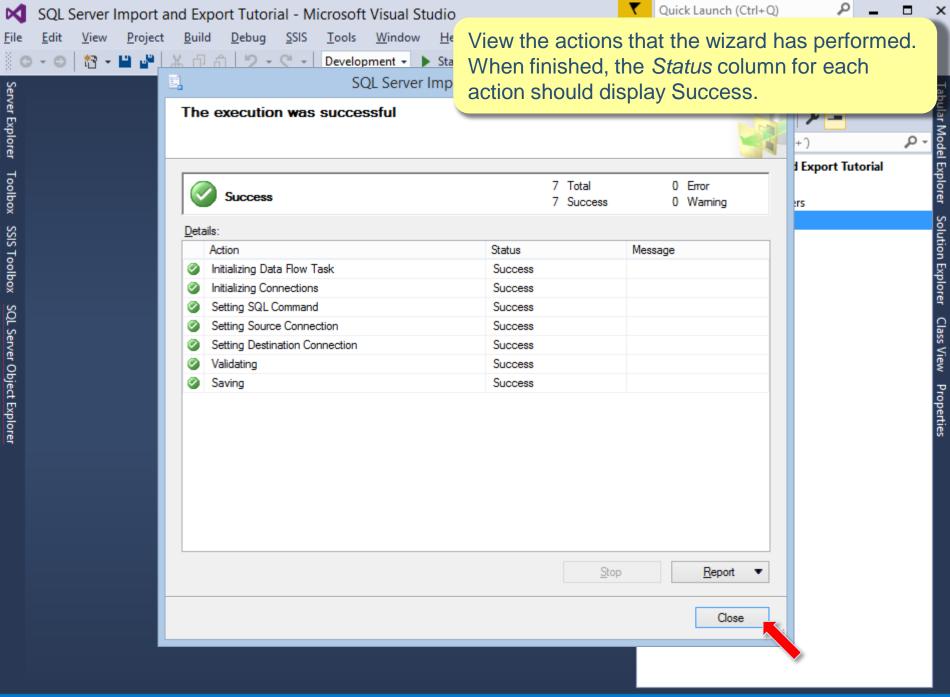


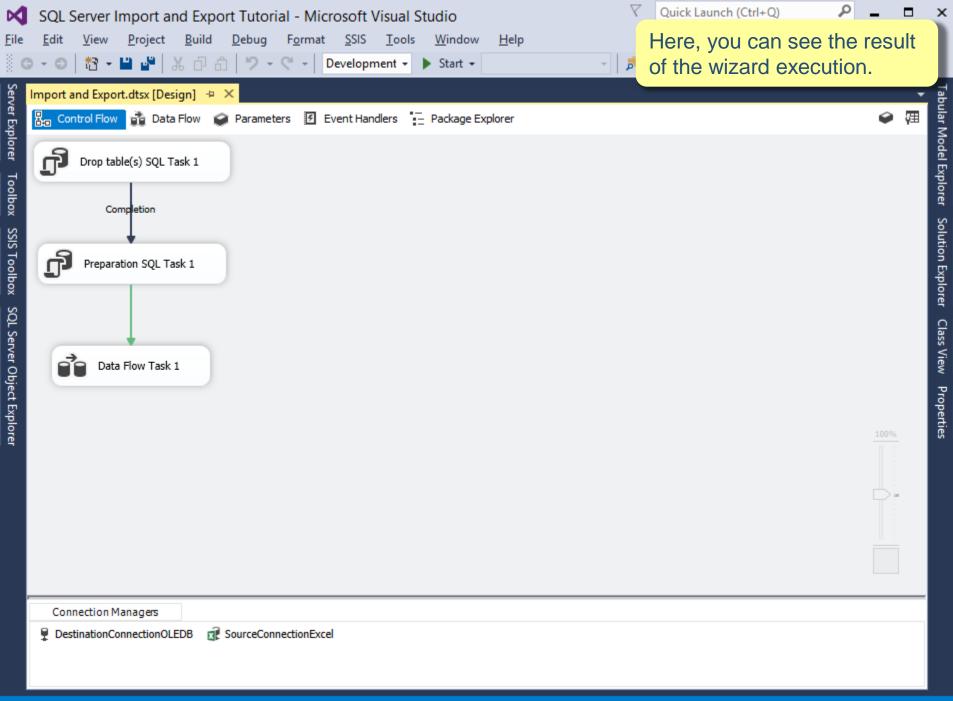


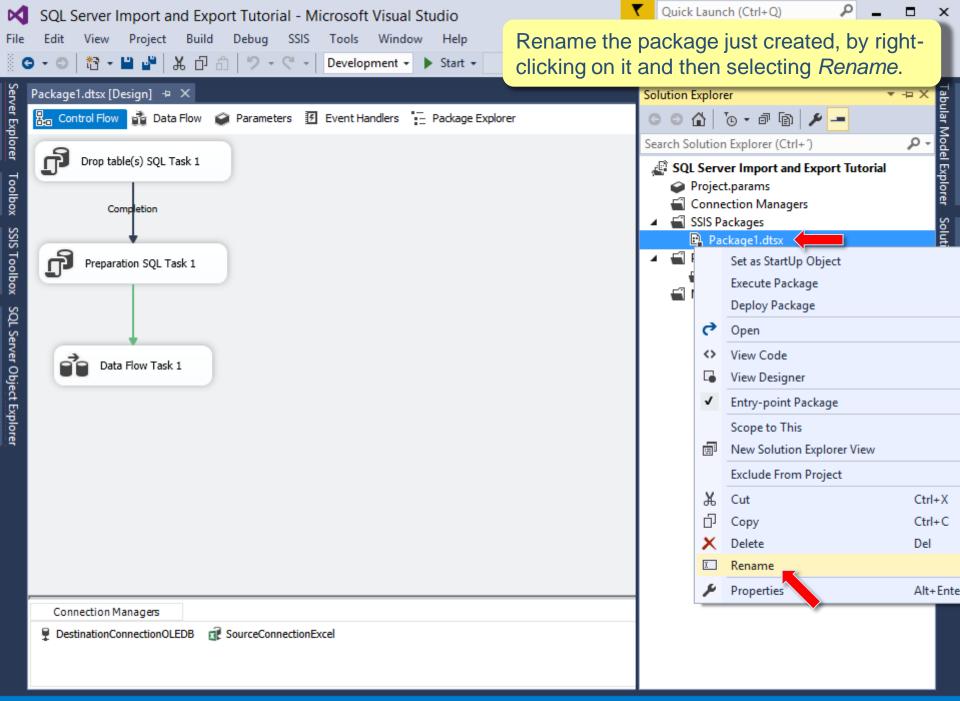


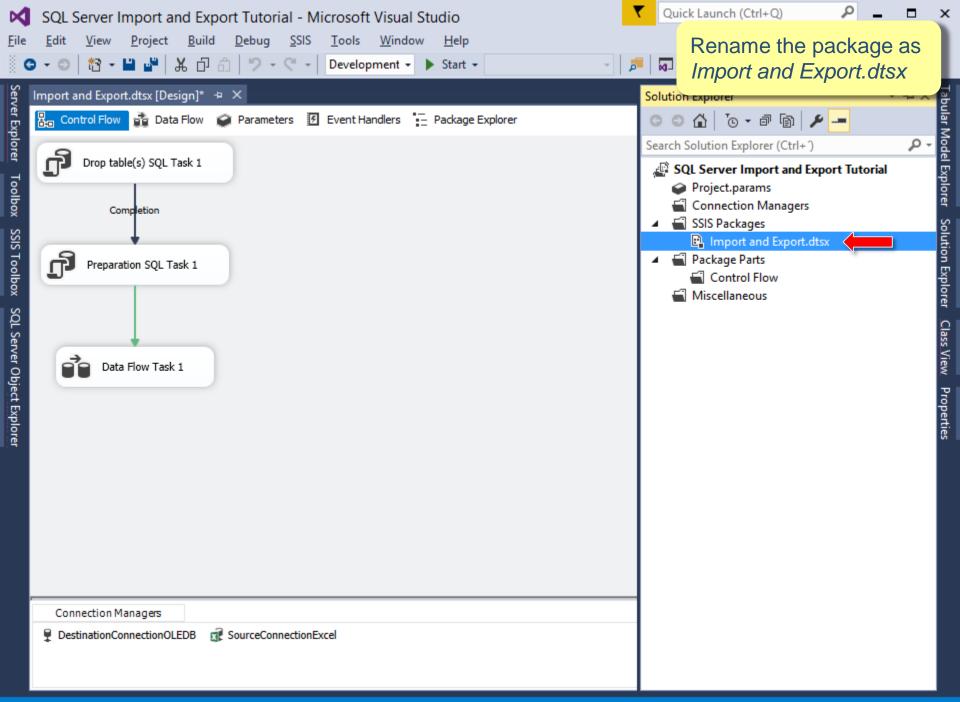


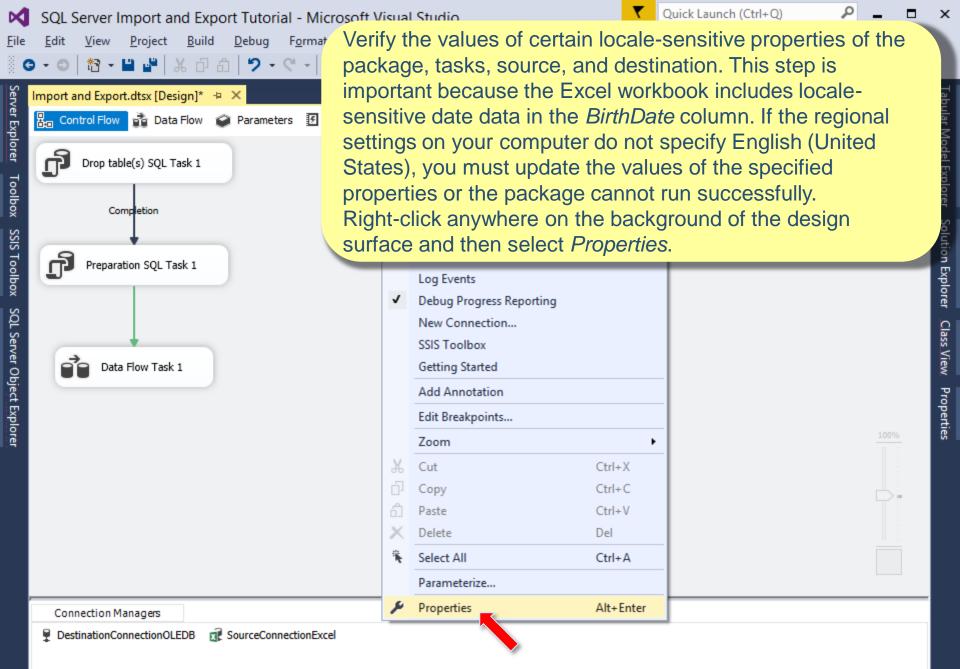


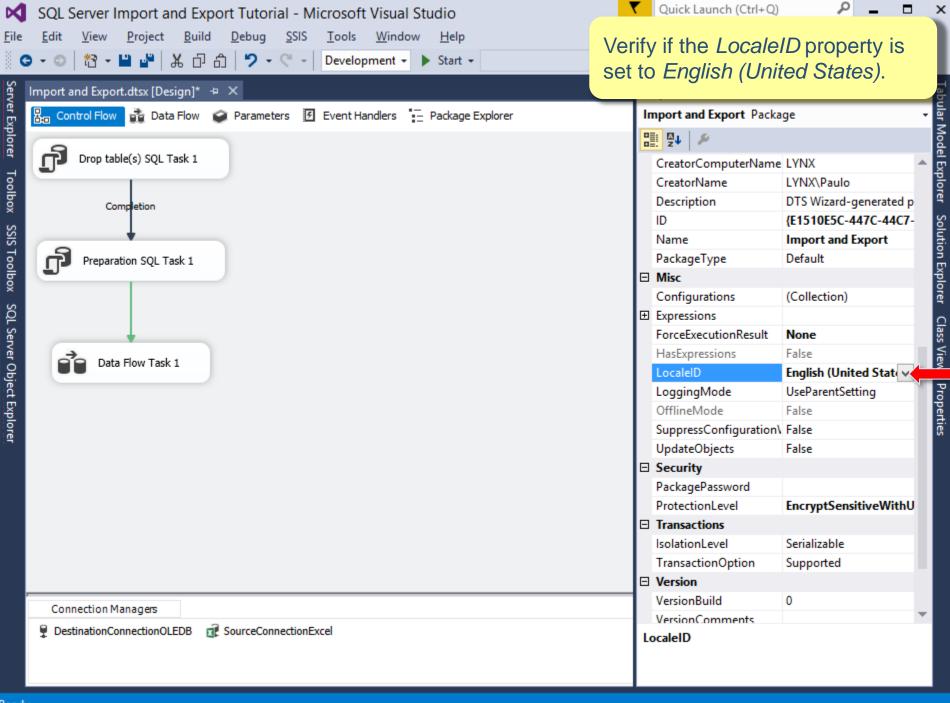


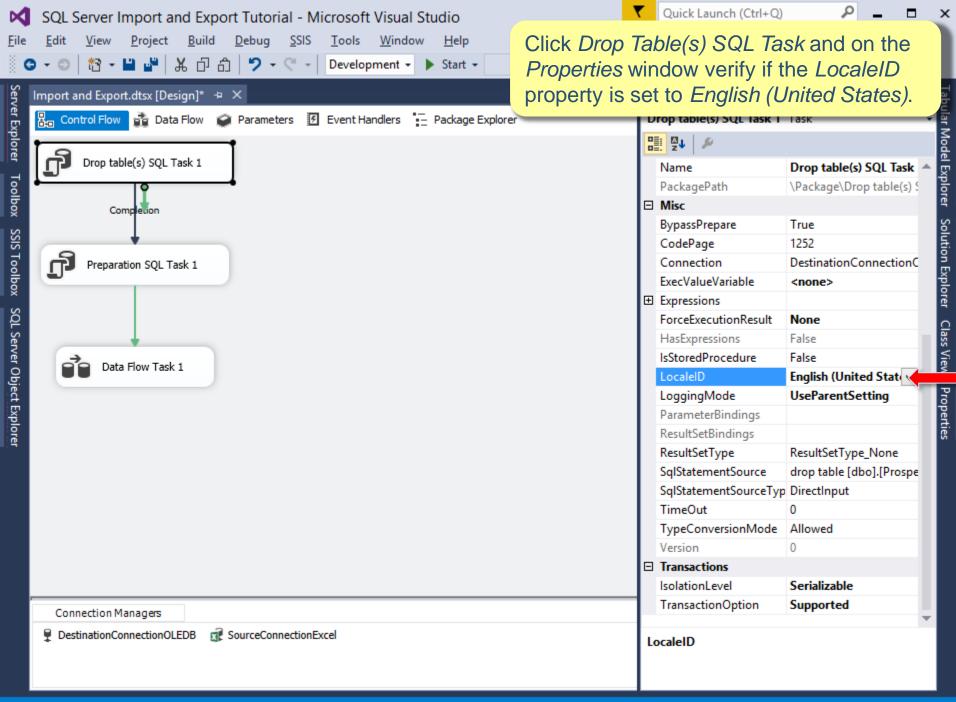


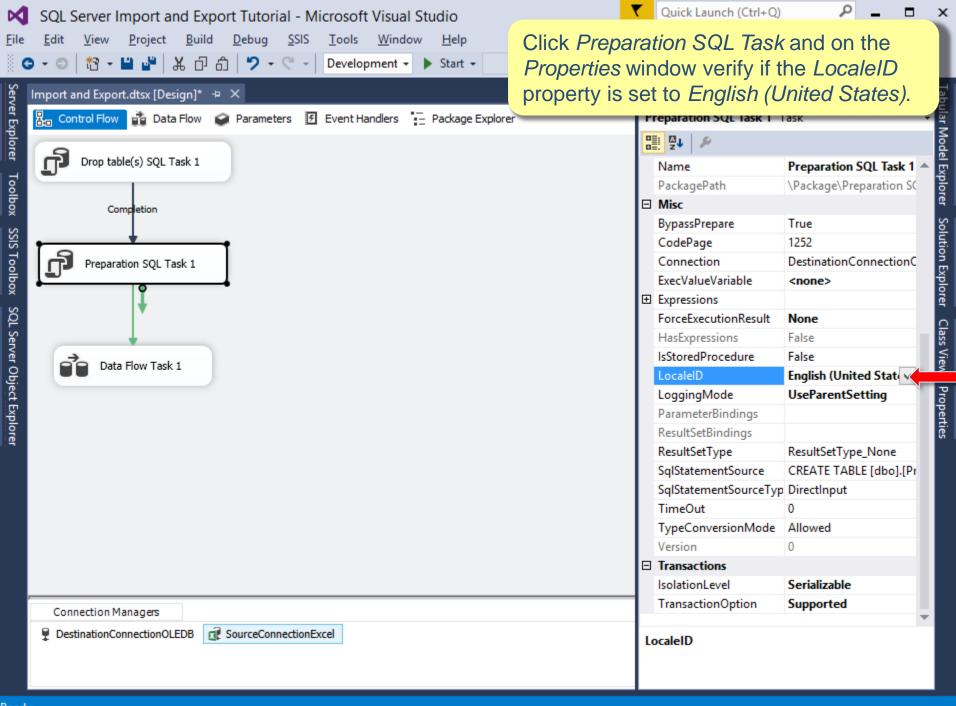


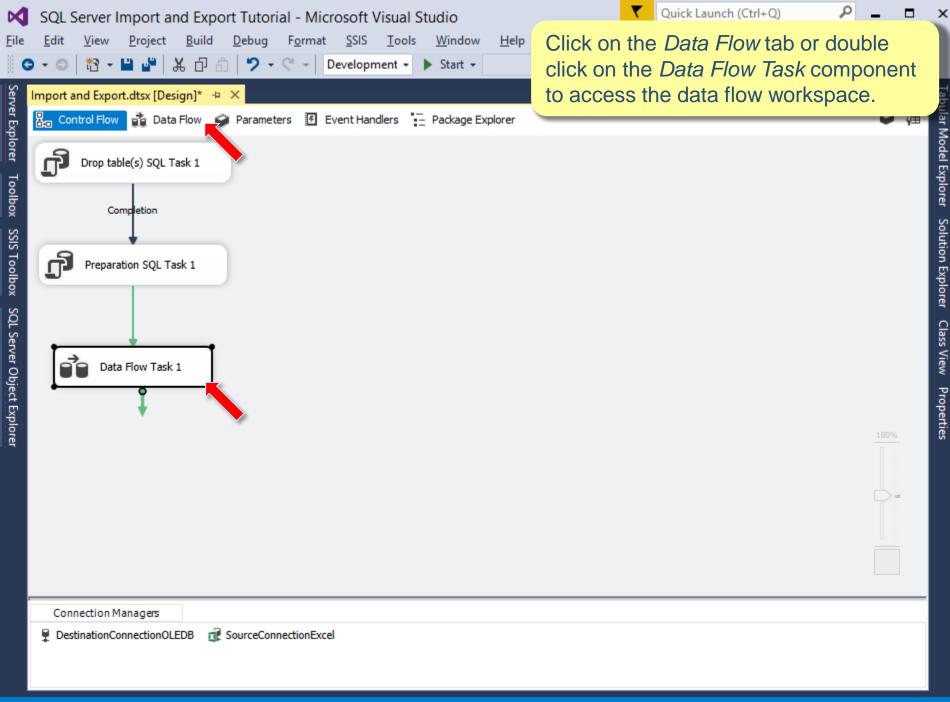


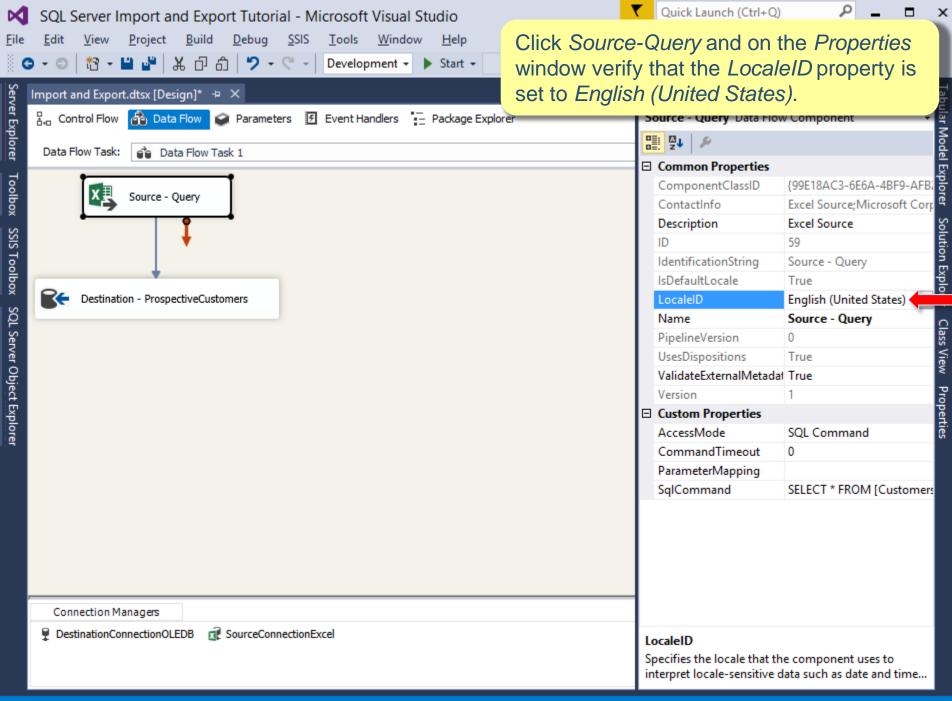


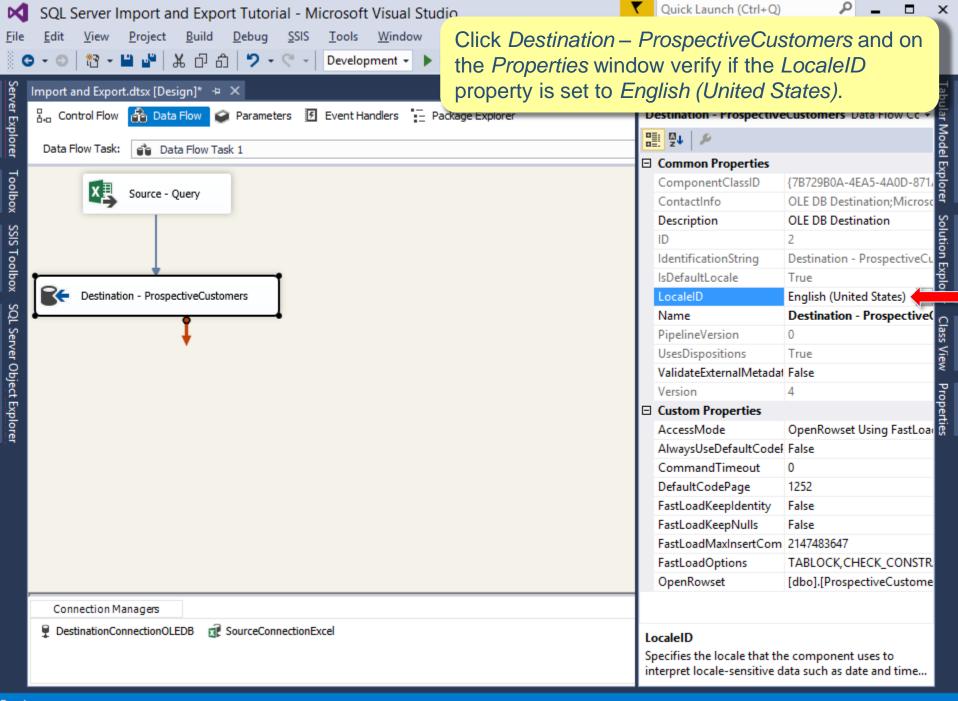


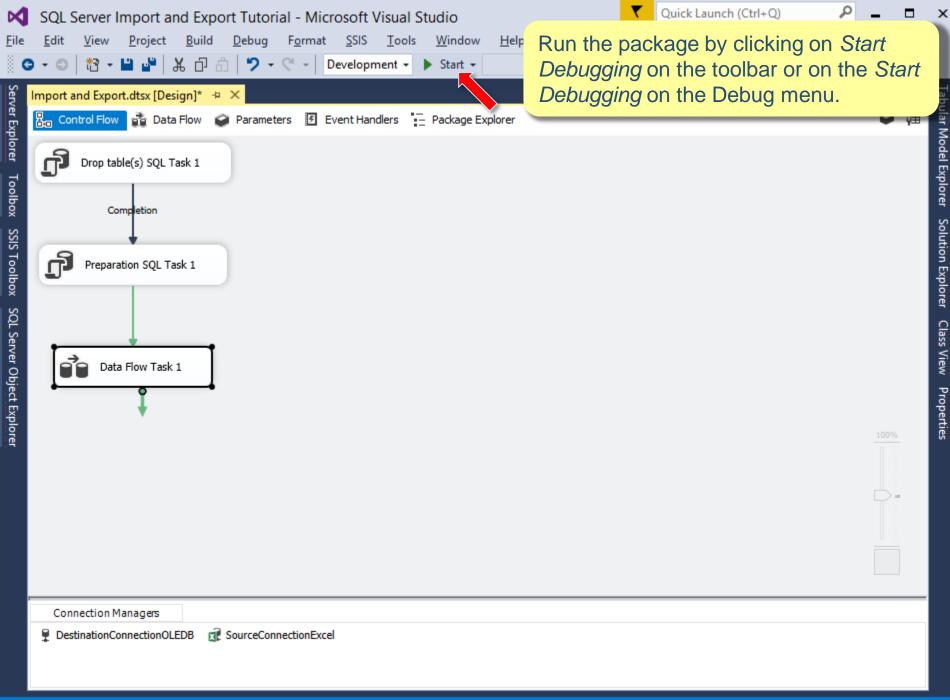


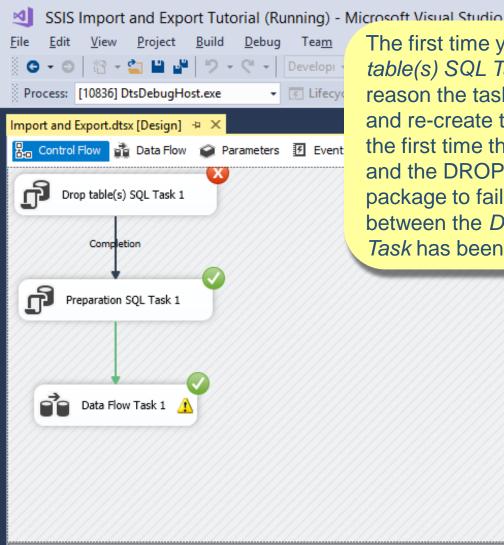












The first time you run the package, the task named *Drop table(s) SQL Task* will fail. This behavior is expected. The reason the task fails is that the package attempts to drop and re-create the *ProspectiveCustomers* table; however, the first time that the package runs the table does not exist and the DROP statement fails. This does not cause the package to fail because the precedence constraint between the *Drop table(s) SQL Task* and *Preparation SQL Task* has been set to *Completion* rather than *Success*.

Quick Launch (Ctrl+Q)

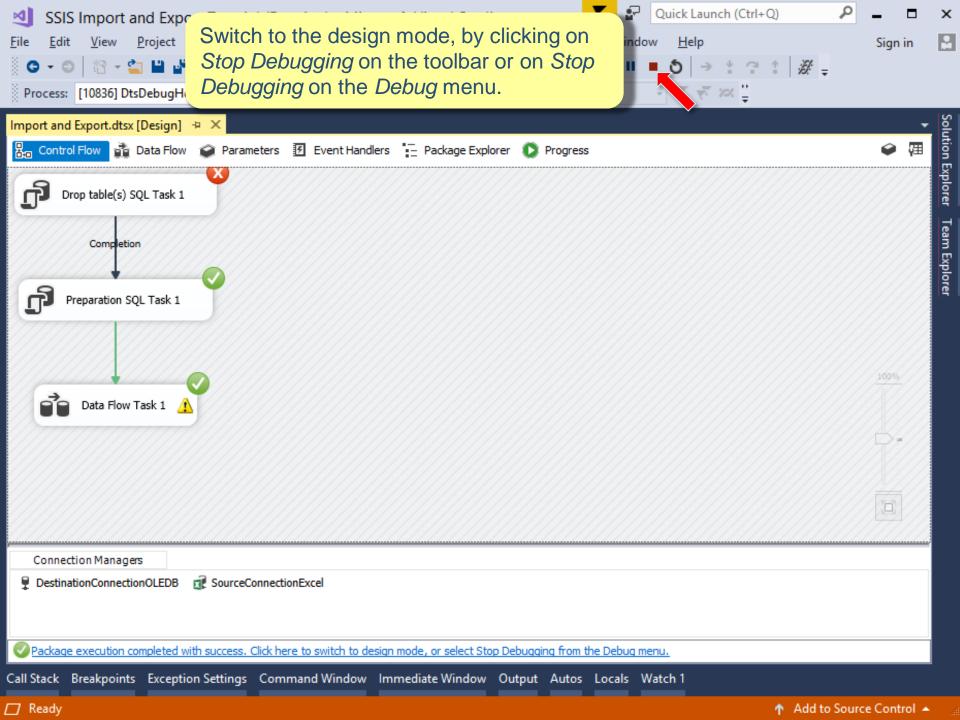
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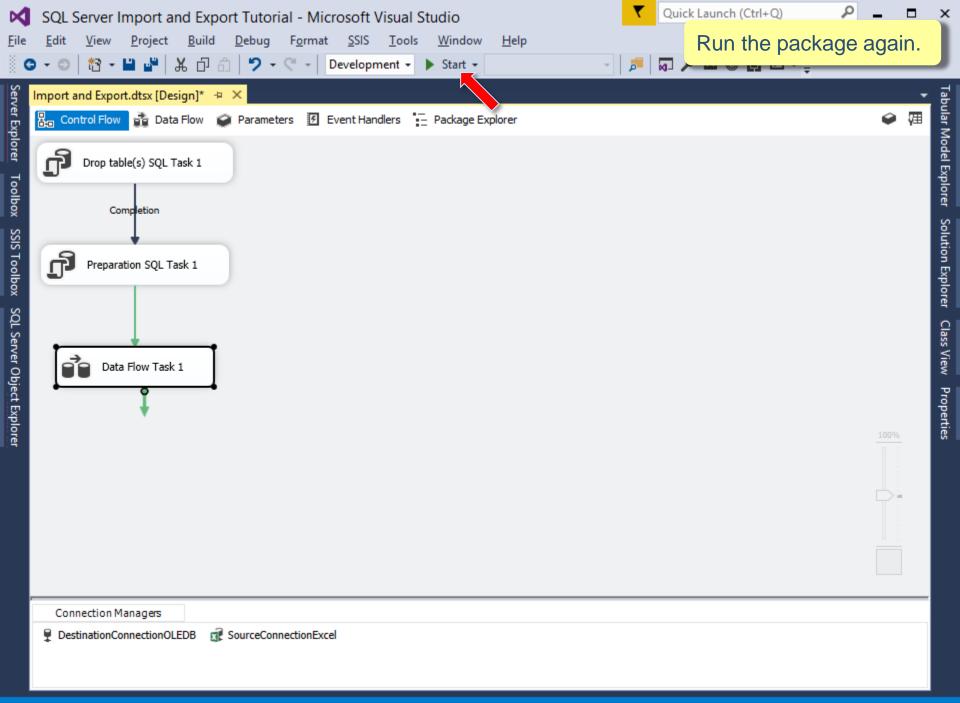
₱ DestinationConnectionOLEDB

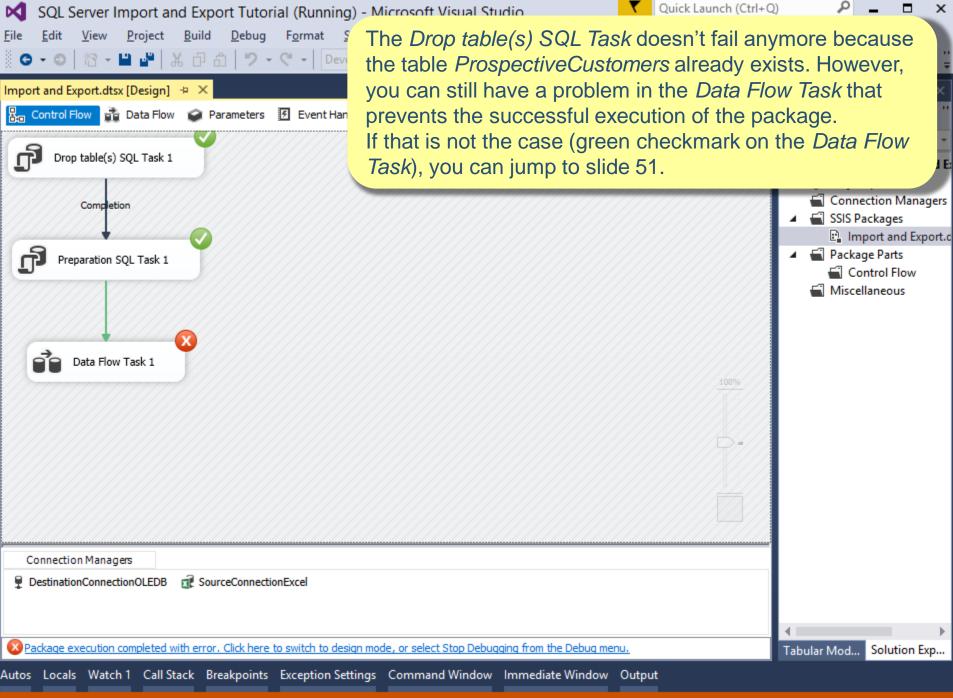
₱ SourceConnectionExcel

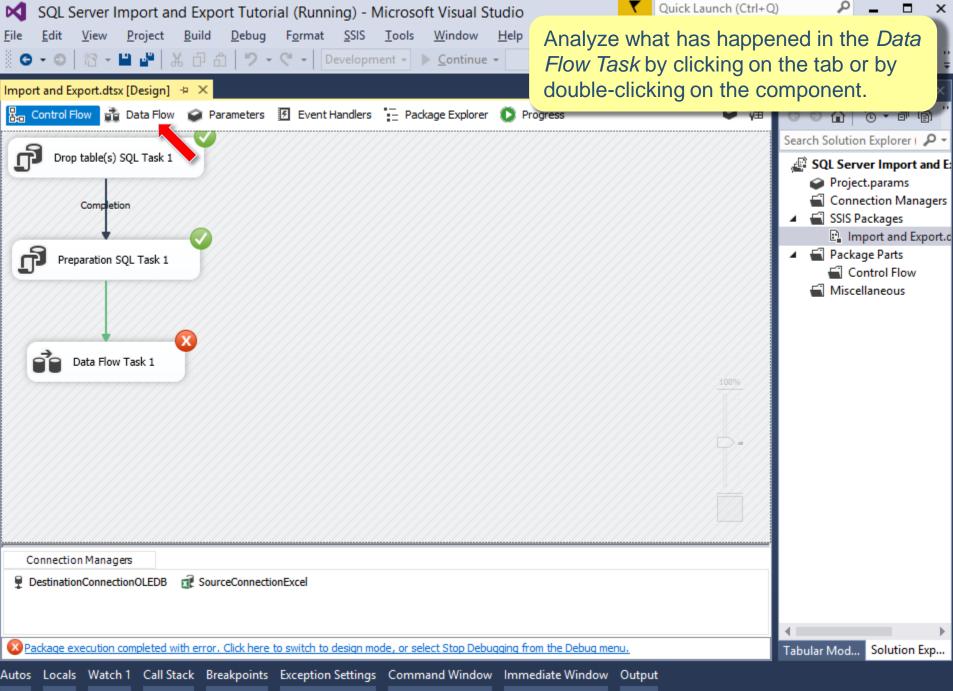
Package execution completed with success. Click here to switch to design mode, or select Stop Debugging from the Debug menu.

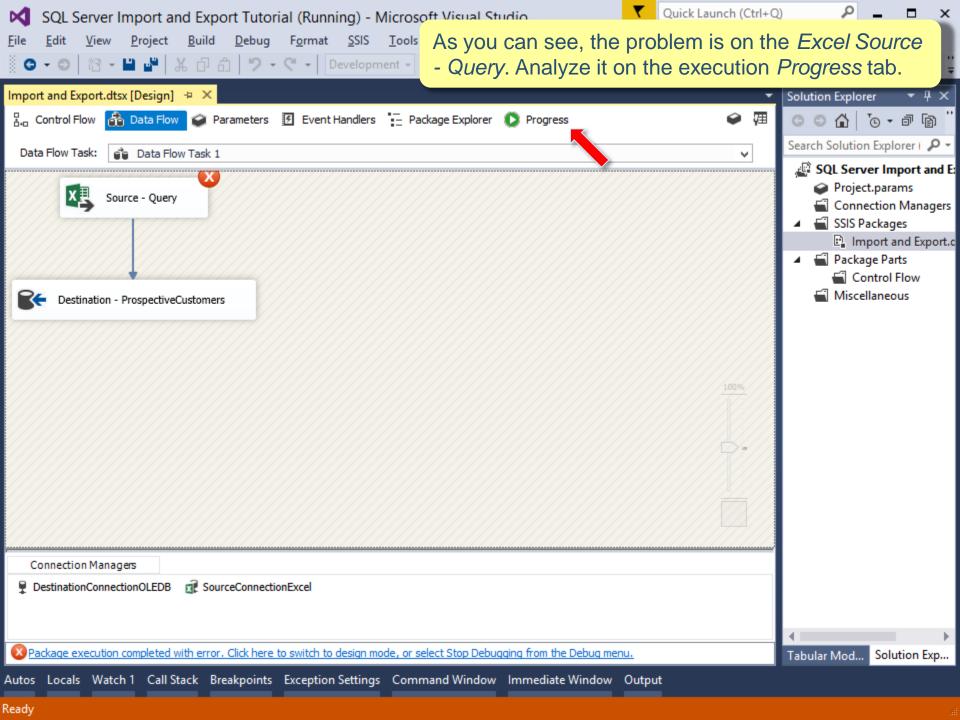
Call Stack Breakpoints Exception Settings Command Window Immediate Window Output Autos Locals Watch 1

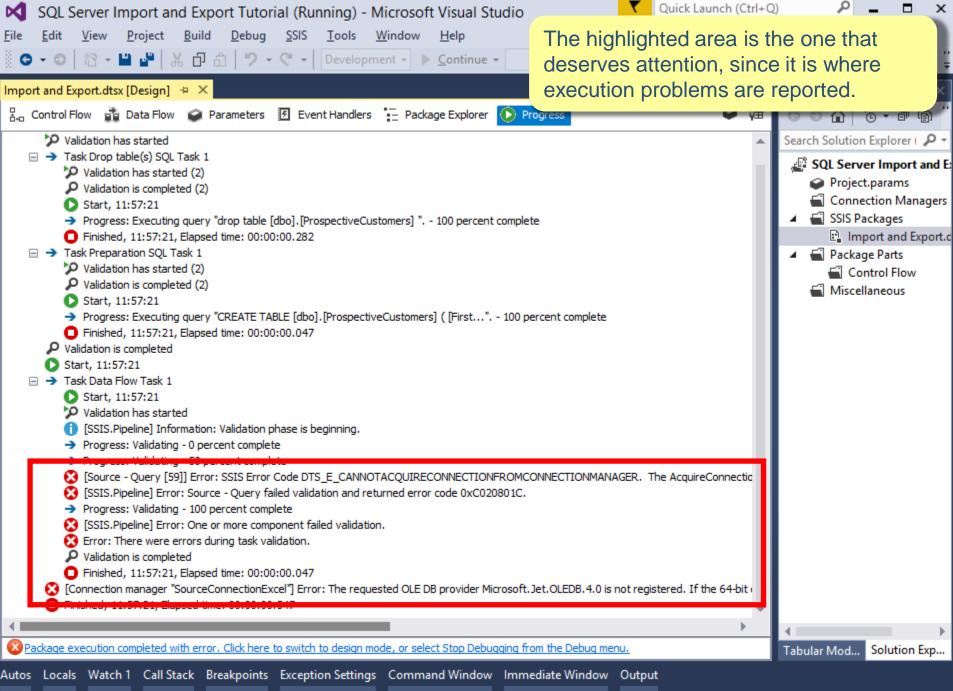


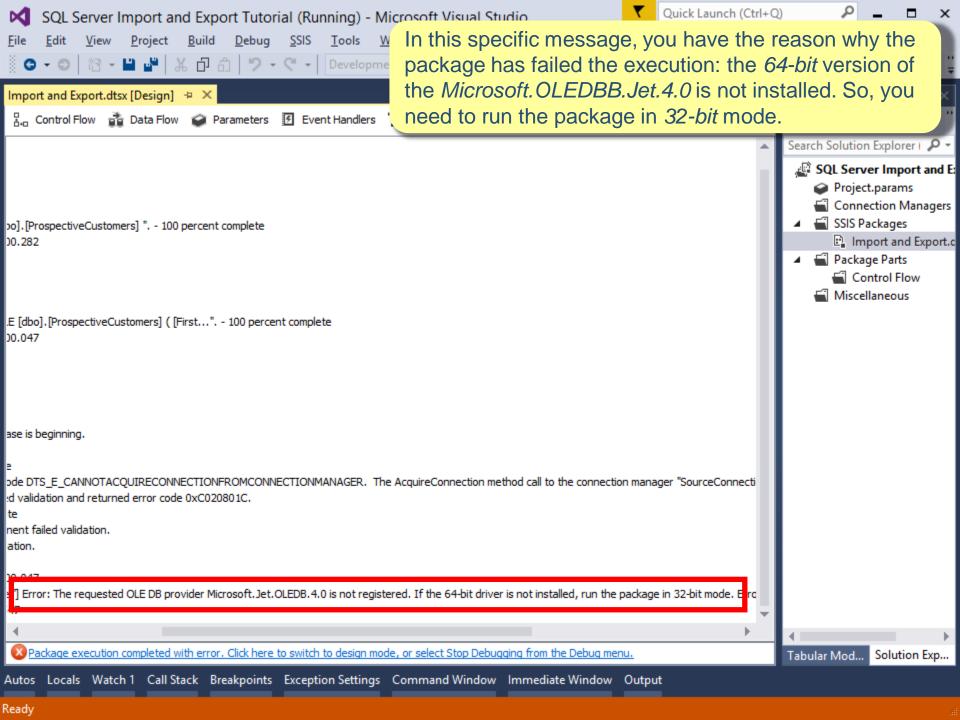


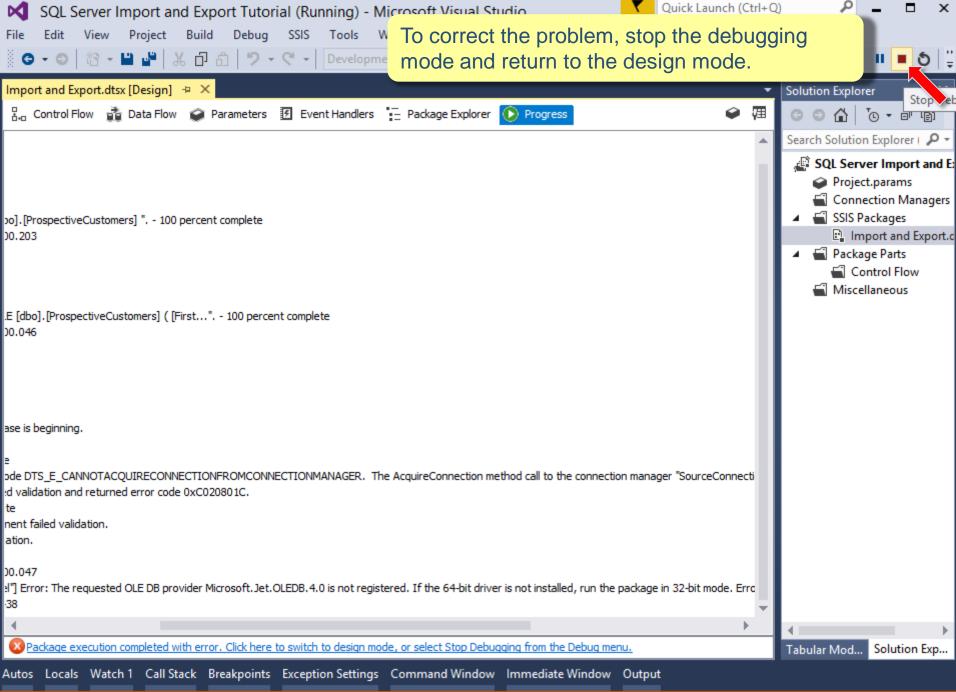


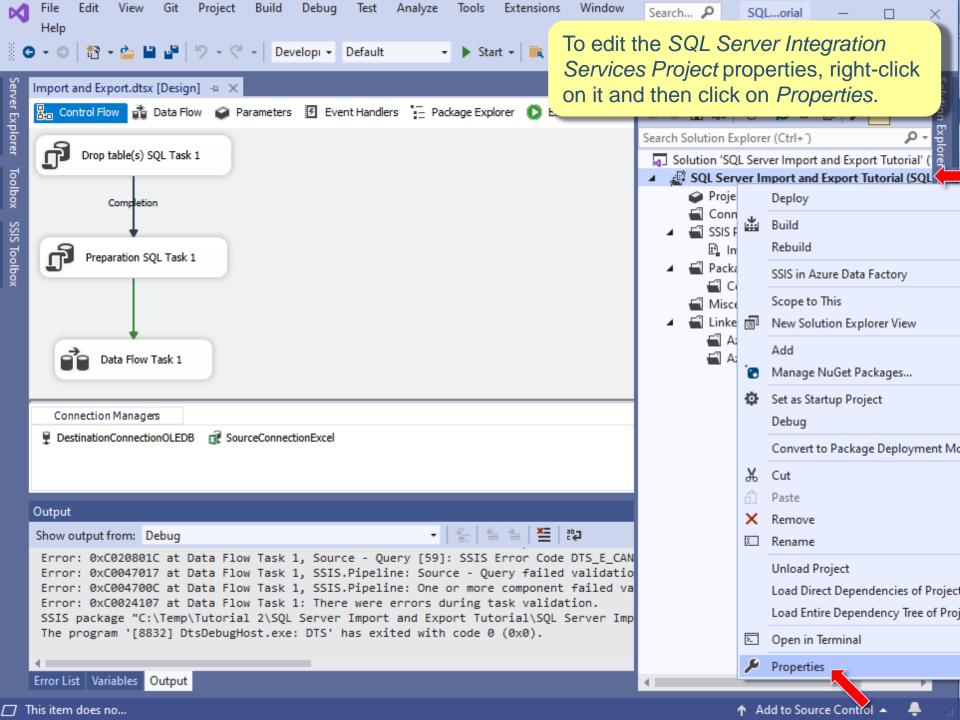


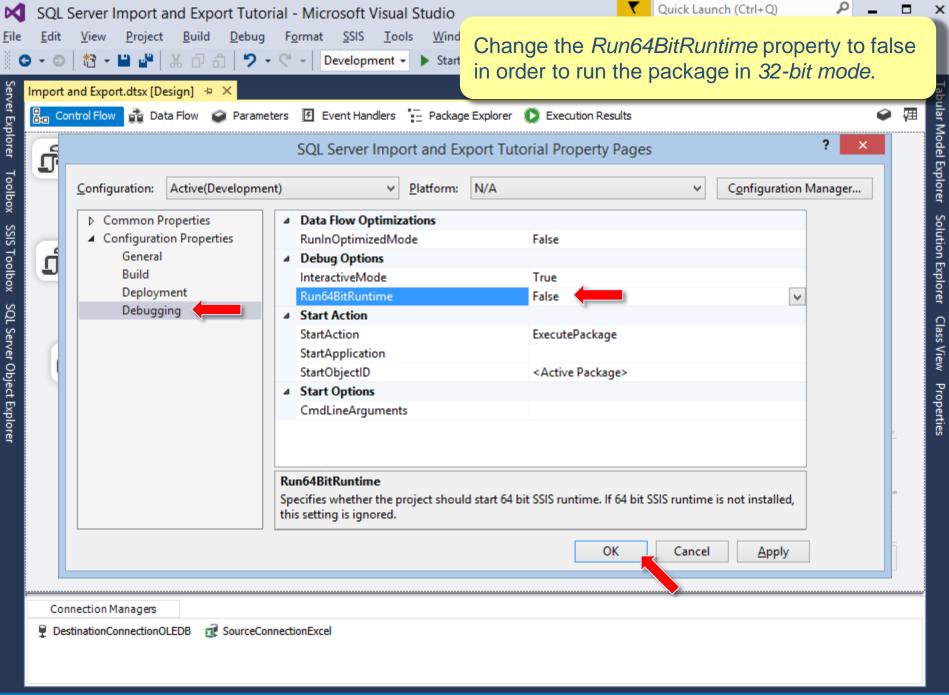


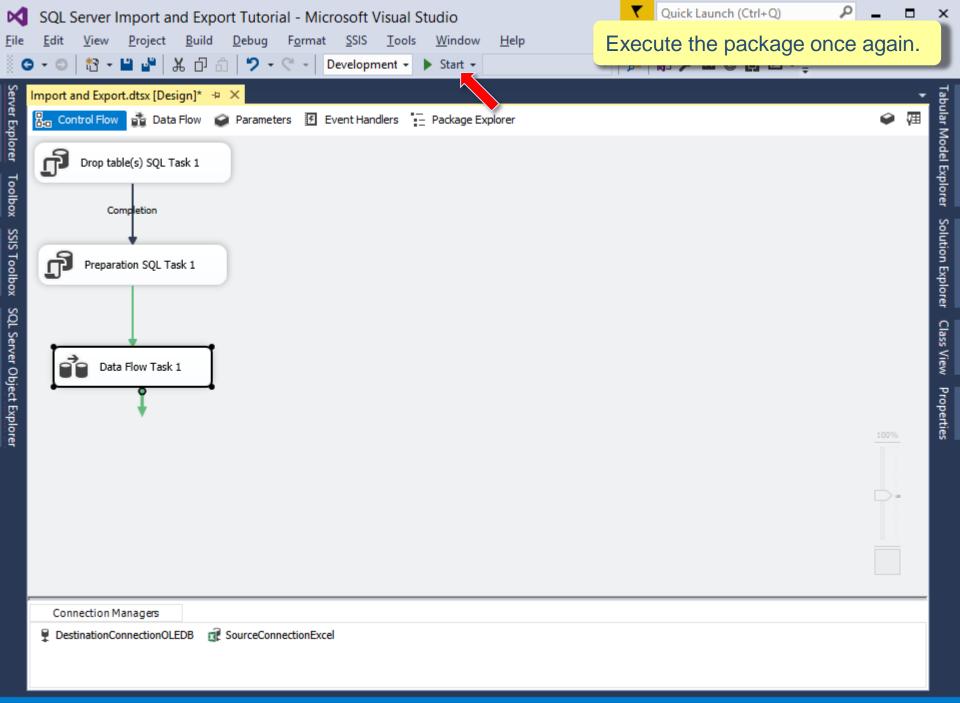


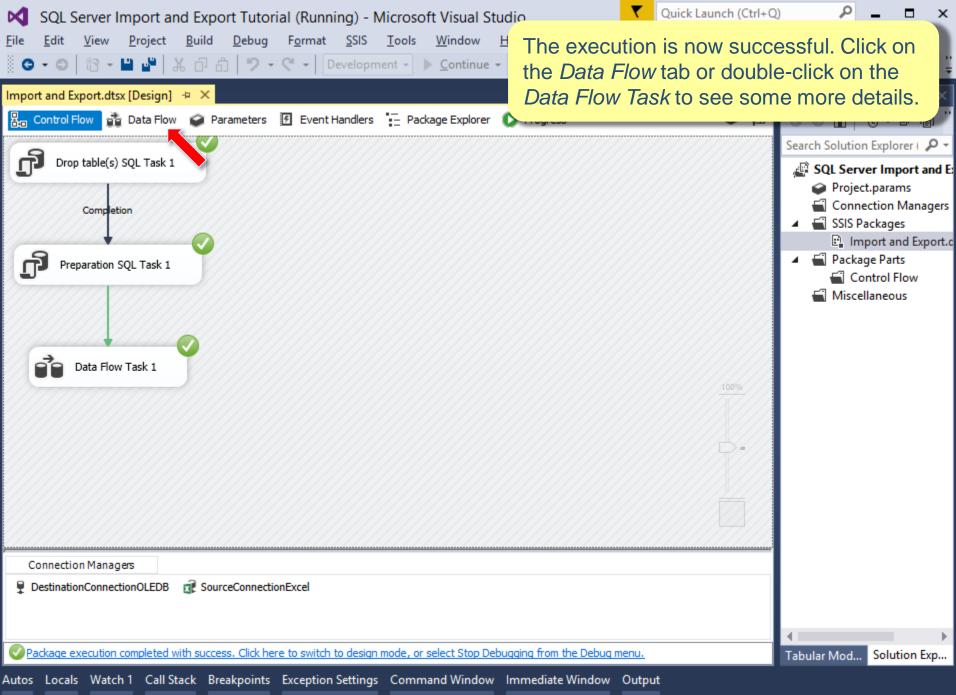


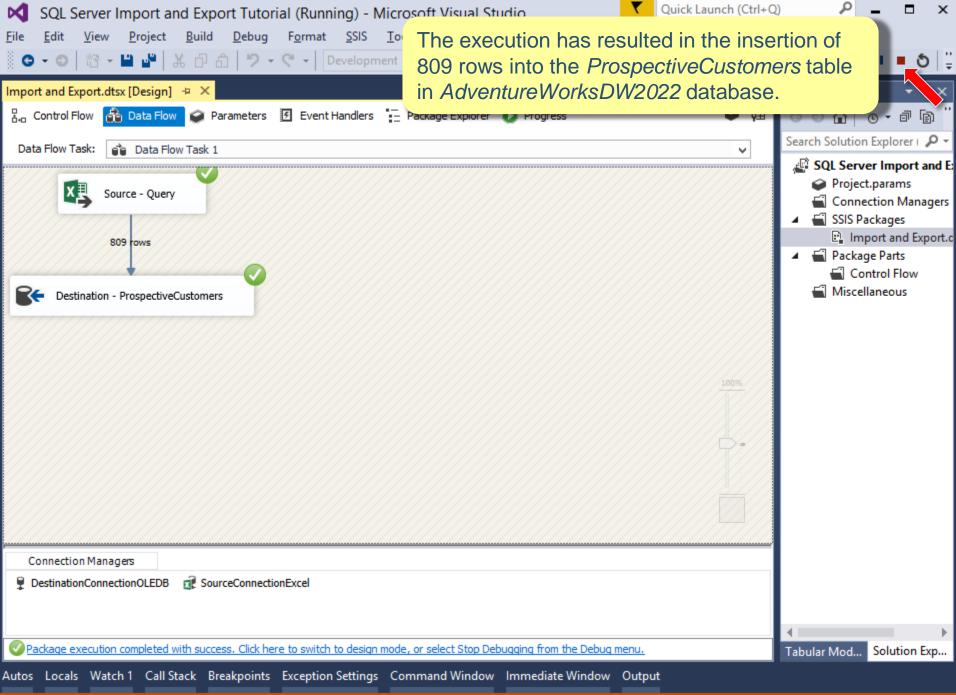






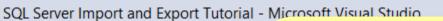


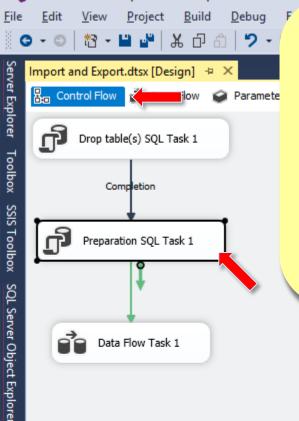




SSIS Import and Export Wizard Tutorial

- The package just created has limited functionality; it only extracts data from an Excel workbook file and loads the data into a sample database.
- Typically, a package also needs to manipulate and transform the data.
- Integration Services provides a wealth of transformations that you can use to copy, cleanse, modify, sort, and aggregate data.
- If you need to transform data in ways that are not supported by the standard transformations, you can easily write a script for the Script transformation or code a custom transformation to address your needs.
- Next, you will enhance the basic package to sort the data and add a new column based on values from other columns of the dataset.
- Because a new column is added to the dataset, the *ProspectiveCustomers* table and the OLE DB destination must be modified to include this new column.

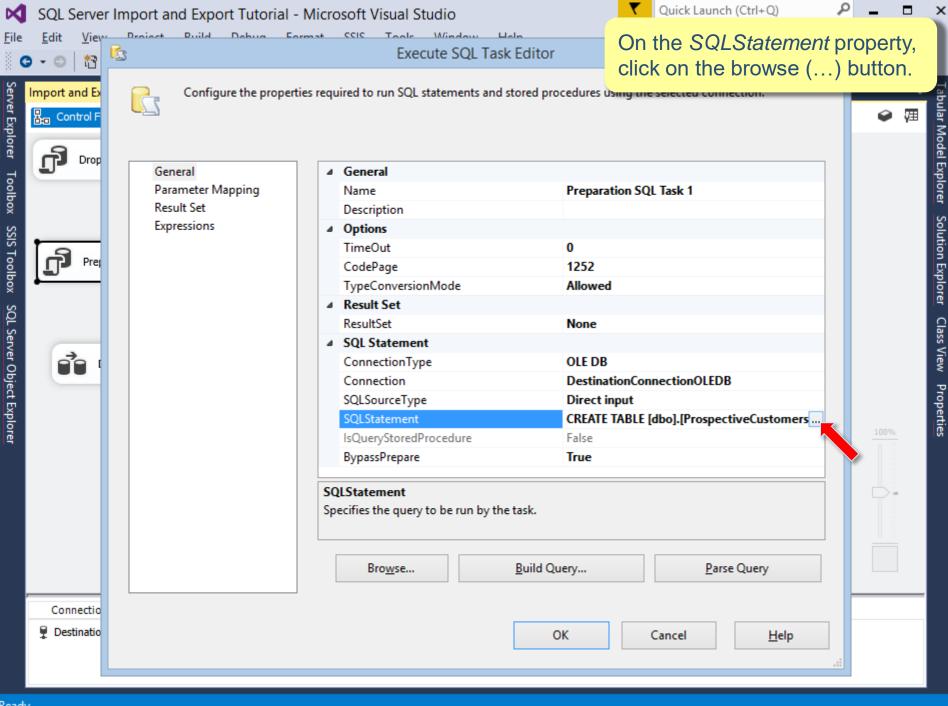


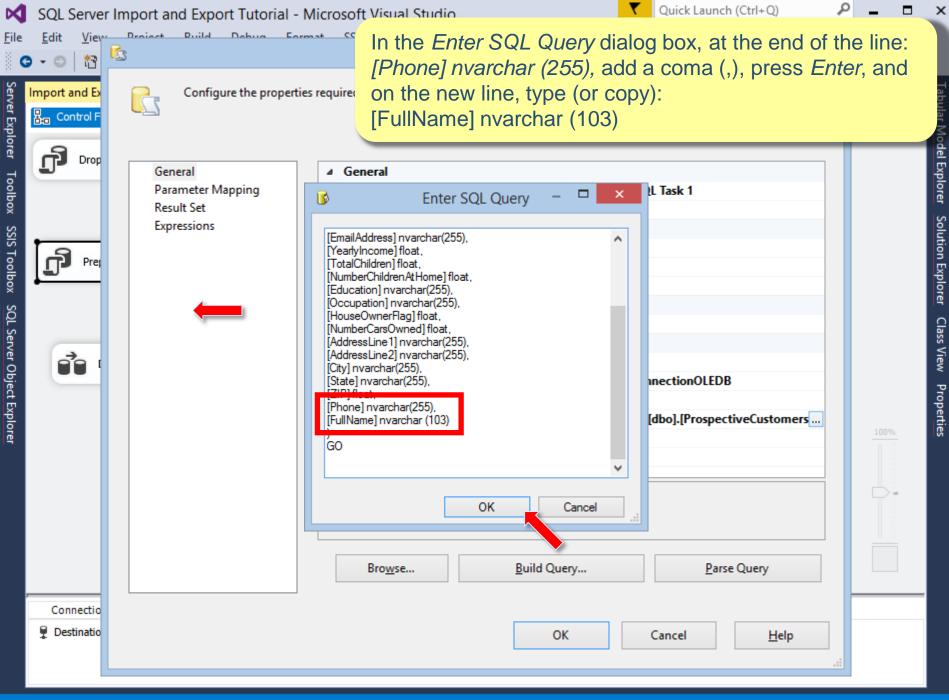


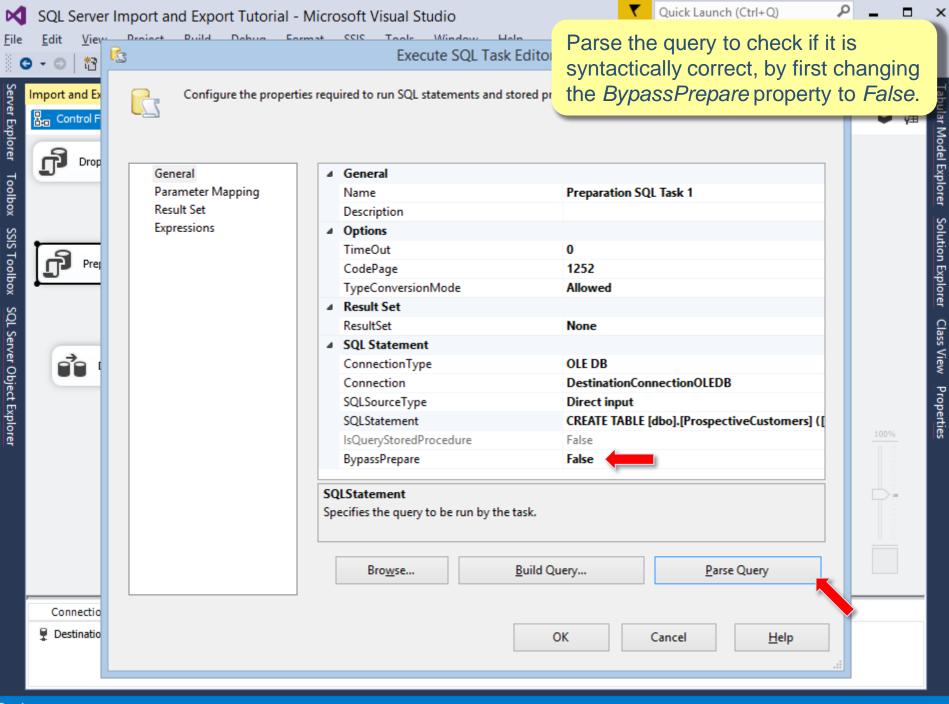
Now, you will update the SQL statement in the Execute SQL task named *Preparation SQL Task*. The existing SQL statement was automatically generated from the options you specified when you stepped through the *SQL Server Import and Export Wizard* pages. This SQL statement creates the *ProspectiveCustomers* table in the *AdventureWorksDW2022* database when the package is run. Later in this lesson, you will generate an additional column to the data that is extracted from the Excel spreadsheet, and you need to include a definition of that column in the SQL statement. Edit the SQL statement by double-clicking on the *Preparation SQL Task*.

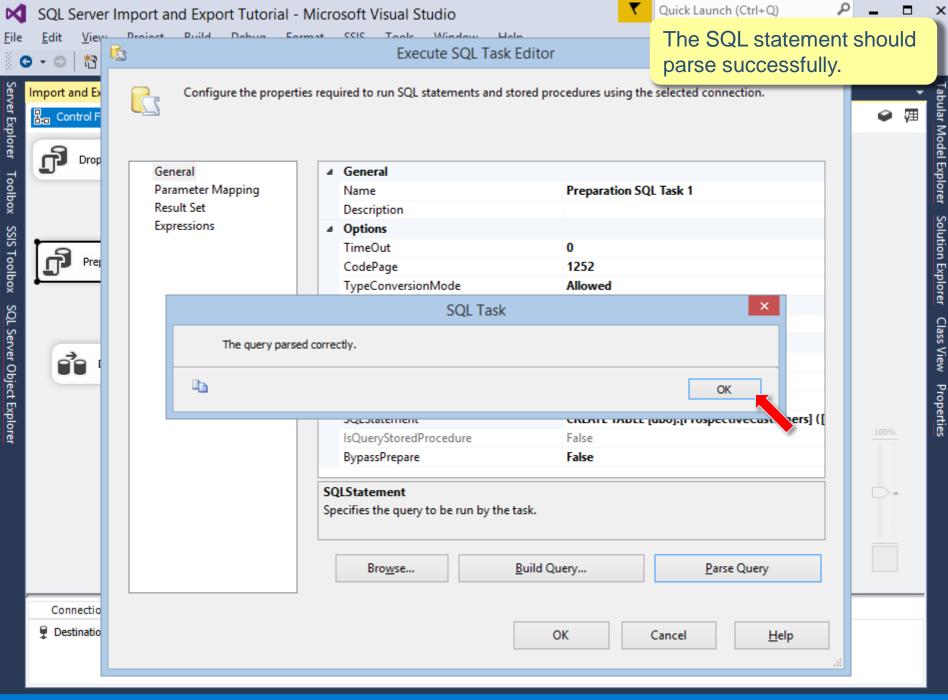
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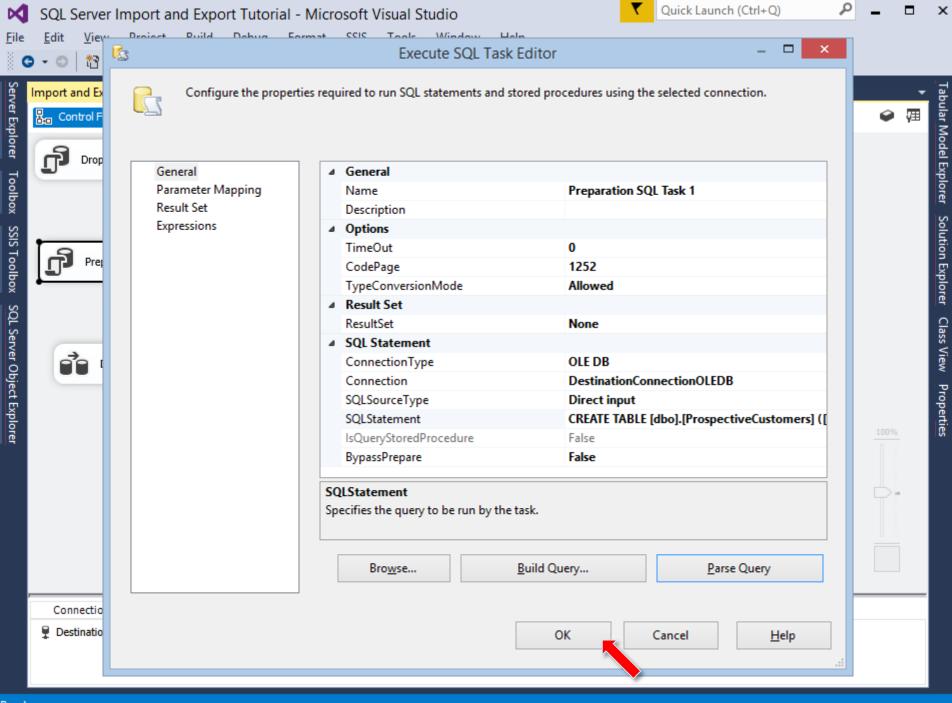
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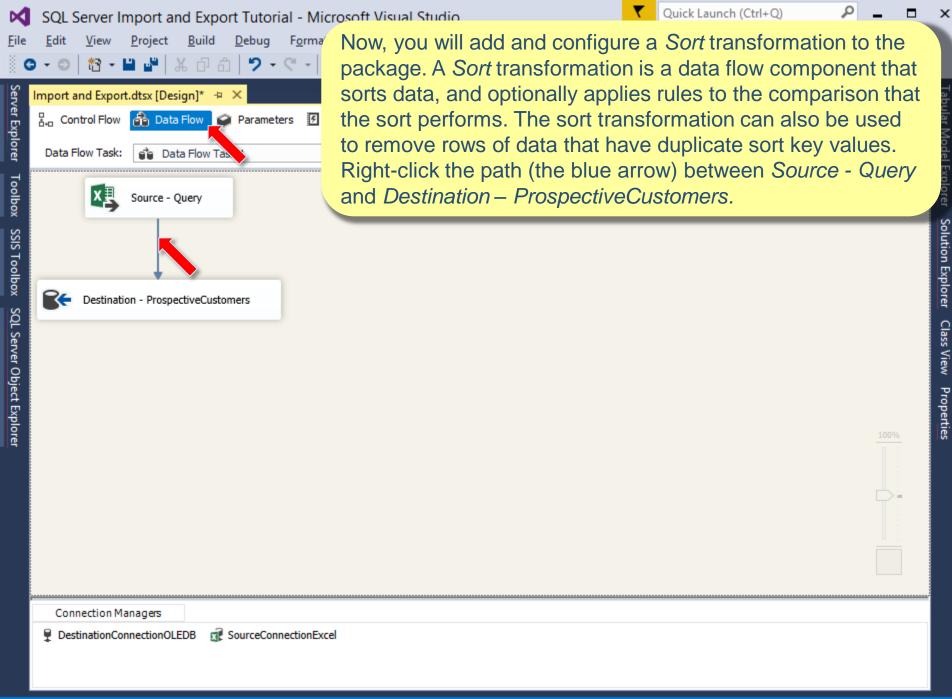


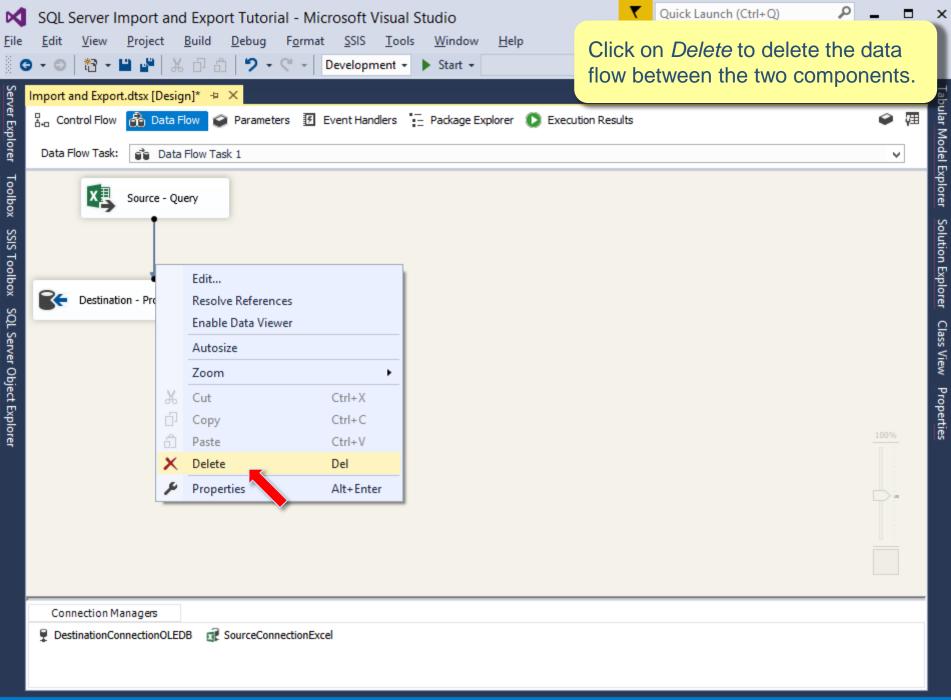


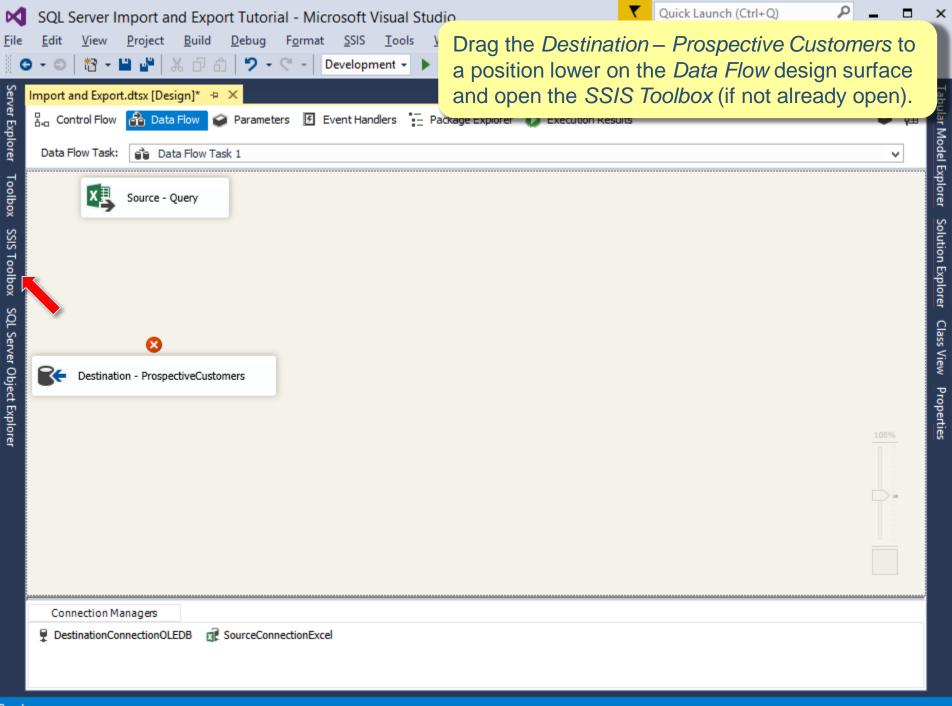


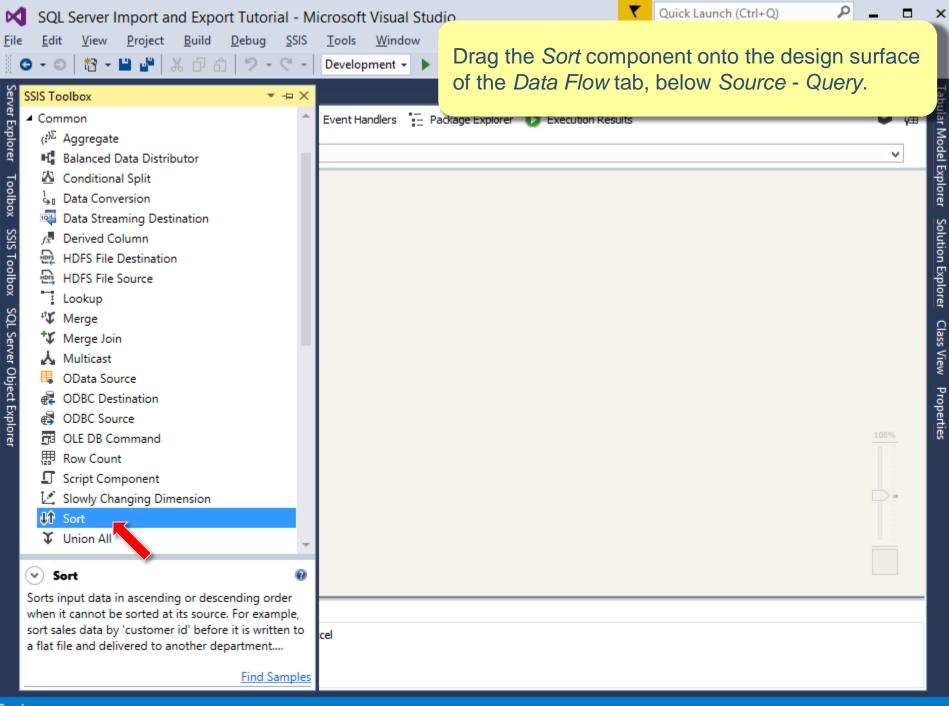


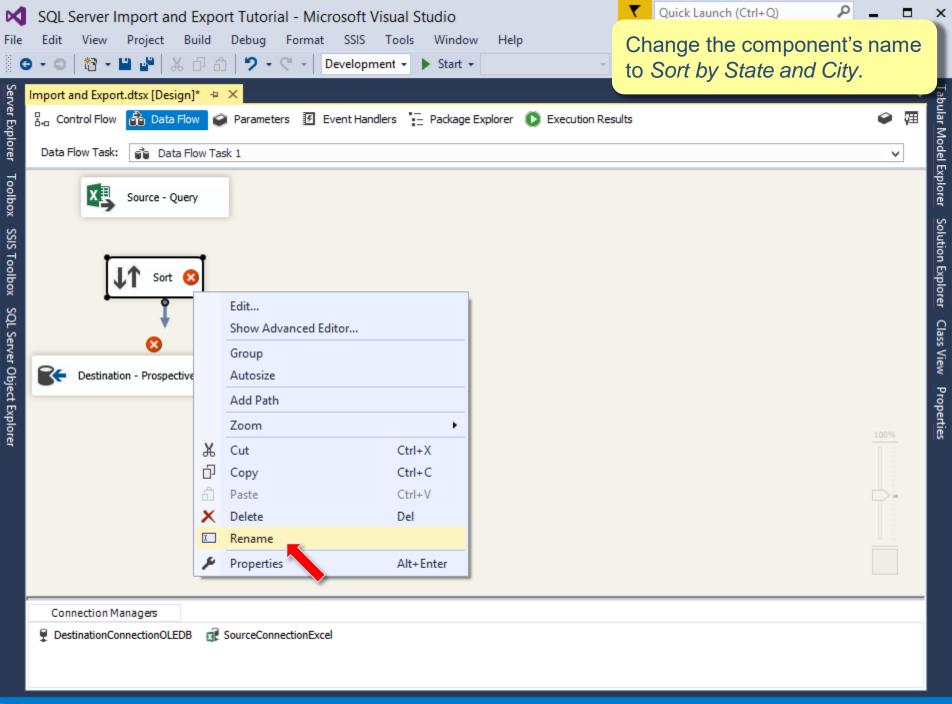


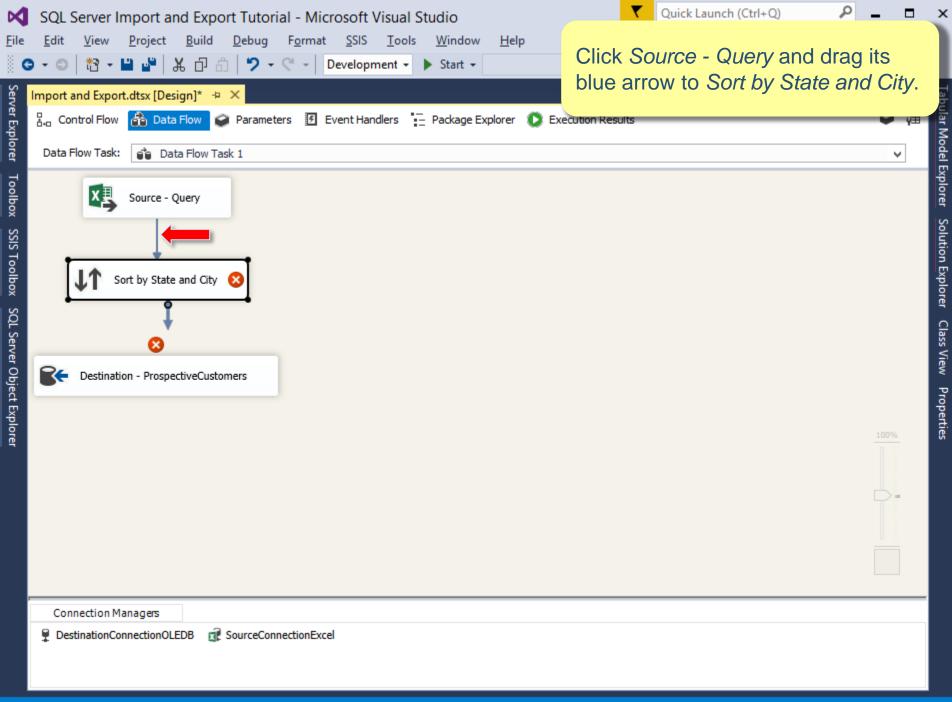


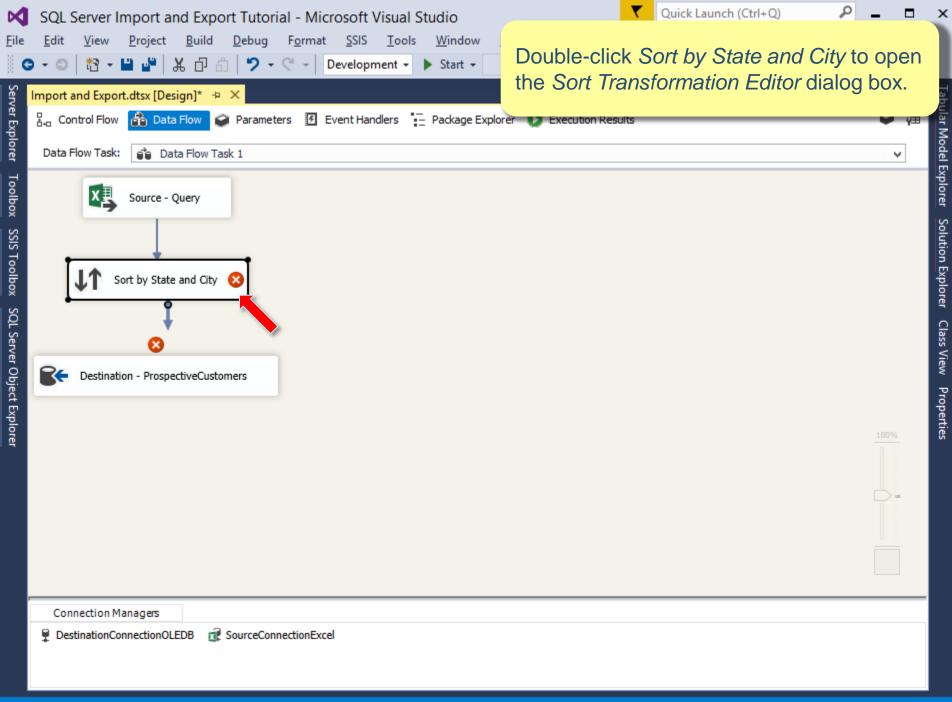


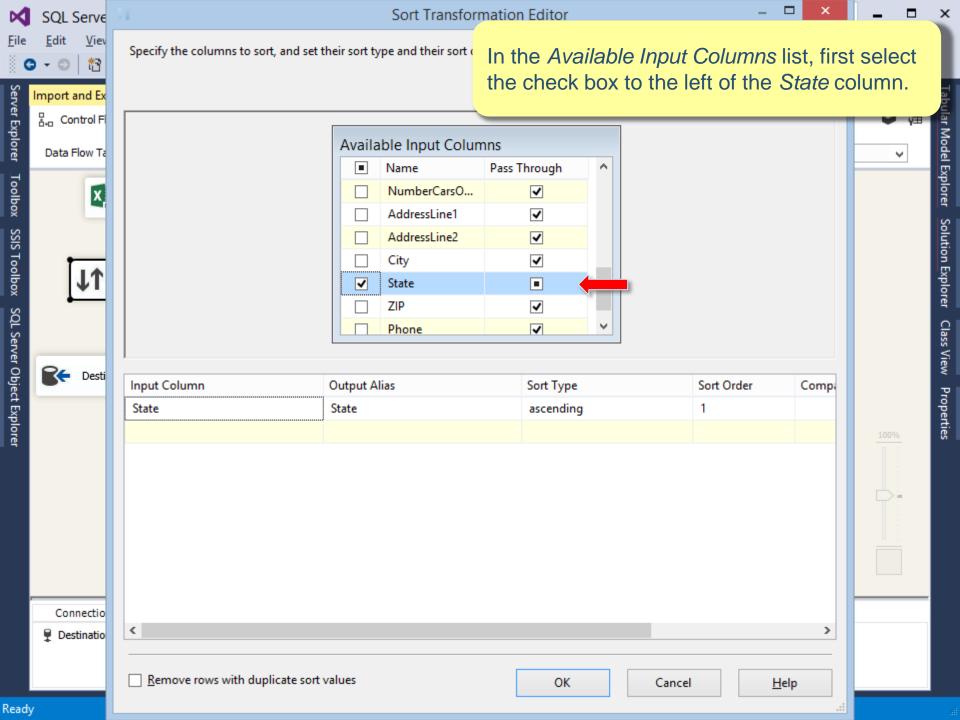


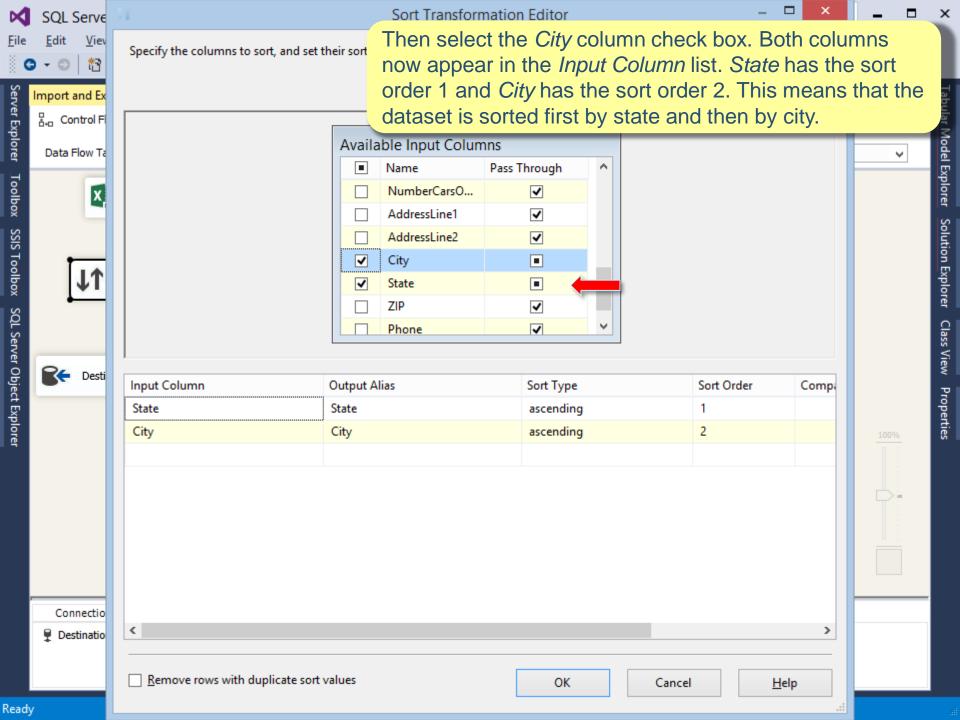


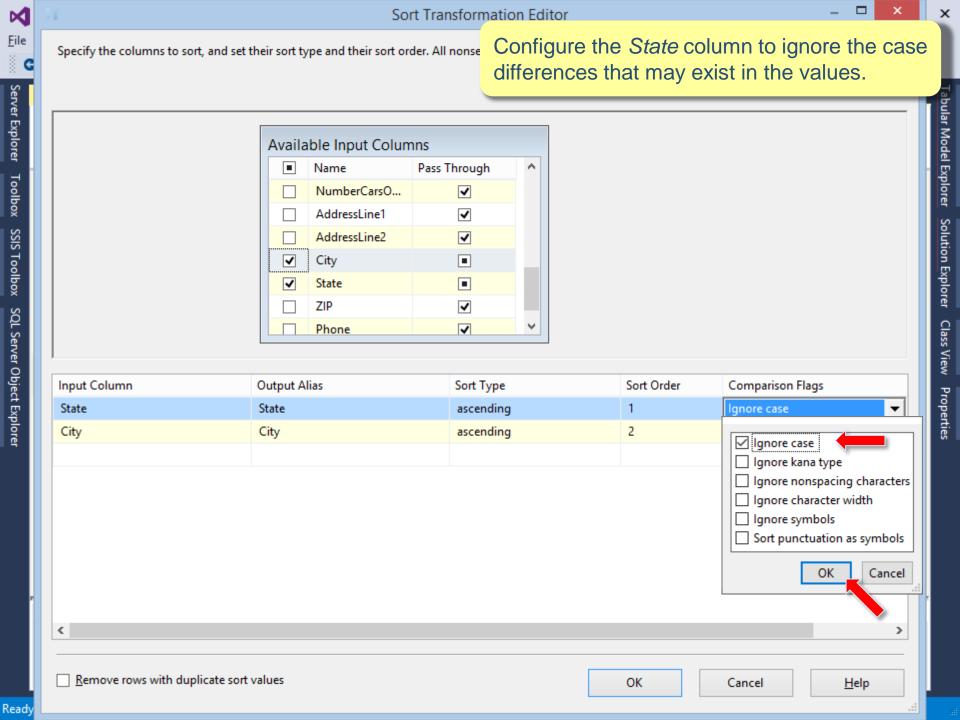


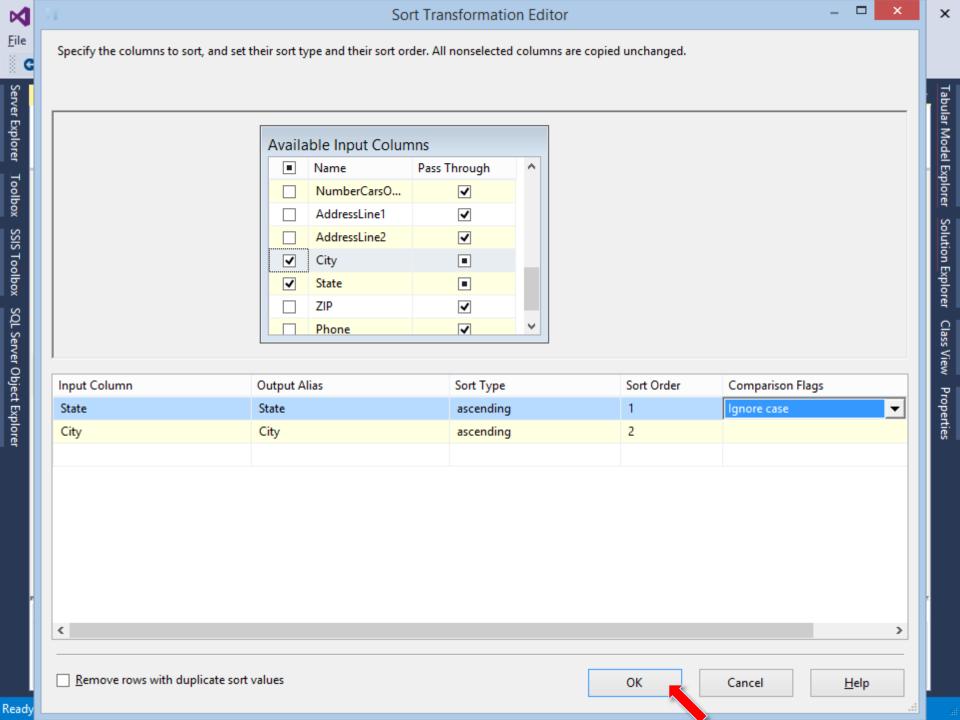




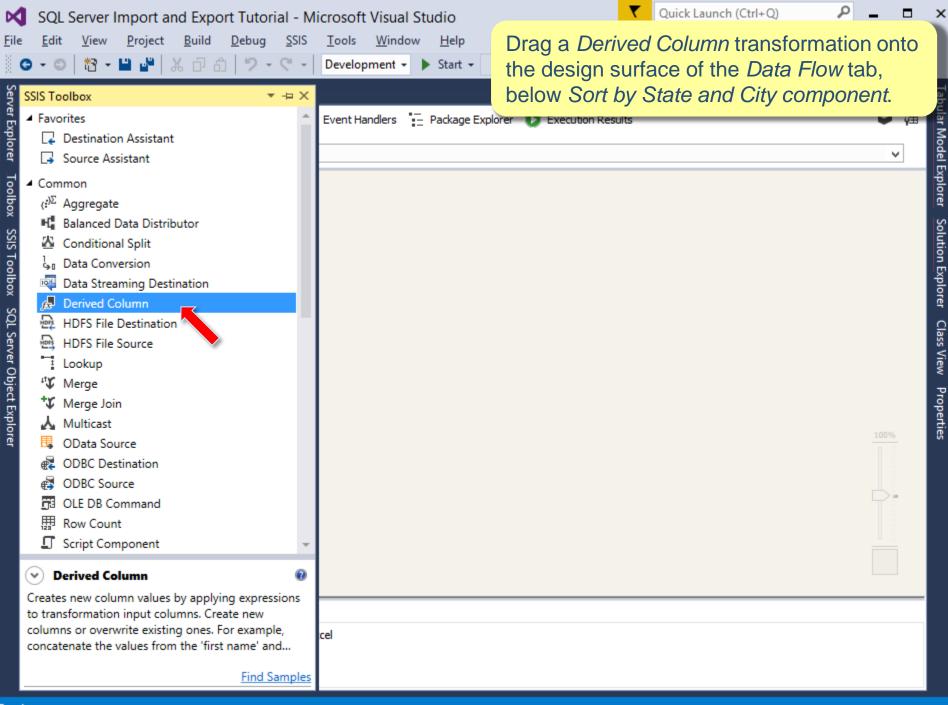


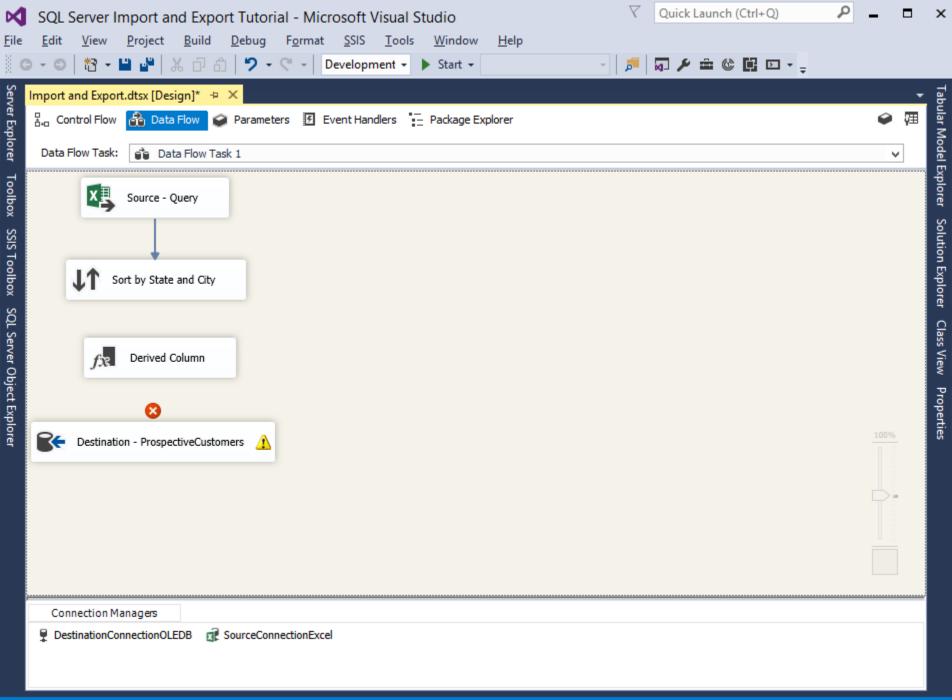


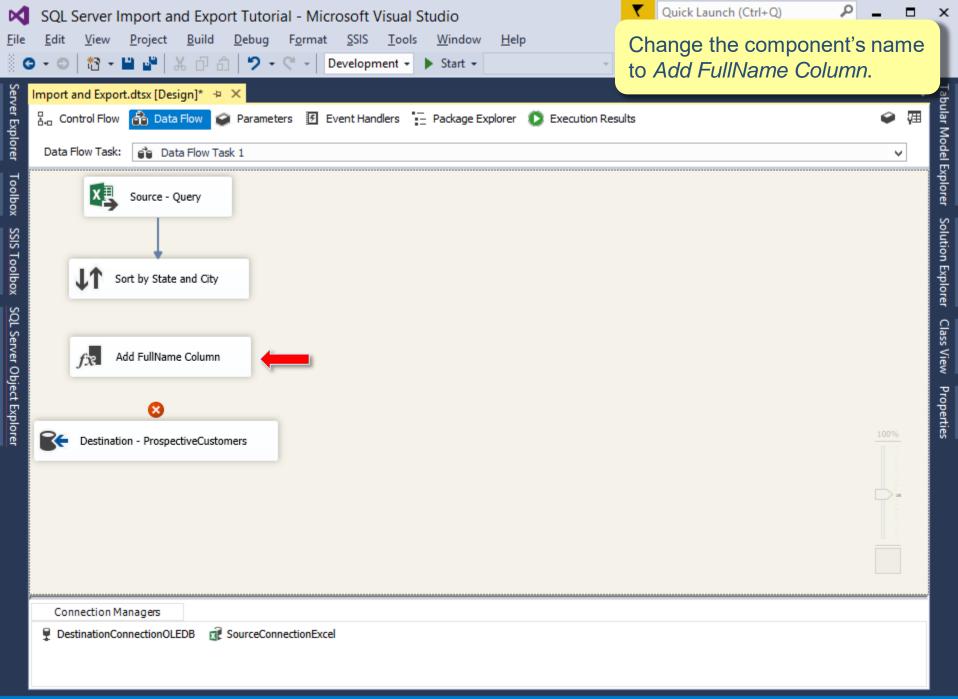


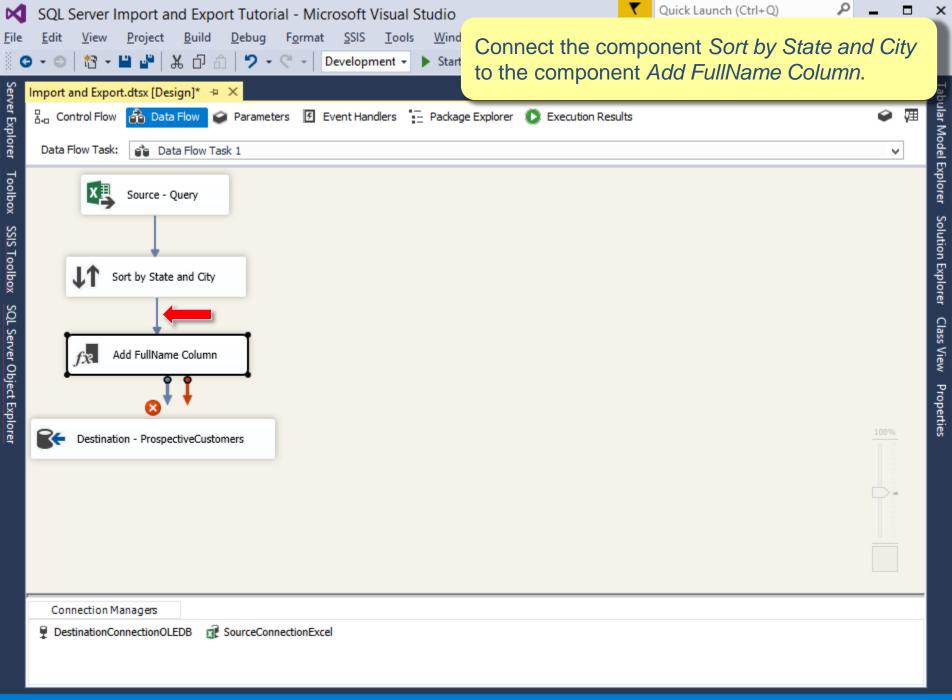


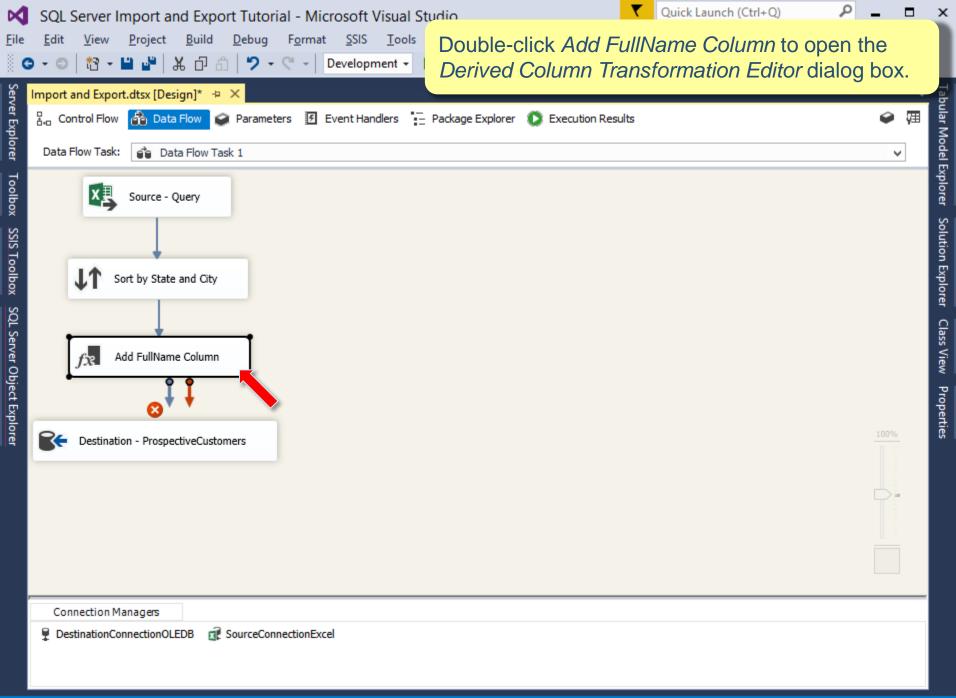
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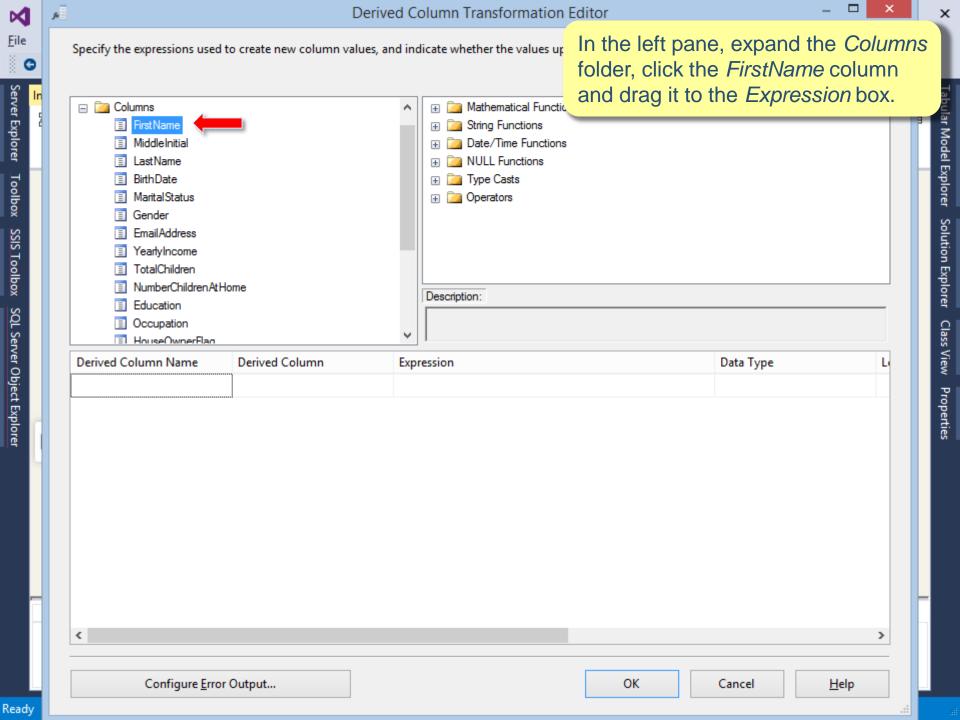


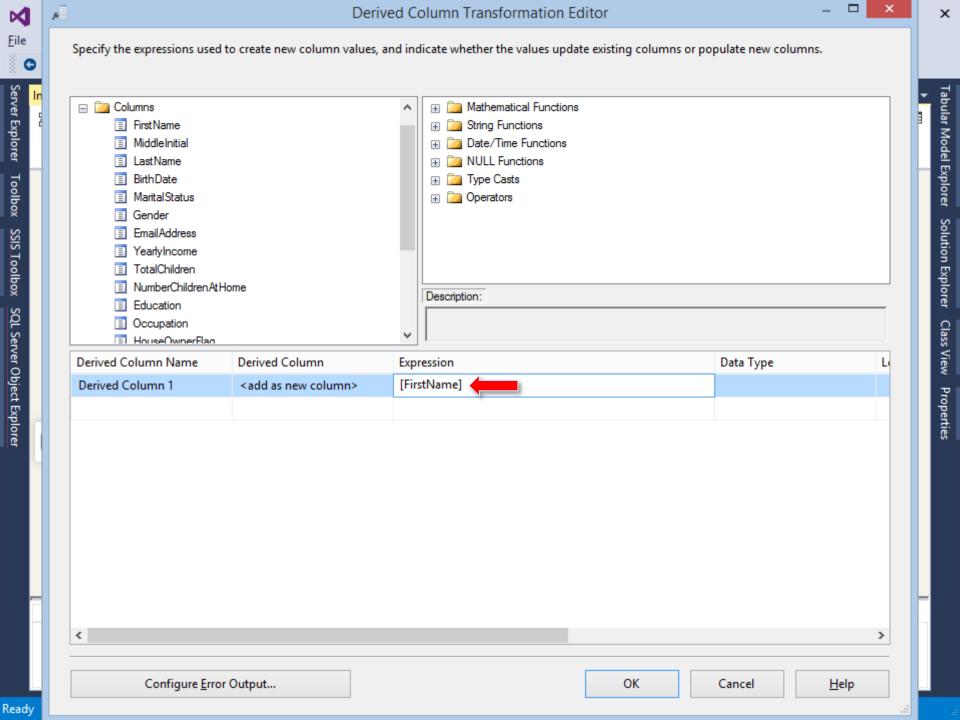


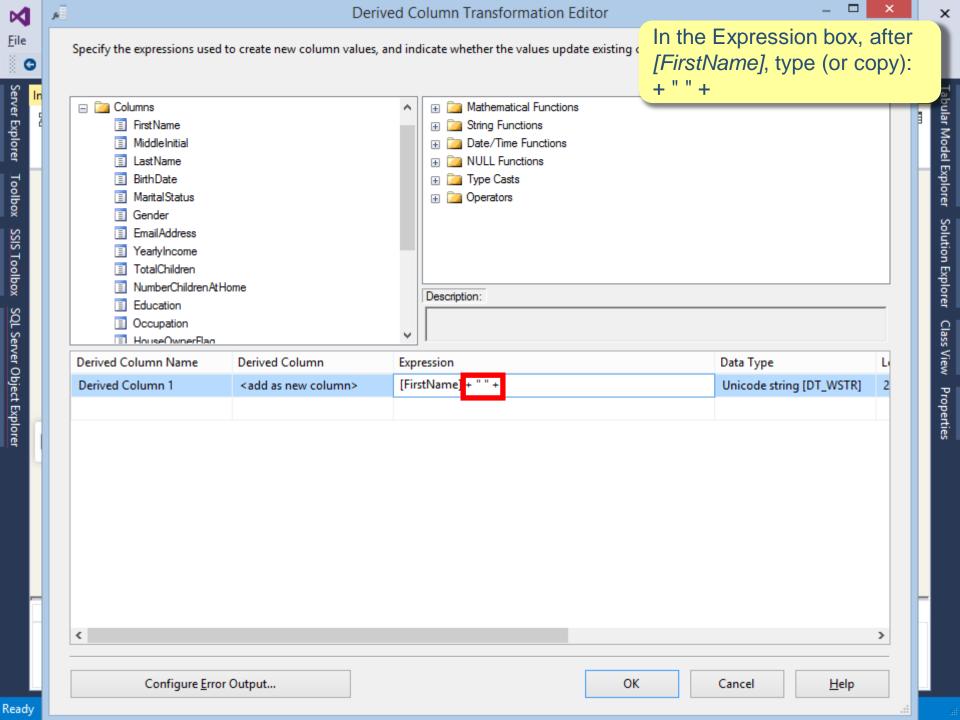


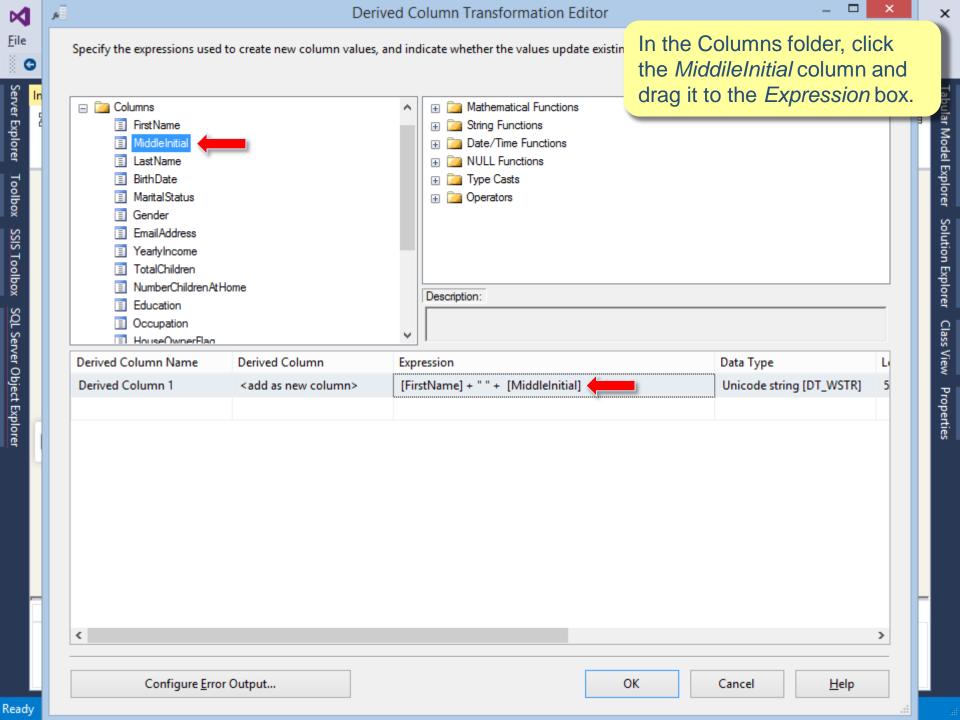


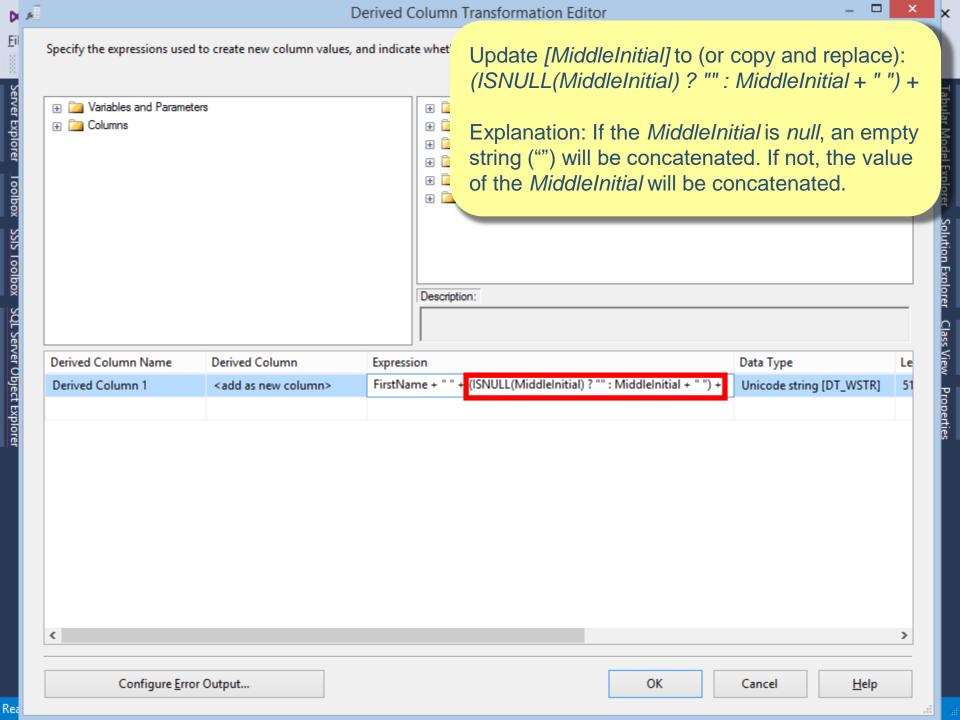


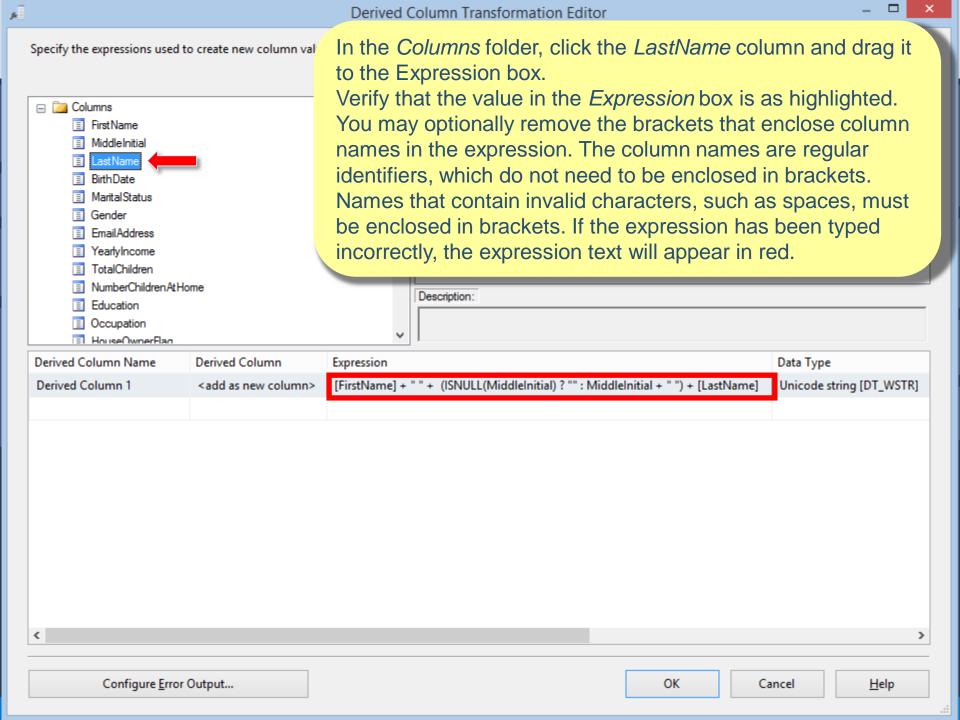


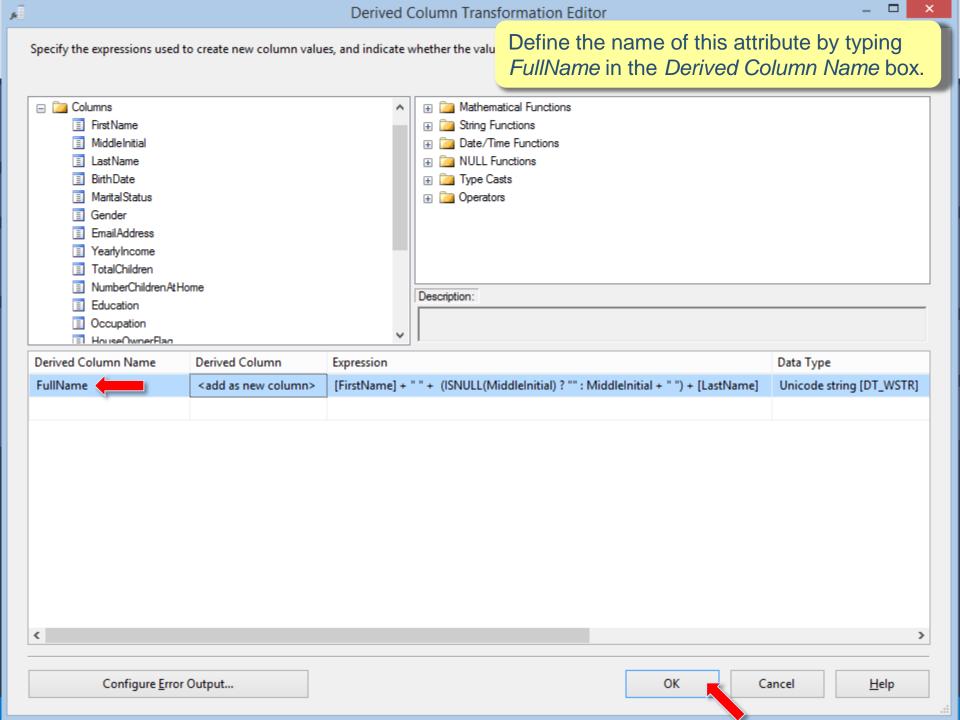


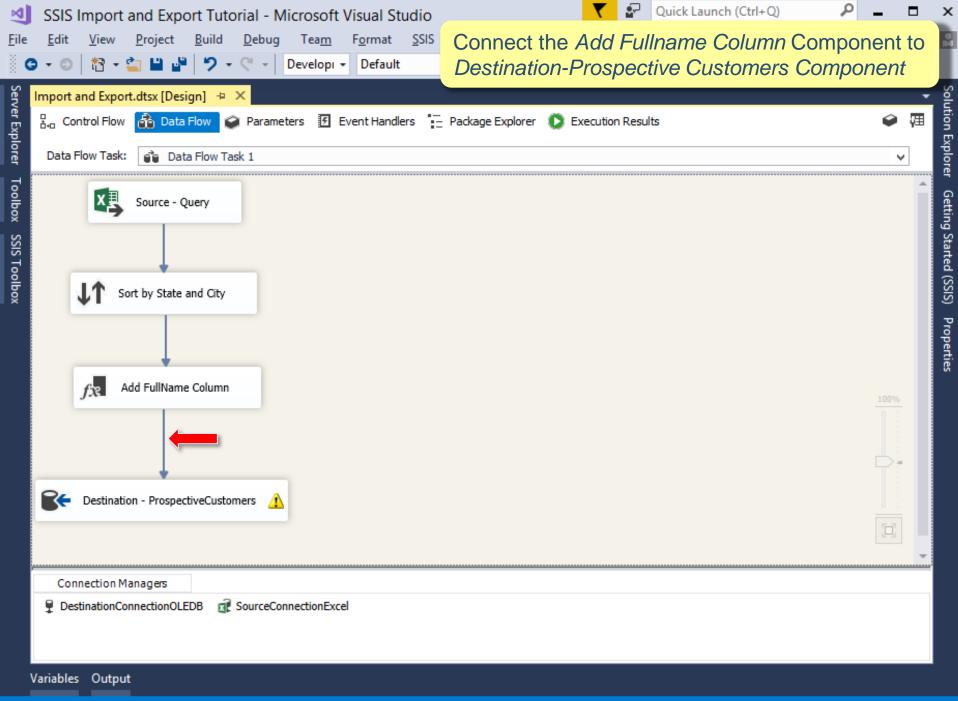


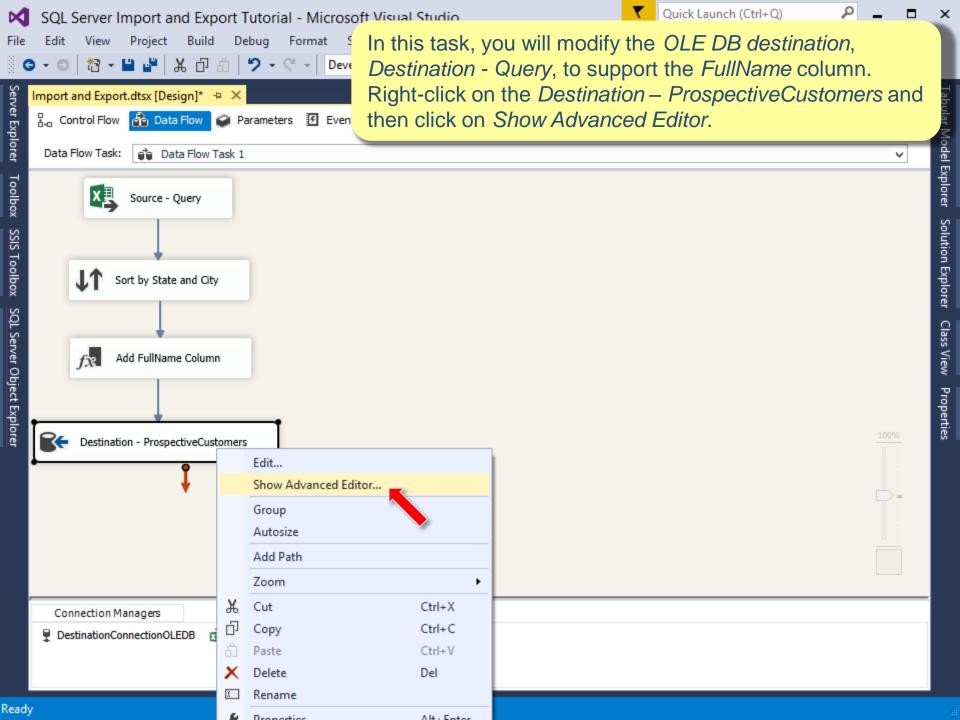


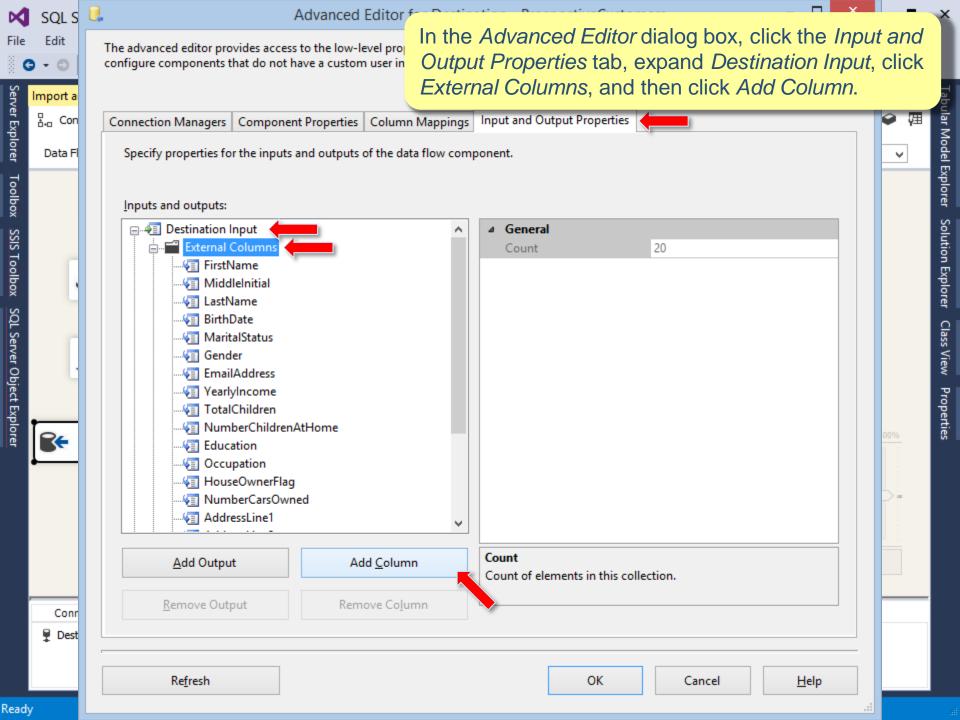


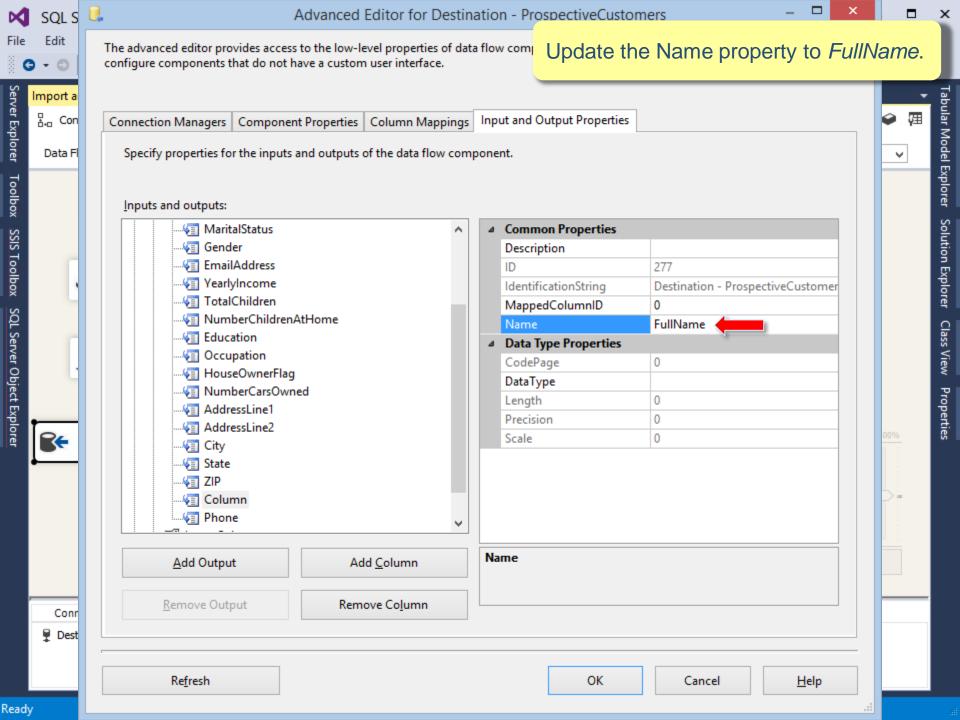


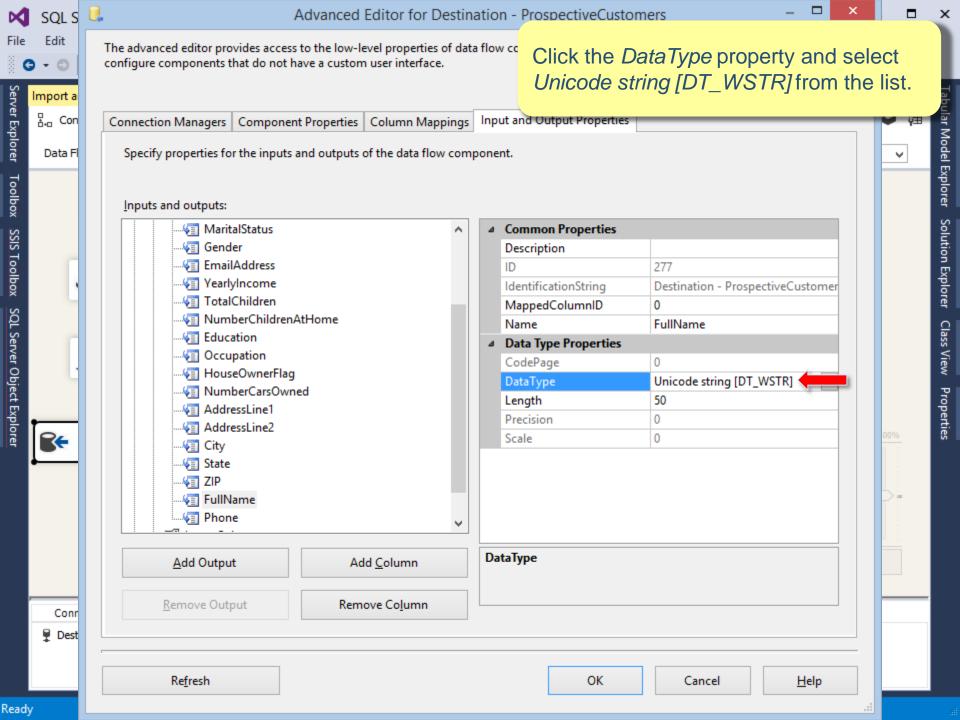


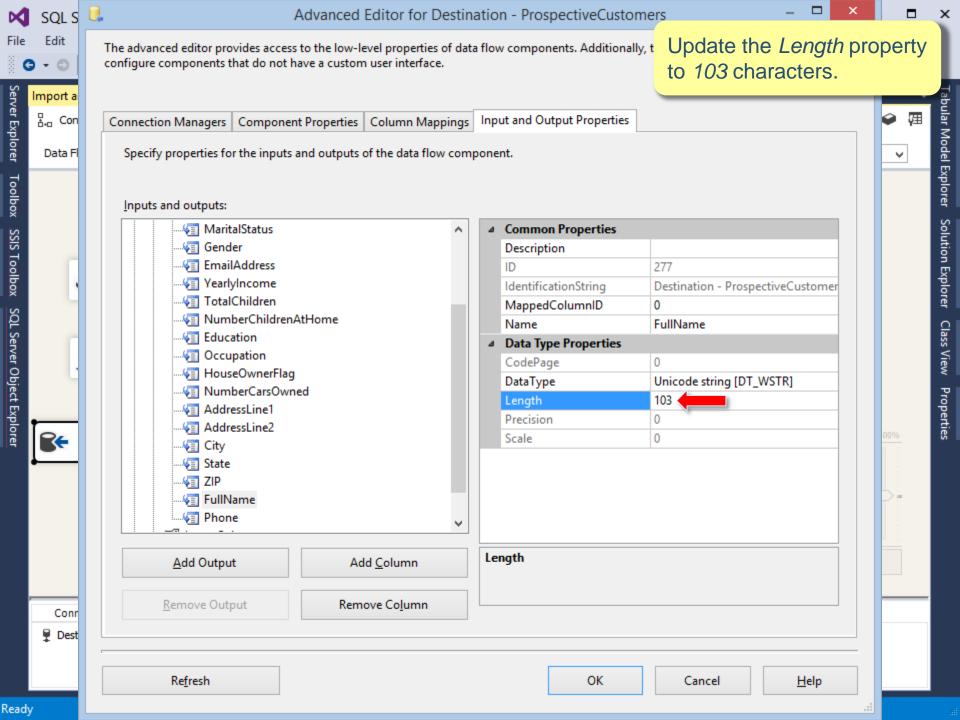


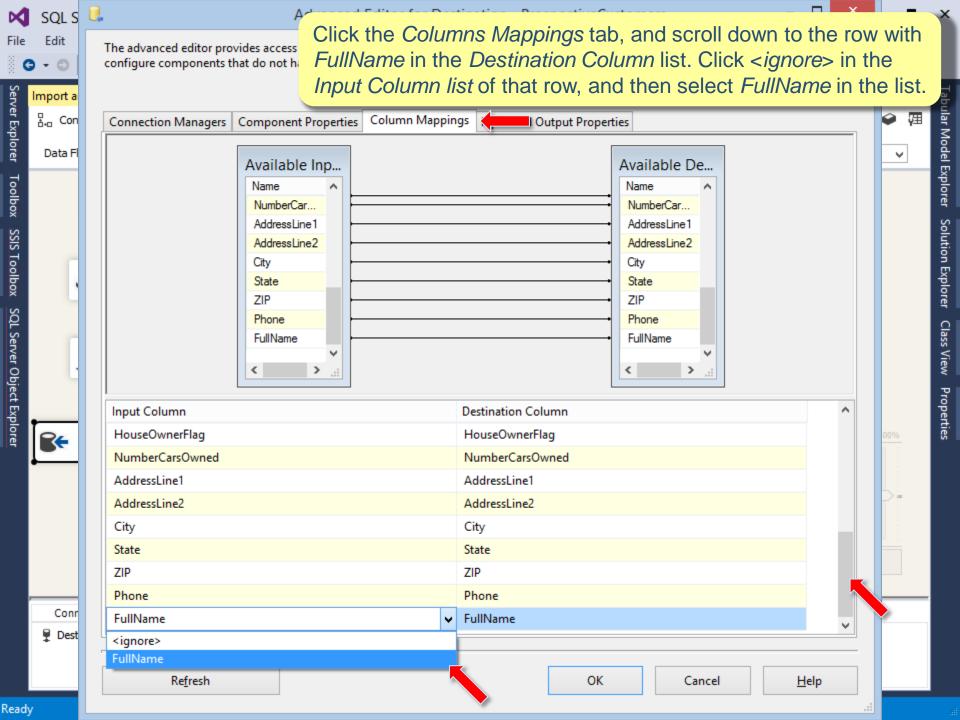


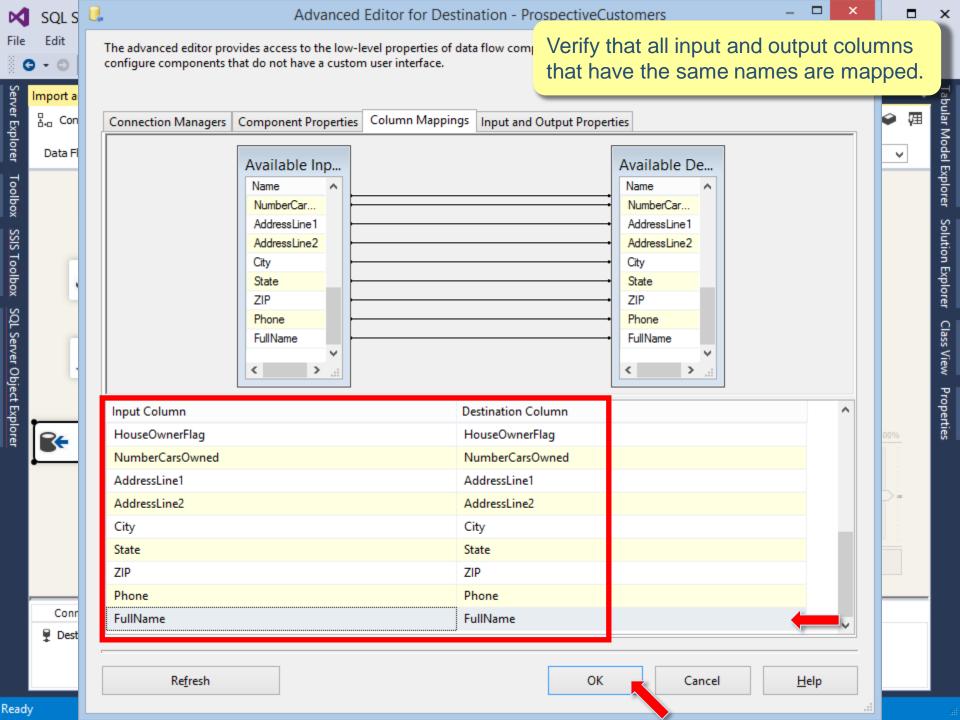












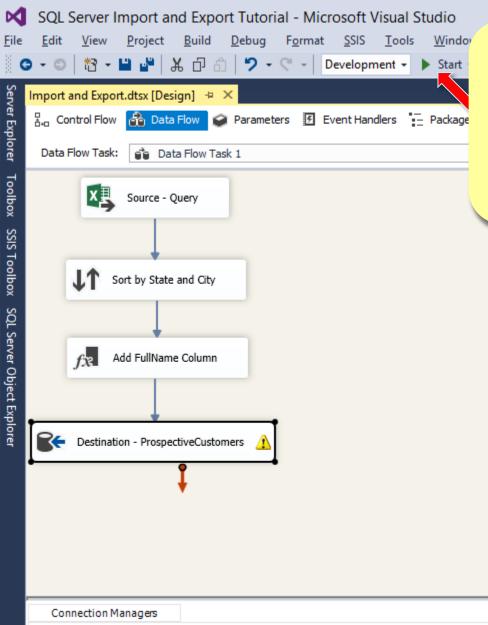


Class View

Properties

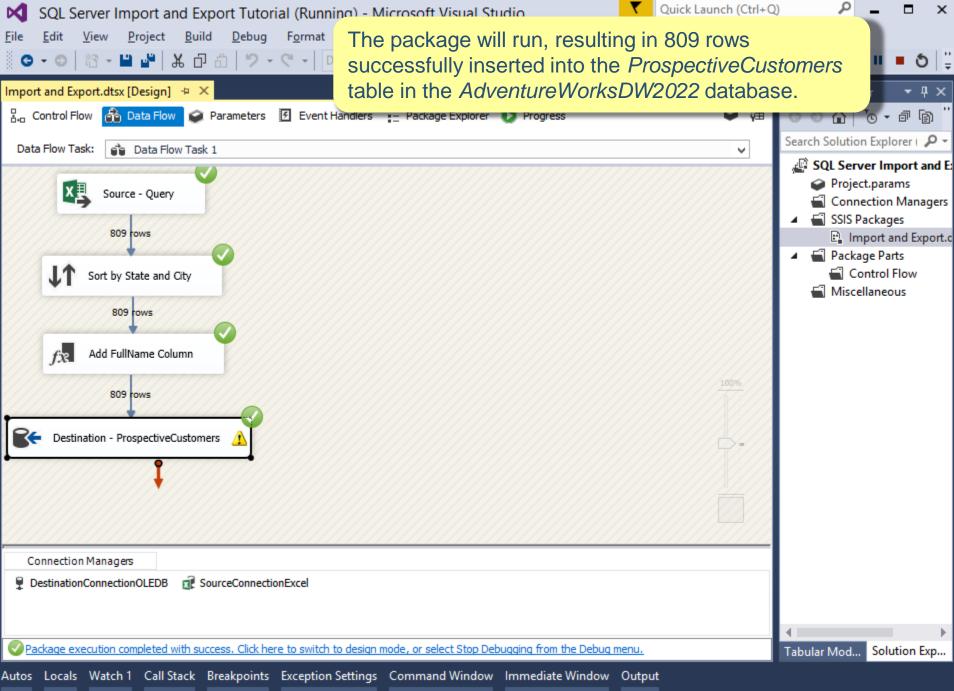
Quick Launch (Ctrl+Q)

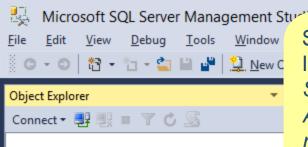
As you can see, there's a warning in the last component. It gives an alert for a possible truncation problem in the *FullName* attribute of the *ProspectiveCustomers* table. Warnings don't prevent the package execution.



Ready

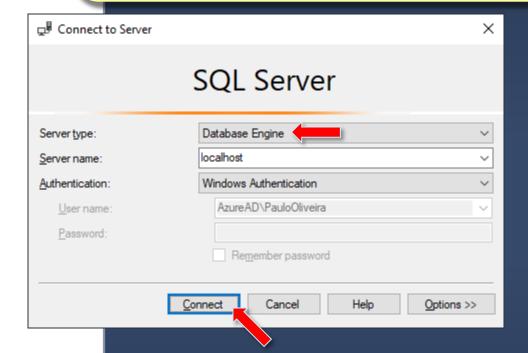
DestinationConnectionOLEDB

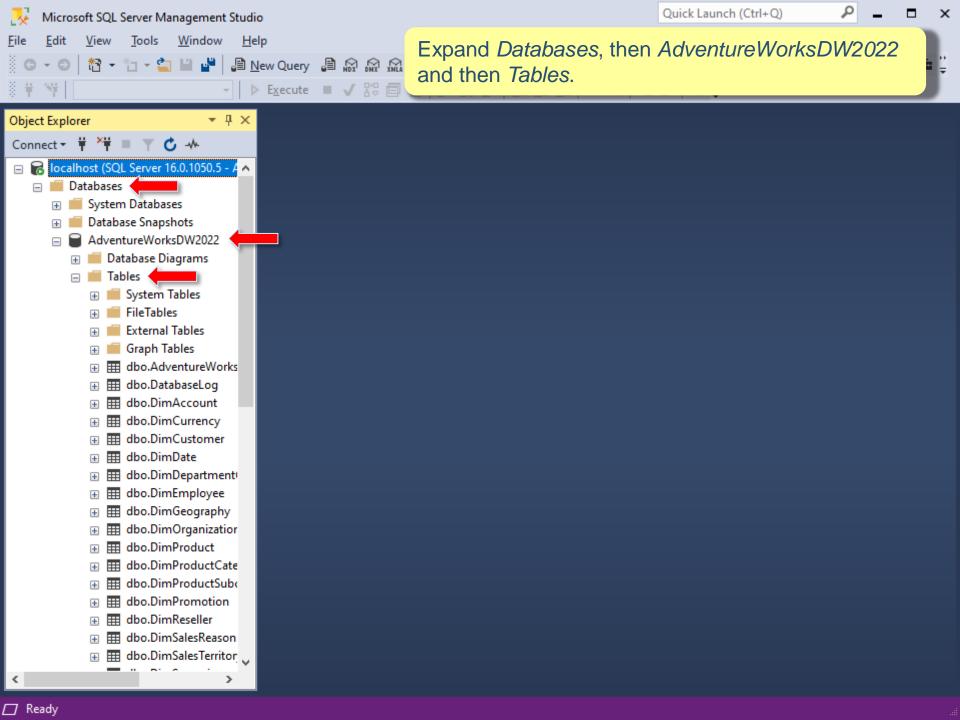


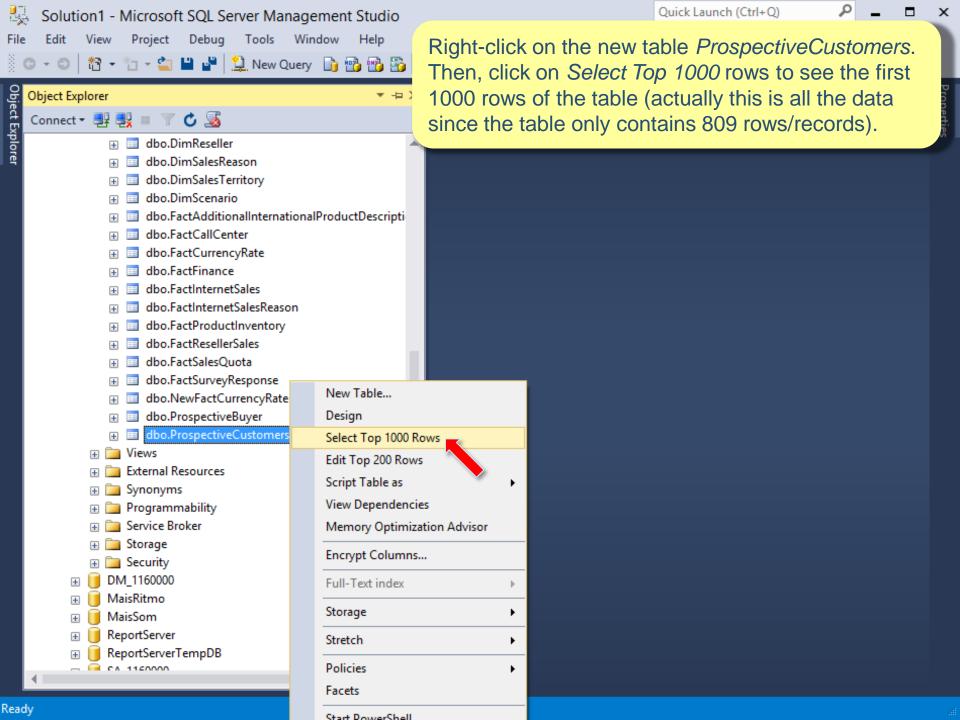


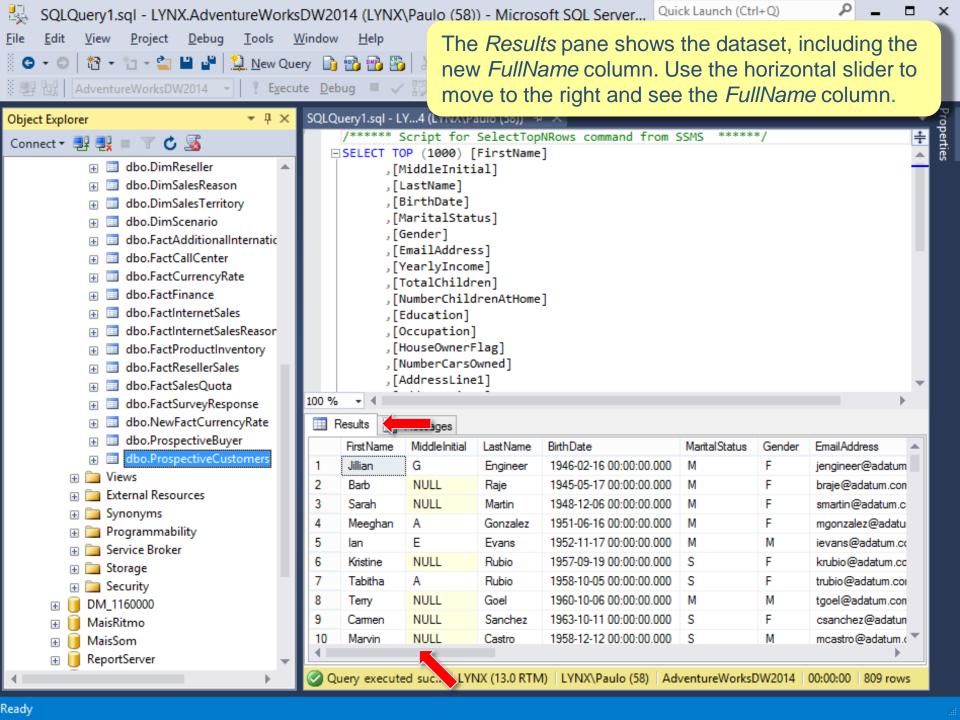
Start the SQL Server Management Studio.

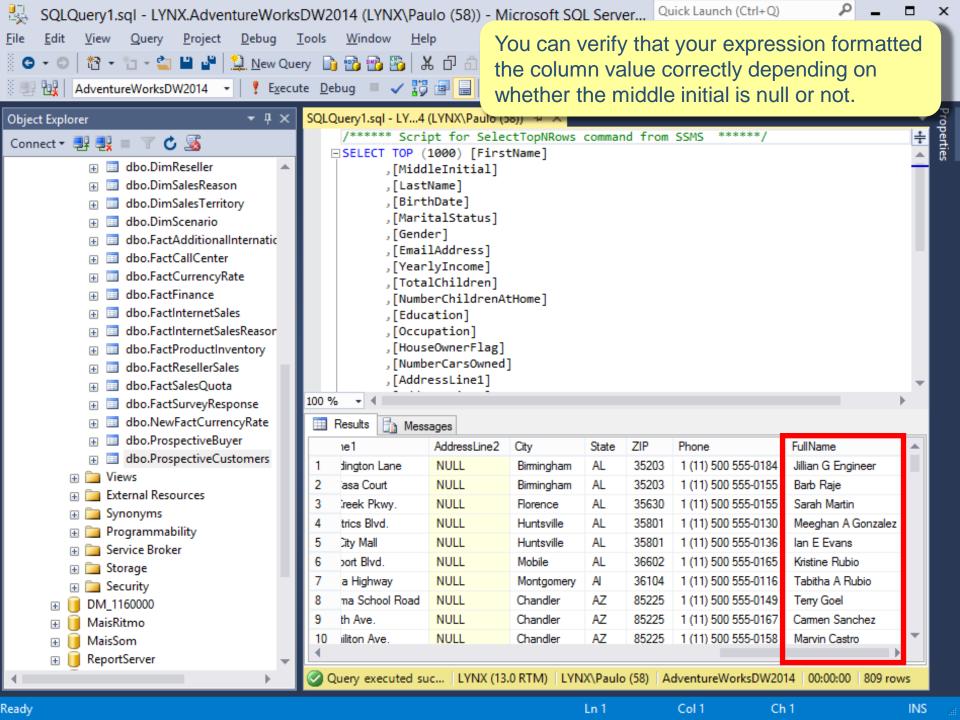
In the *Connect to Server* dialog, select *Database Engine* in the *Server type* list, provide the name of the server on which the *AdventureWorksDW2022* database is installed in the *Server name* box, and select an authentication mode option. If you select SQL Server Authentication, provide a user name and a password.

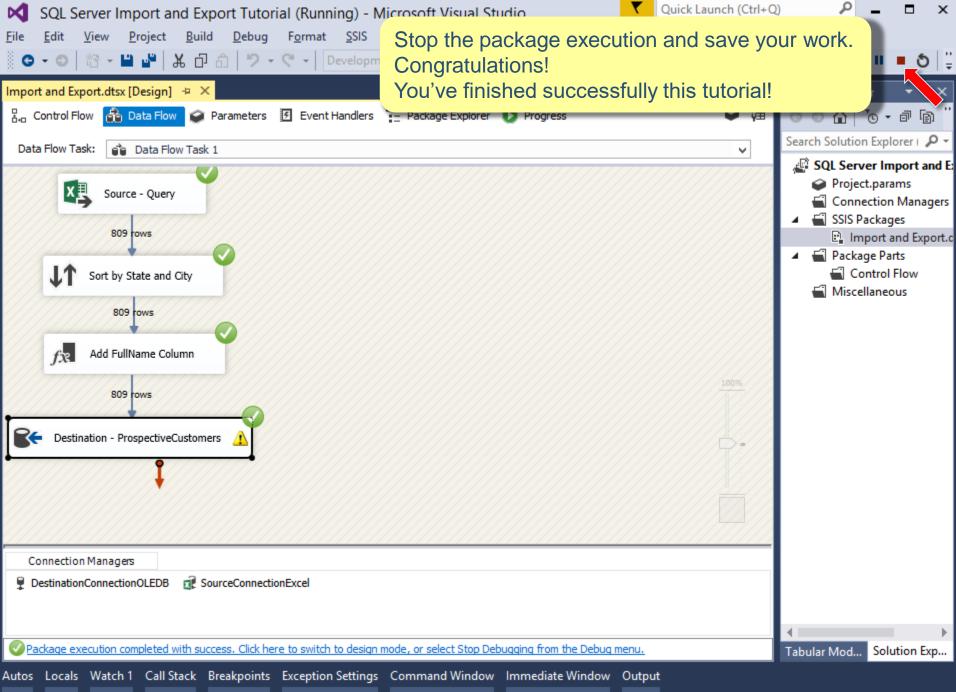












Ready