

ARMDD

EXERCISE 5 TUTORIAL

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DEI-ISEP

Start Page - Microsoft Visual Studio

File Edit View Project Debug Team Tools Test Analyze Window Help

Start Page Attach... Solution Explorer Team Explorer Getting Started (SSIS)

Get Started

Build your first app in 5 minutes!

Maximize your productivity with these tips and tricks for Visual Studio

Take advantage of the newest technologies to deploy beautiful, low-cost and reliable websites

Develop modern, fully-native, Android and iOS apps

Produce more, fix faster and deliver updates seamlessly

Recent

This week

- Data Mart.sln**  D:\Temp\ARPAD\Data Mart
- Create Date Dimension 2.sln** D:\Temp\ARPAD\Create Date Dimension 2
- Create CSV Date Dimension.sln** D:\Temp\ARPAD\Create CSV Date Dimension

Open

Get code from a remote version control system or open something on your local drive.

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- Azure DevOps

New project

Search project templates

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- Analysis Services M... Analysis Services
- Integration Serv... Business Intelligence
- Analysis Services M... Analysis Services

Create new project...

In this tutorial, you will load the *DimItem*, *DimStore* and *DimPaymentMethod* dimensions. Start Visual Studio and load the *Data Mart* project finished last class (also available in Moodle).

Developer News

Visual Studio 2019 v16.8 and v16.9 Preview 1 Release

Visual Studio team is proud to announce the release of Visual Studio 2019 v16.8 and v16.9 Preview 1. These releases have several notable f...

NEW 12 de novembro de 2020

Announcing the Release of the Git Experience in Visual Studio

We're excited to announce that our new Git tooling is now the default source control experience in Visual Studio 2019, beginning wit...

NEW 12 de novembro de 2020

Announcing .NET 5.0

We're excited to release .NET 5.0 today and for you to start using it. It's a major release — including C# 9 and F# 5 — with a broad set of n...

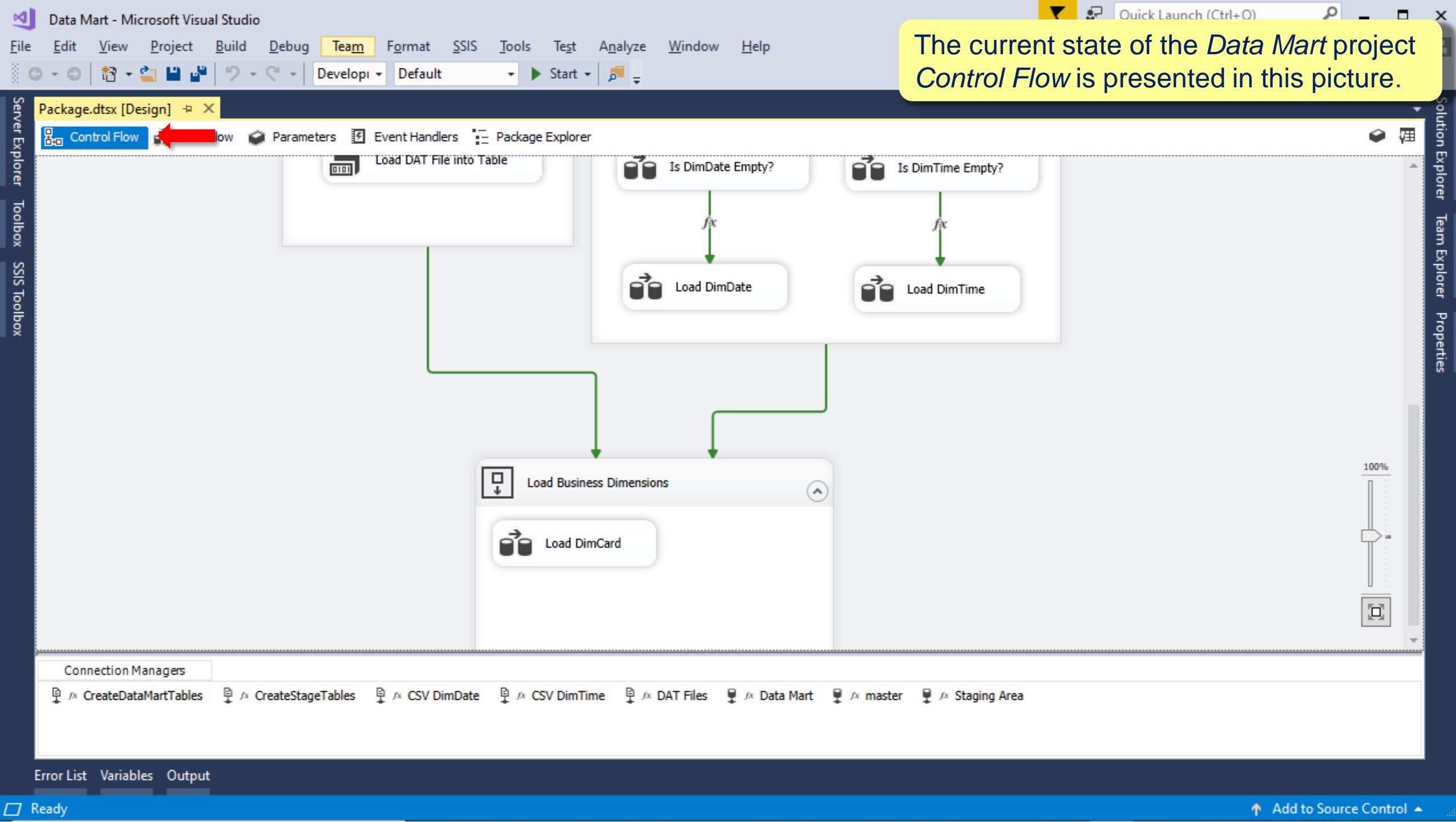
NEW 12 de novembro de 2020

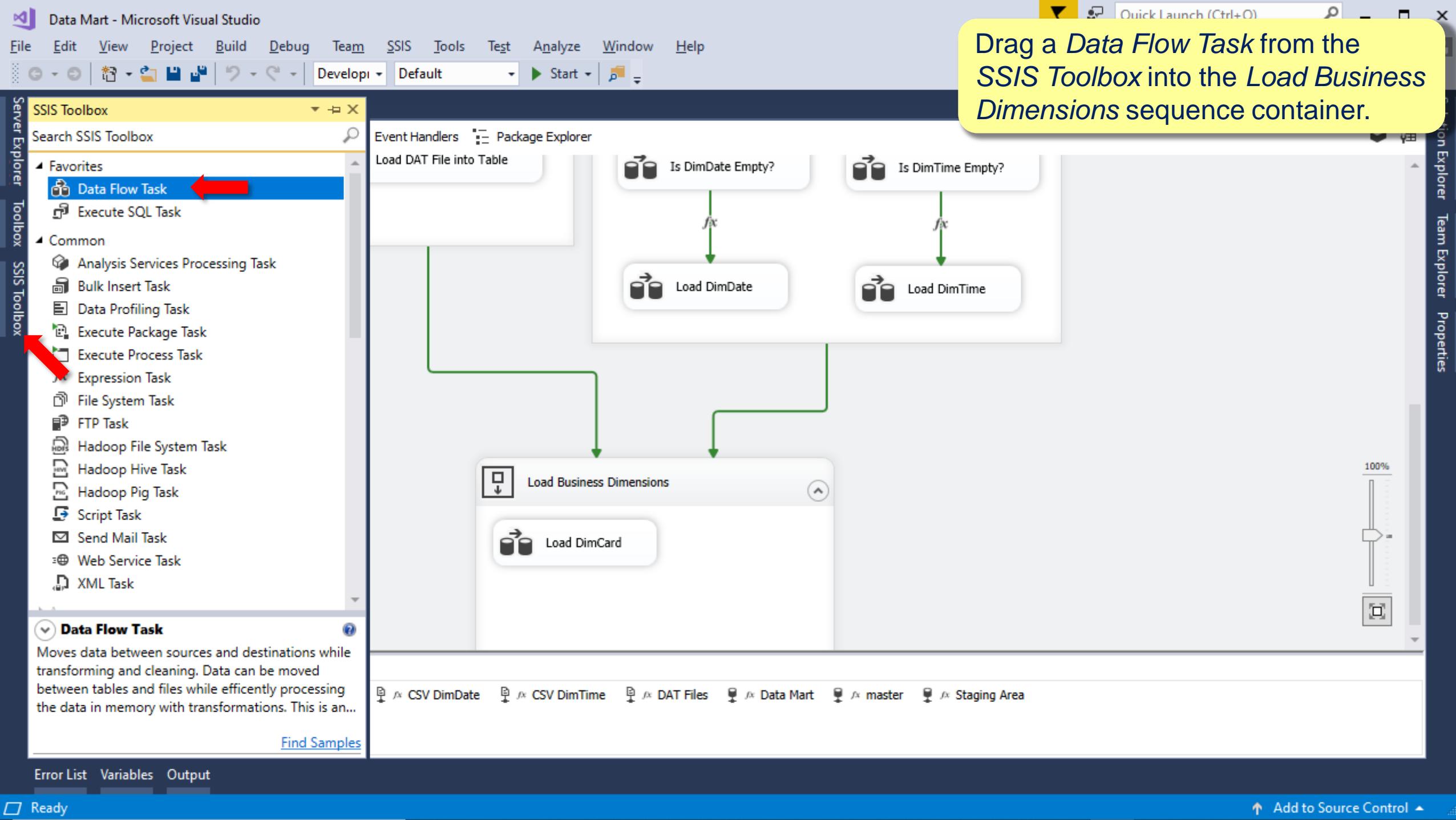
Announcing ASP.NET Core in .NET 5

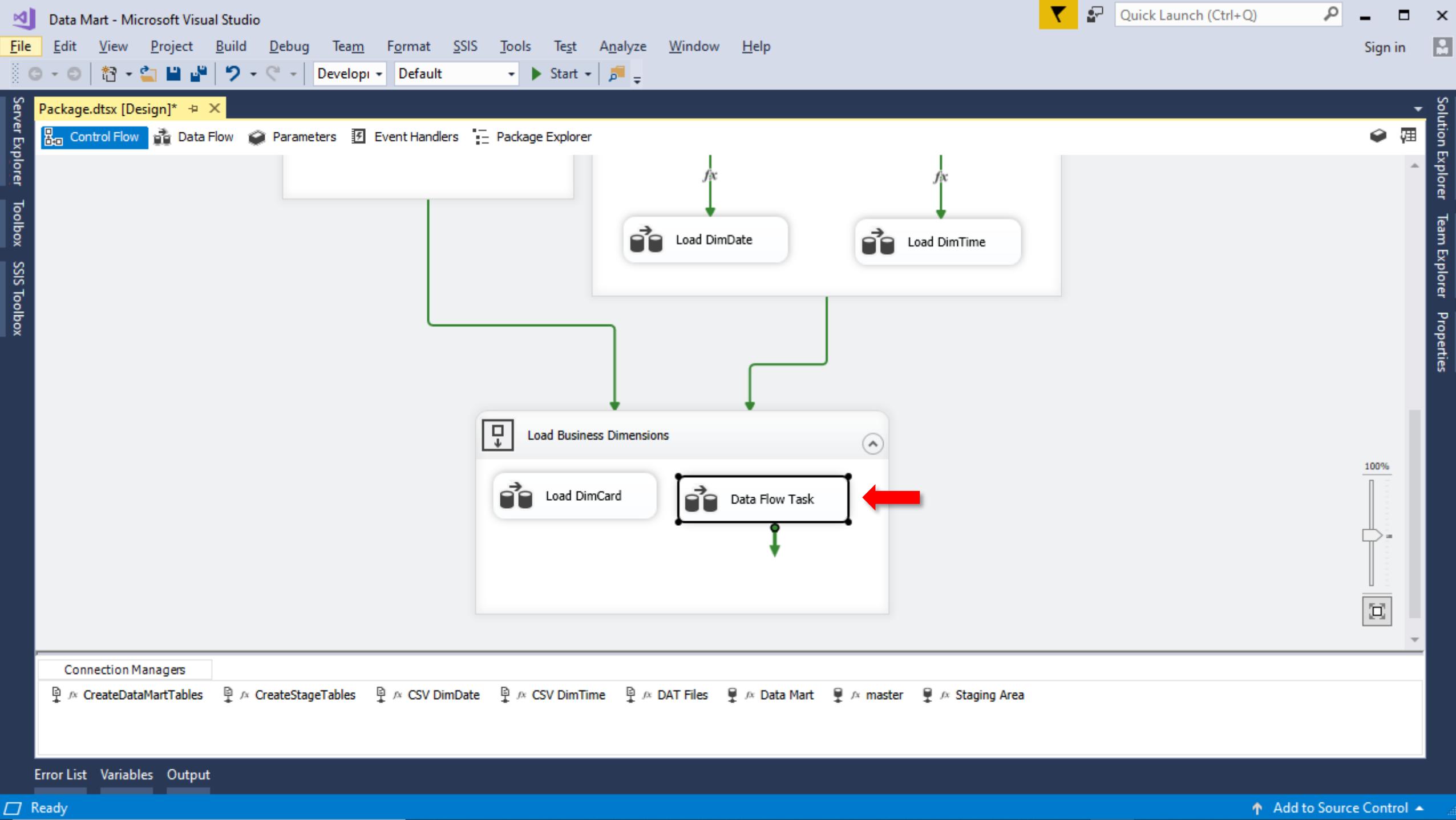
More news...

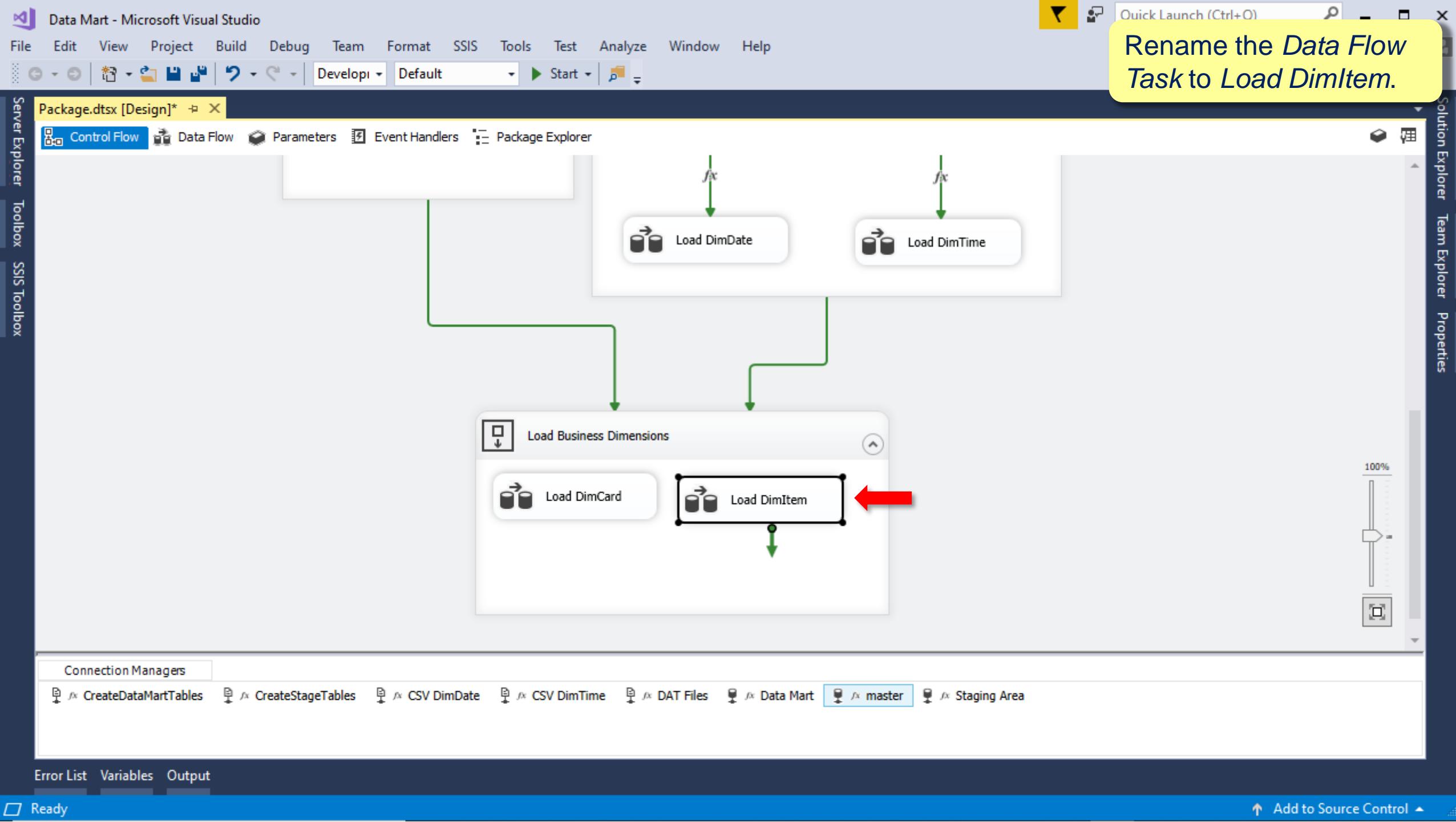
Error List Variables Output

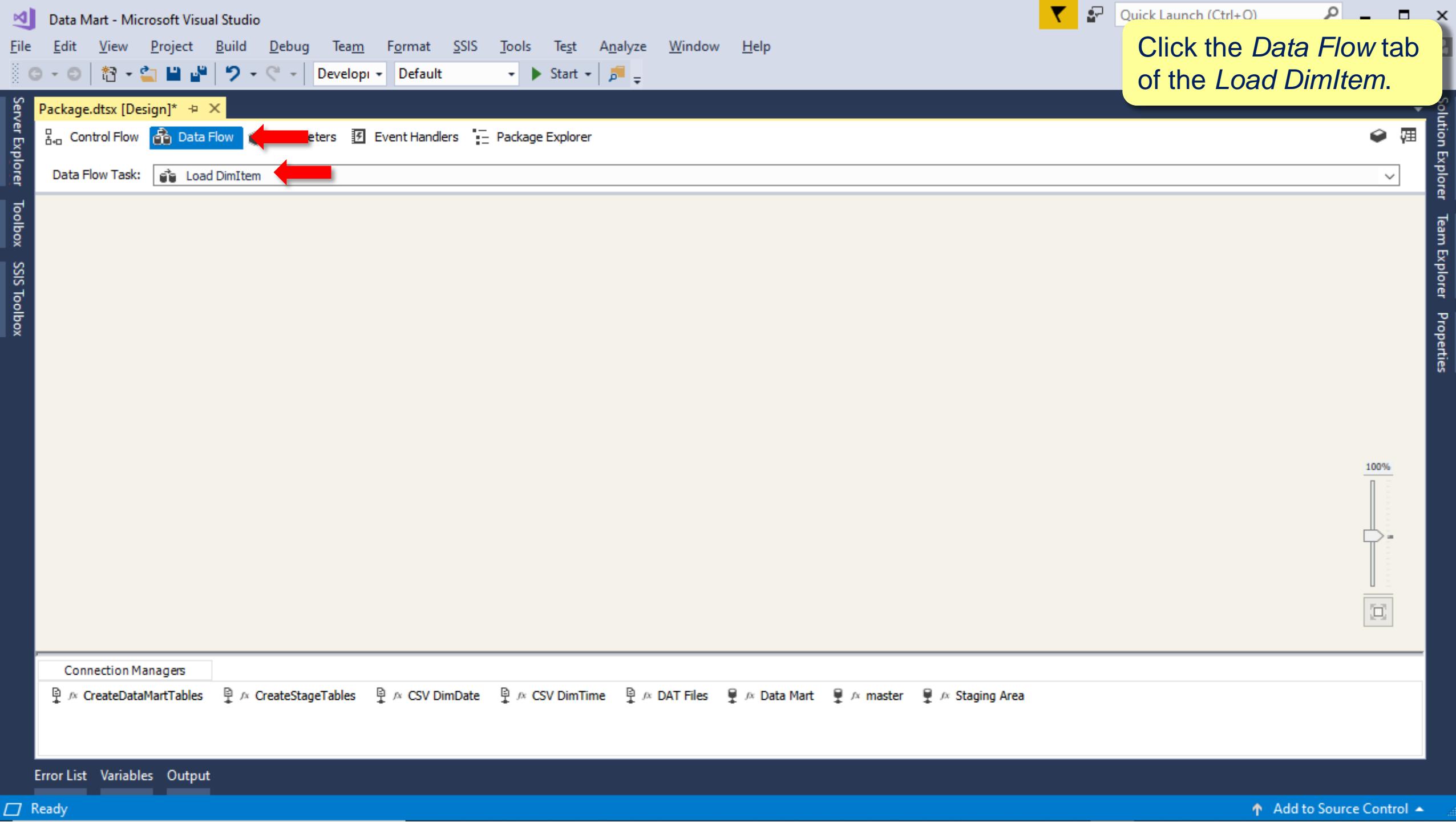
Ready



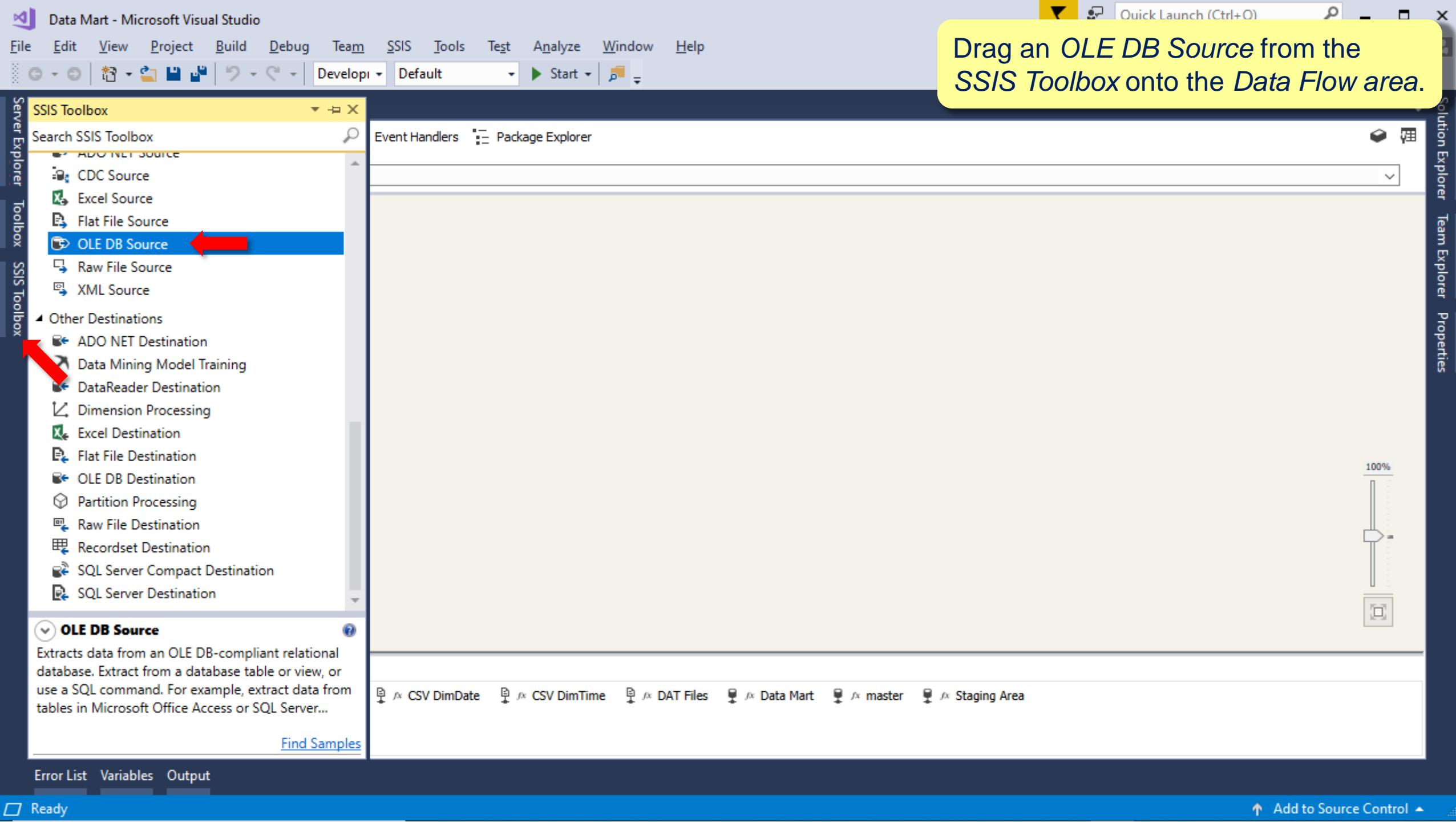


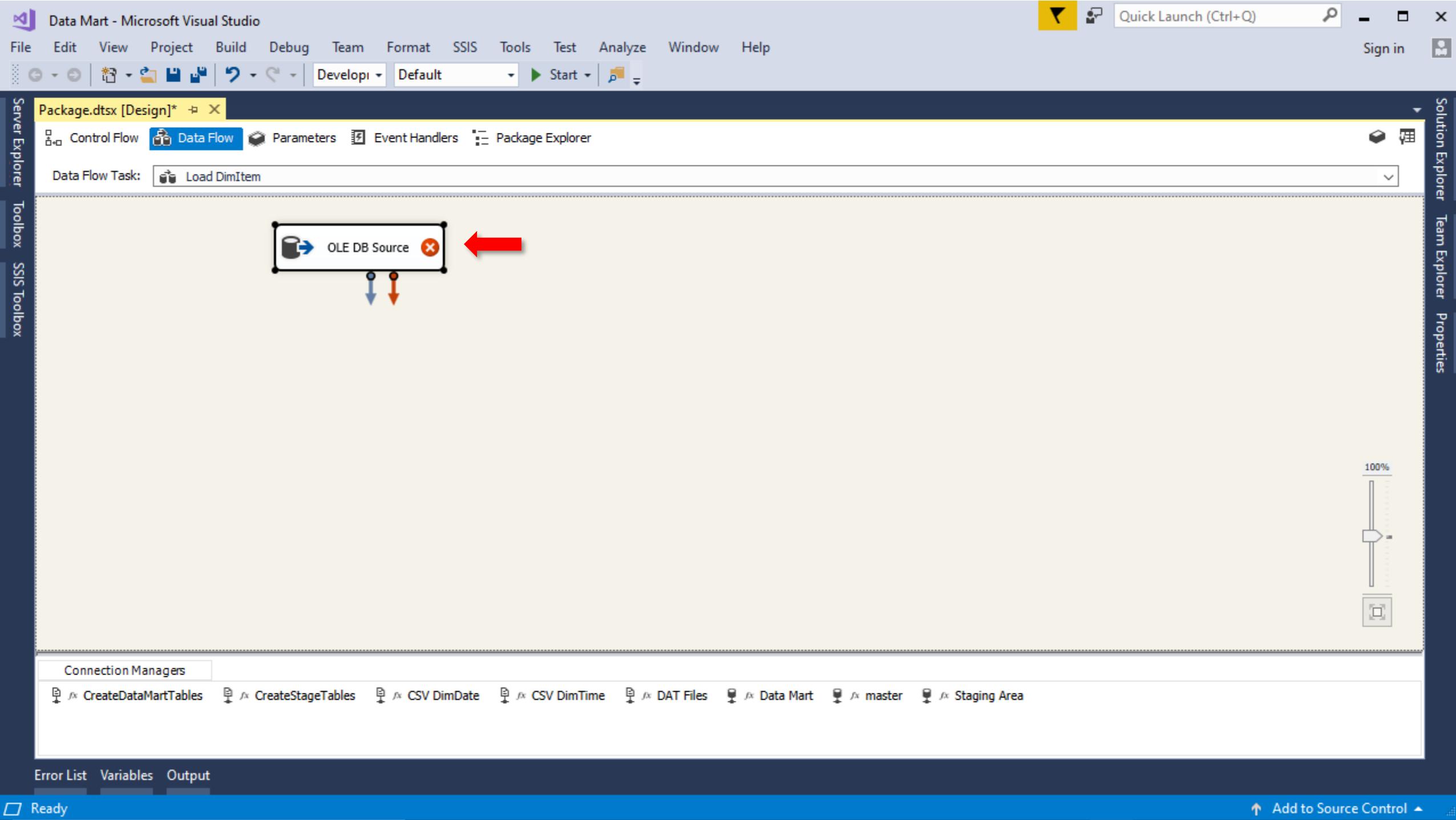






Click the *Data Flow* tab of the *Load DimItem*.





Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Quick Launch (Ctrl+O)

Package.dtsx [Design]*

Control Flow Data Flow Parameters Event Handlers Package Explorer

Data Flow Task: Load DimItem

Item

Connection Managers

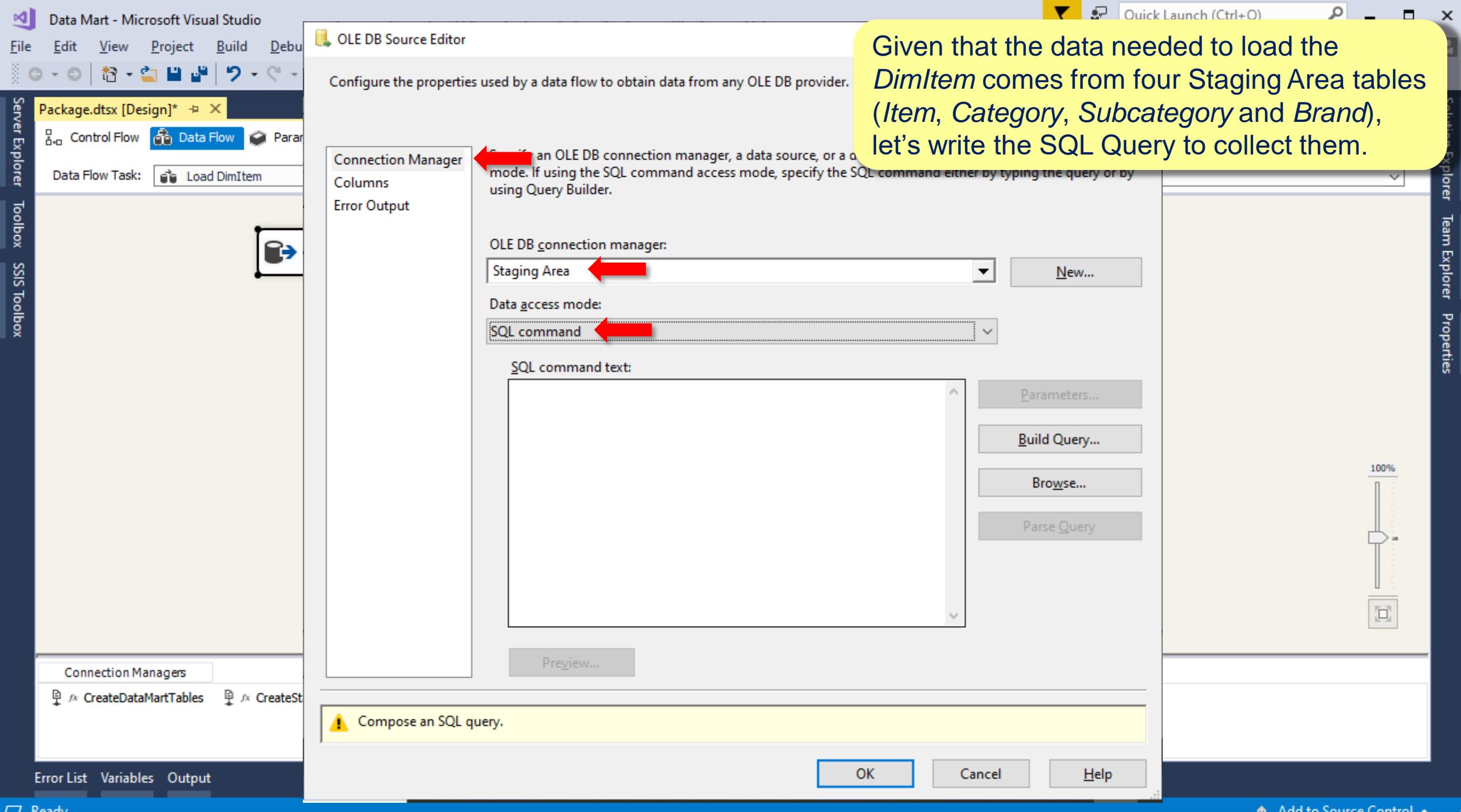
- CreateDataMartTables
- CreateStageTables
- CSV DimDate
- CSV DimTime
- DAT Files
- Data Mart
- master
- Staging Area

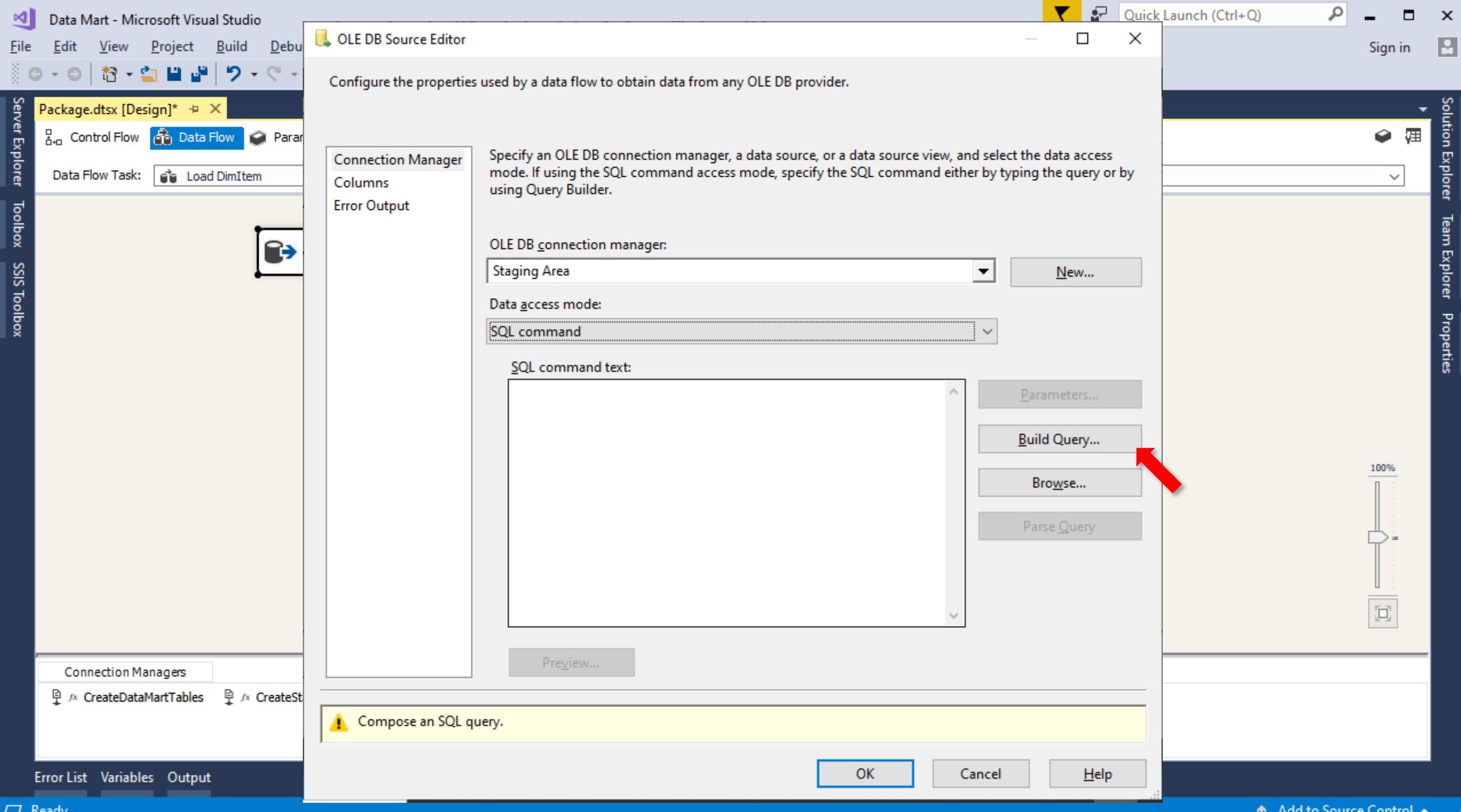
Error List Variables Output

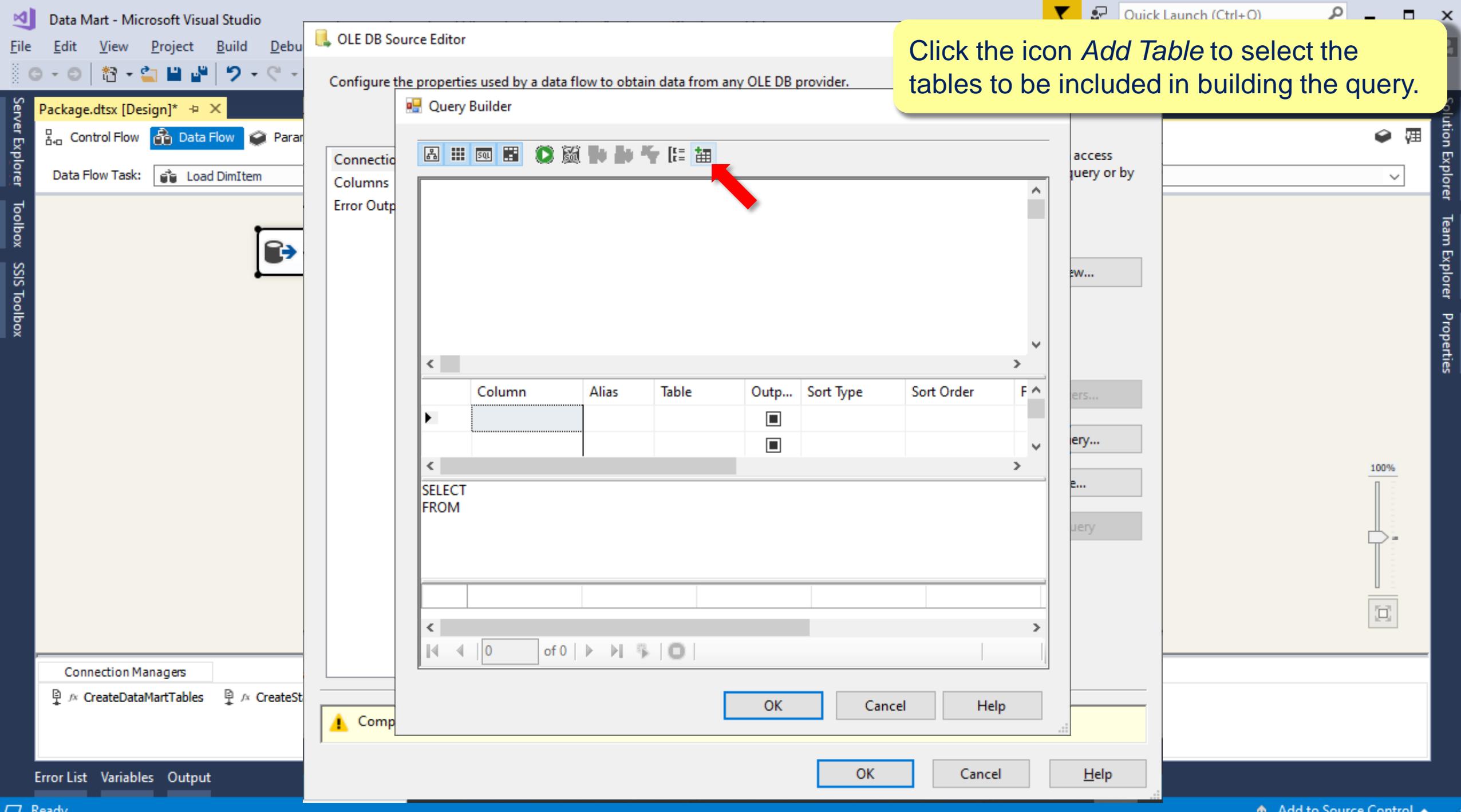
Add to Source Control

Rename the *OLE DB Source* to *Item*. The data to load the *DimItem* mainly comes from this Staging Area table. Edit the component to configure it.

```
graph TD; Item[Item] --> BlueTarget[ ]; Item --> RedTarget[ ];
```







Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Quick Launch (Ctrl+O)

Ctrl-click the needed tables to select them.

Package.dtsx [Design]*

Control Flow Data Flow Parameters Event Handlers Package Explorer

Data Flow Task: Load DimItem

Server Explorer Solution Explorer

Toolbox Team Explorer Properties

Transaction

Add Table

Tables Views Functions Synonyms

Brand
Card
CardDQP
Category
Item
MaritalStatusDescription_Lookup
SubCategory
Transaction
Transaction_Item

Refresh Add Close

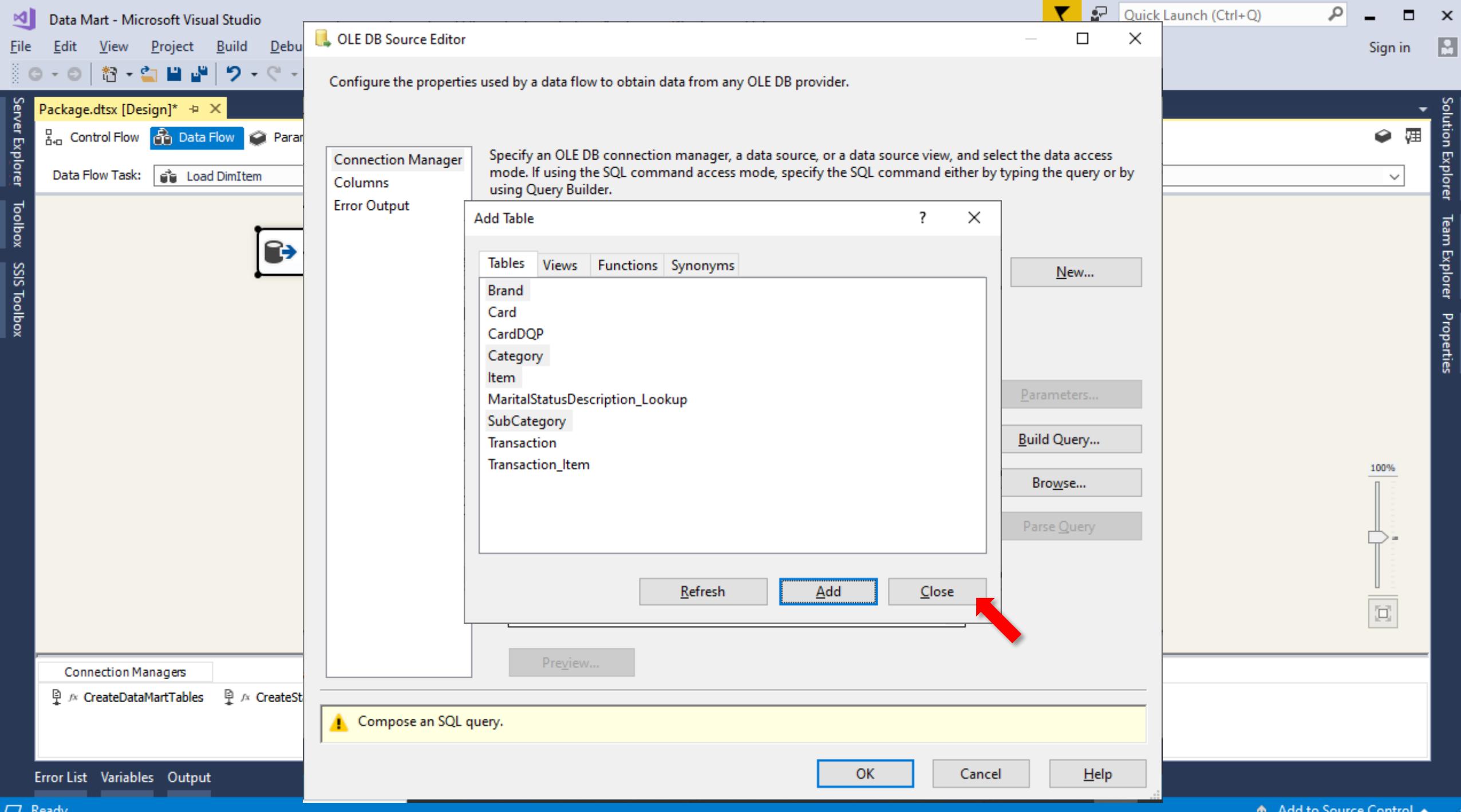
Connection Managers

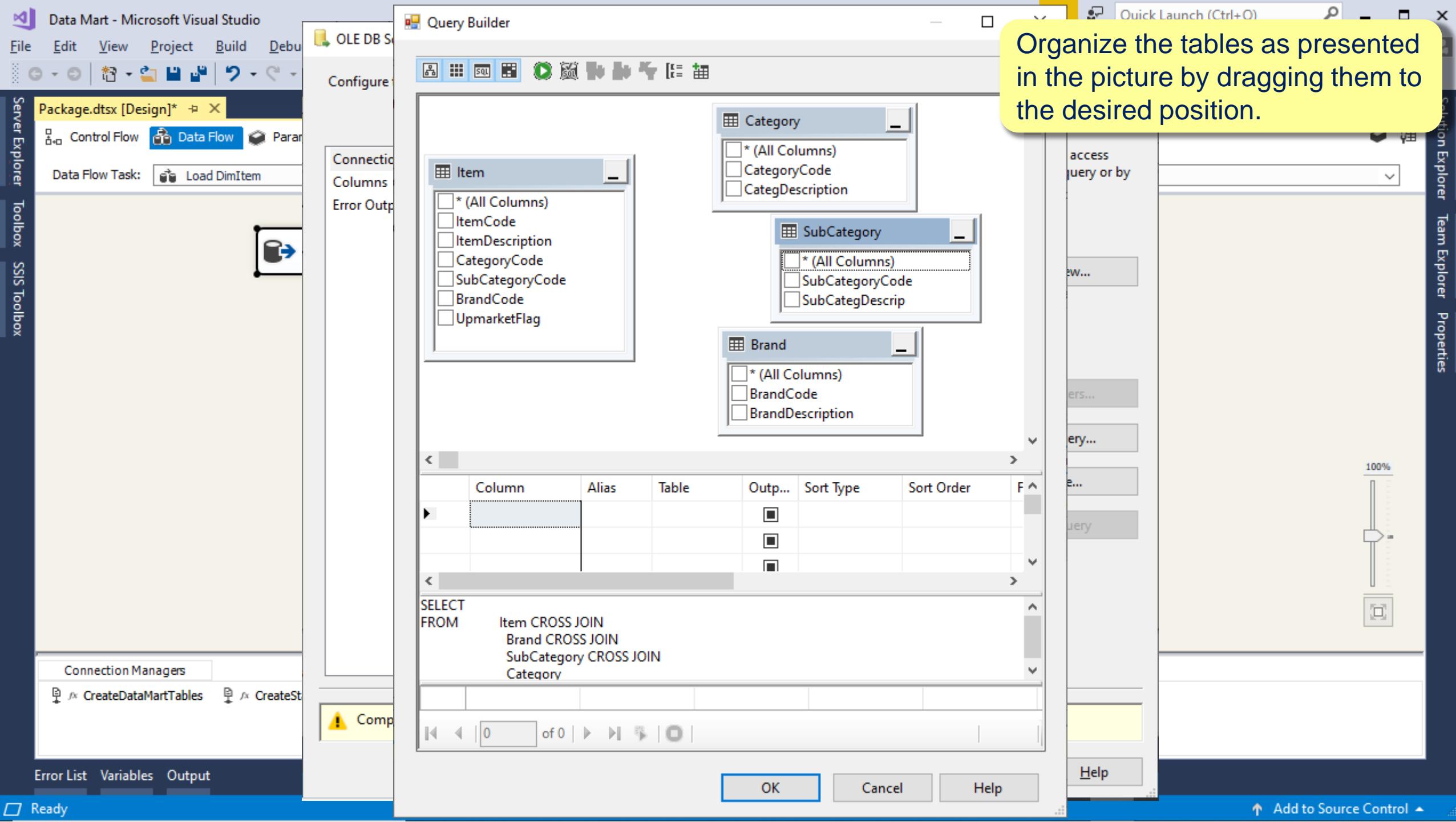
CreateDataMartTables CreateStageTables CSV DimDate CSV DimTime DAT Files Data Mart master Staging Area

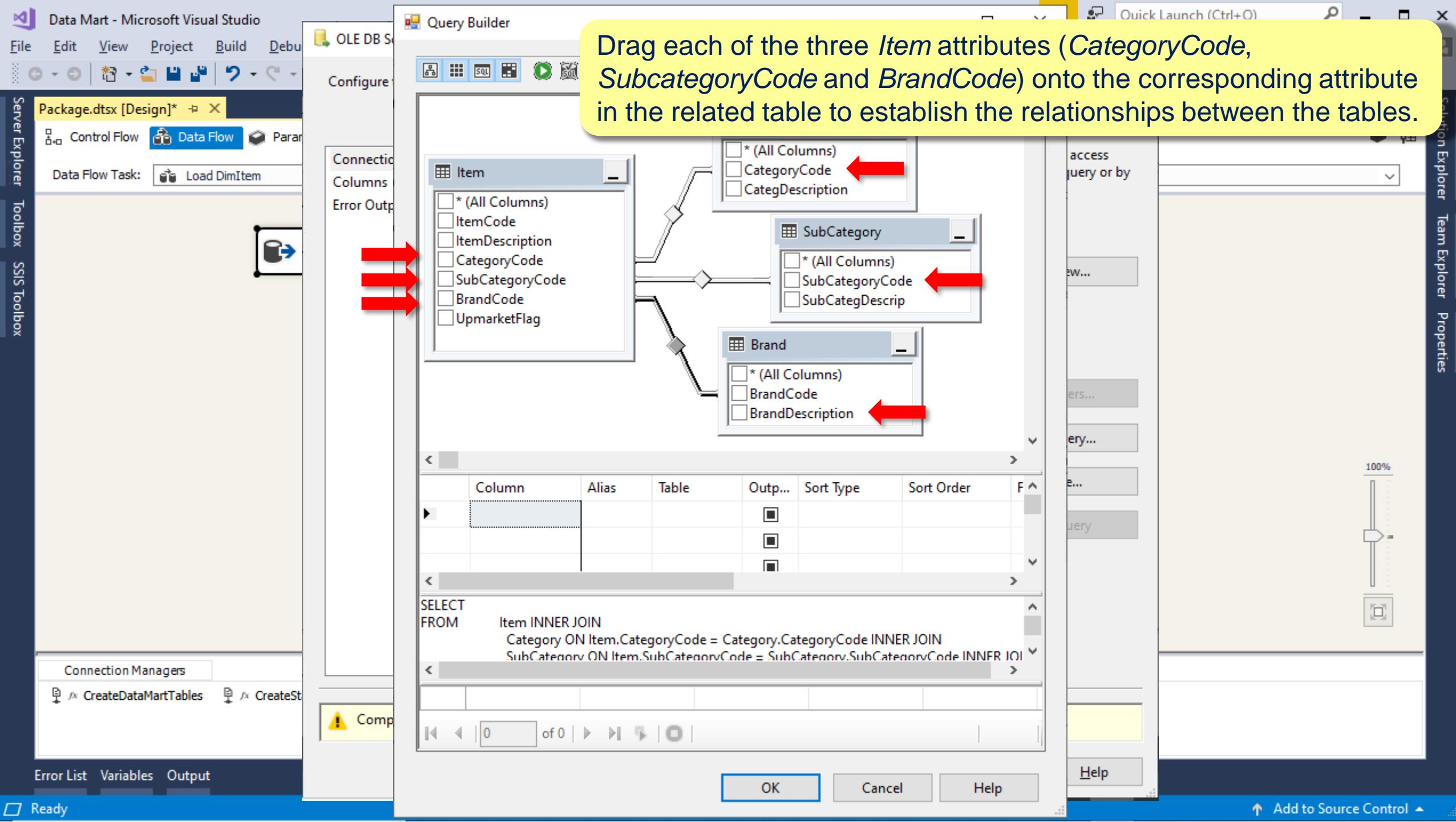
Error List Variables Output

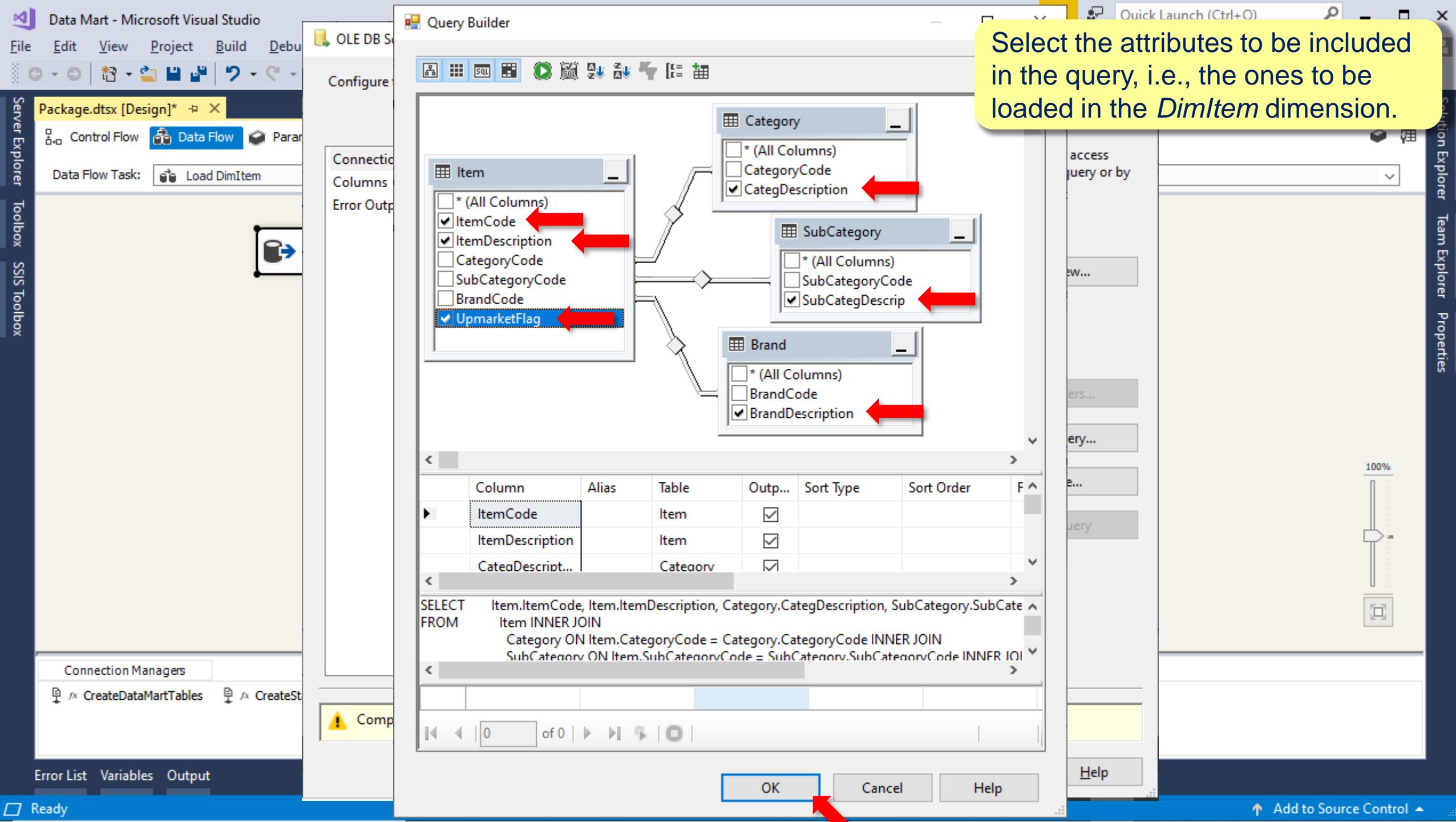
Ready Add to Source Control

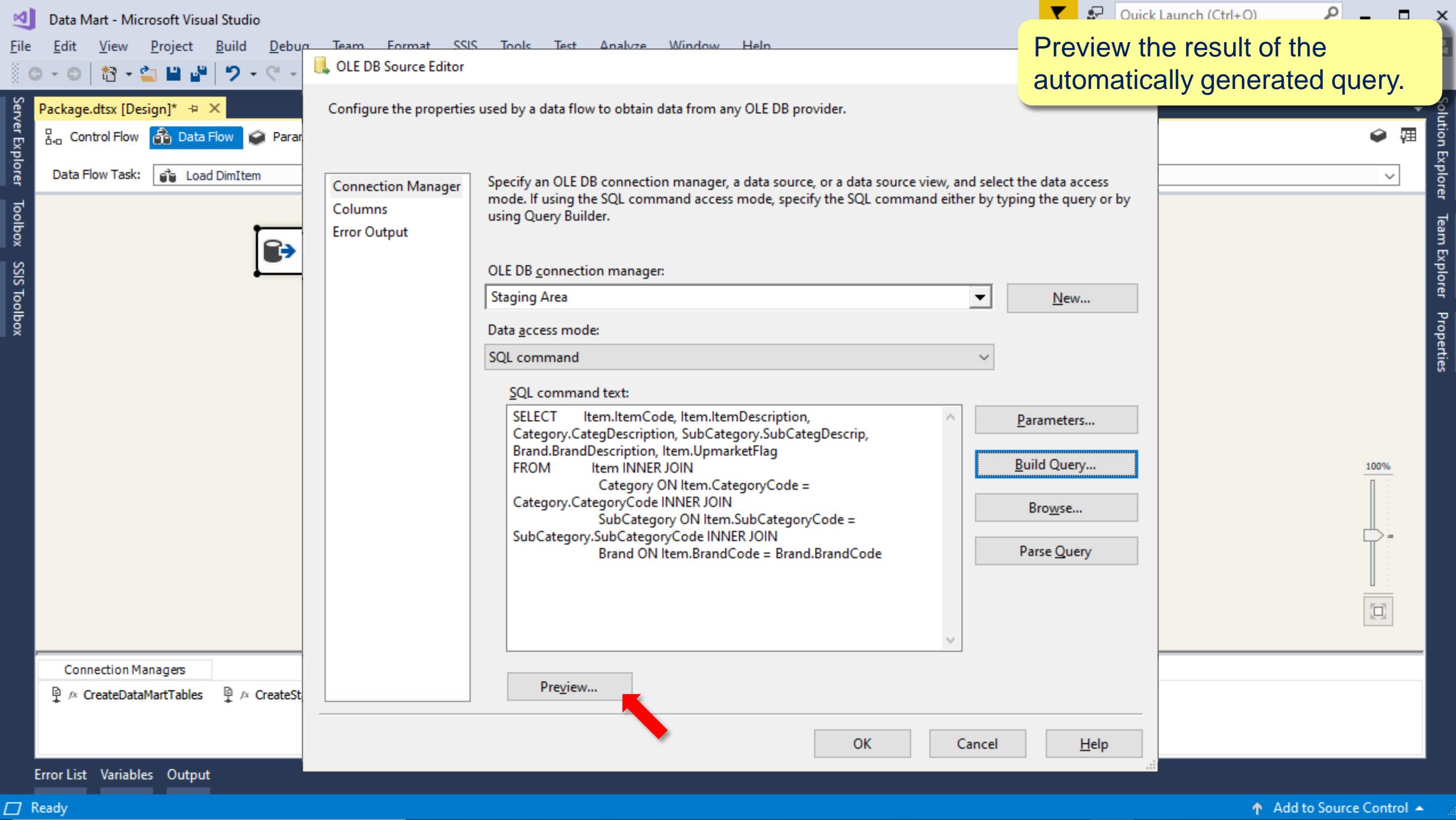
The screenshot displays the Microsoft Visual Studio interface for an SSIS package named 'Package.dtsx'. The main window shows a 'Data Flow Task' named 'Load DimItem'. On the left, the 'Toolbox' contains various data flow components. In the center, the 'Data Flow' tab is selected in the ribbon, and the 'Add Table' dialog box is open, listing tables from a catalog. The 'Tables' tab is active. Several tables are highlighted with blue selection bars, and red arrows point from the labels 'Brand', 'Category', 'Item', and 'SubCategory' to their respective entries in the list. The 'Add' button at the bottom right of the dialog is also highlighted with a red arrow. A callout bubble in the top right corner contains the text 'Ctrl-click the needed tables to select them.' The status bar at the bottom shows 'Ready' and 'Add to Source Control'.











Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Quick Launch (Ctrl+Q)

Sign in

Server Explorer

Toolbox

SSIS Toolbox

Package.dtsx [Design]*

Control Flow Data Flow Parameters

Data Flow Task: Load DimItem

Preview Query Results

Configure the properties used by a data flow to obtain data from any OLE DB provider.

Query result (up to the first 200 rows):

ItemCode	ItemDescri...	CategDescri...	SubCateg...	BrandDescri...	UpmarketF...
I0000000...	BXT - List...	Accesoires	Mini Spea...	BXT	F
I0000000...	BXT - List...	Accesoires	Mini Spea...	BXT	F
I0000000...	BXT - List...	Accesoires	Mini Spea...	BXT	F
I0000000...	ENDOS - ...	Accesoires	Mini Spea...	Endos	F
I0000000...	ENDOS - ...	Accesoires	Mini Spea...	Endos	F
I0000000...	ENDOS - ...	Accesoires	Mini Spea...	Endos	F
I0000000...	ENDOS - ...	Accesoires	Mini Spea...	Endos	F
I0000000...	TTP - TTP ...	Accesoires	Mini Spea...	TTP	F
I0000000...	BXT - Ada...	Accesoires	Adaptor	BXT	F
I0000000...	BXT - Ada...	Accesoires	Adaptor	BXT	F
I0000000...	ENDOS - ...	Accesoires	Adaptor	Endos	F
I0000000...	ENDOS - ...	Accesoires	Adaptor	Endos	F
I0000000...	TTP - TTP ...	Accesoires	Adaptor	TTP	F
I0000000...	BXT - AA	Accesoires	Batteries	BXT	F
I0000000...	BXT - AAA	Accesoires	Batteries	BXT	F
I0000000...	BXT - 9V	Accesoires	Batteries	BXT	F
I0000000...	PXT - AA	Accesoires	Batteries	PXT	F

data access
the query or by

New...

Parameters...

Find Query...

Browse...

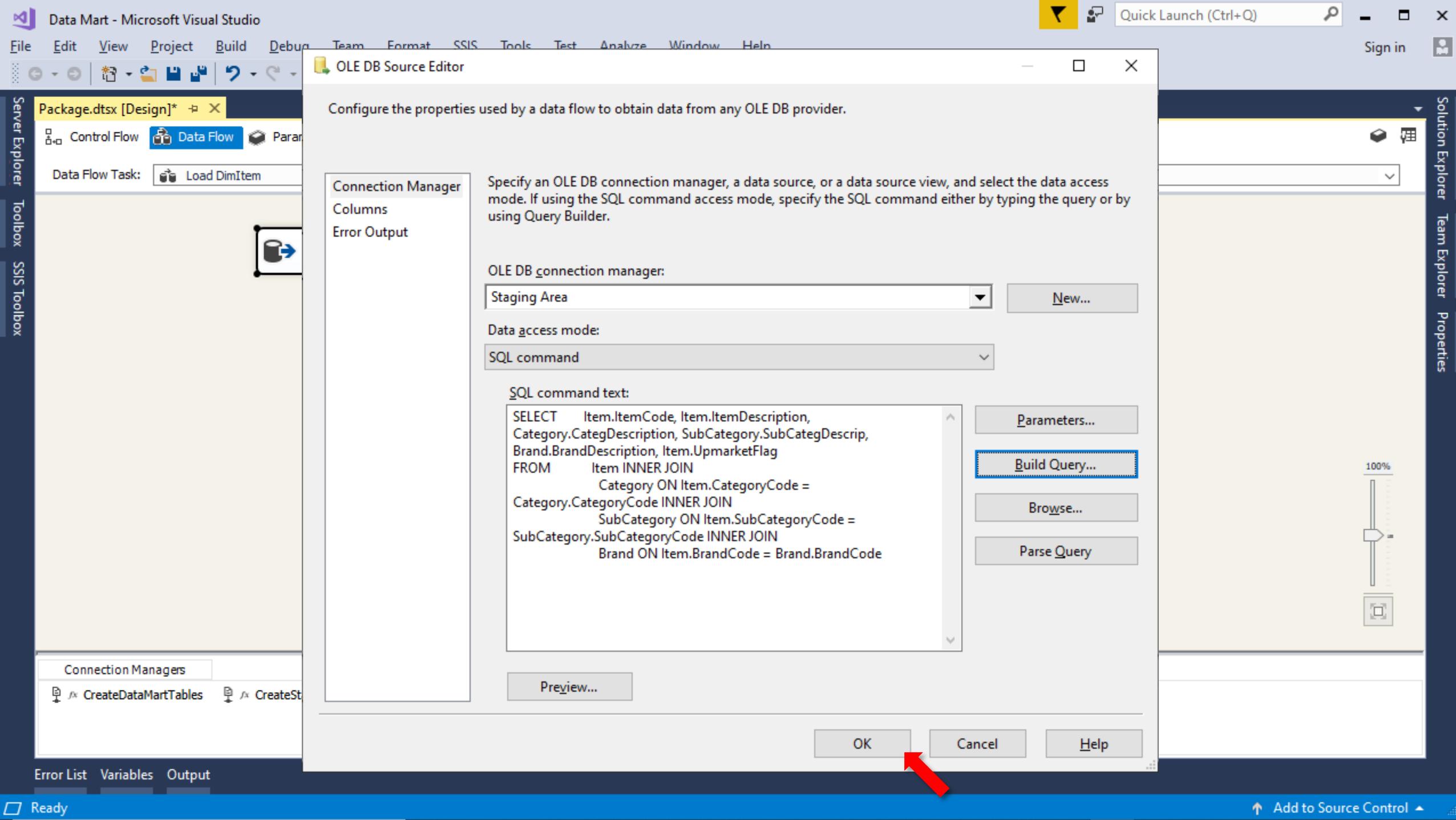
Use Query

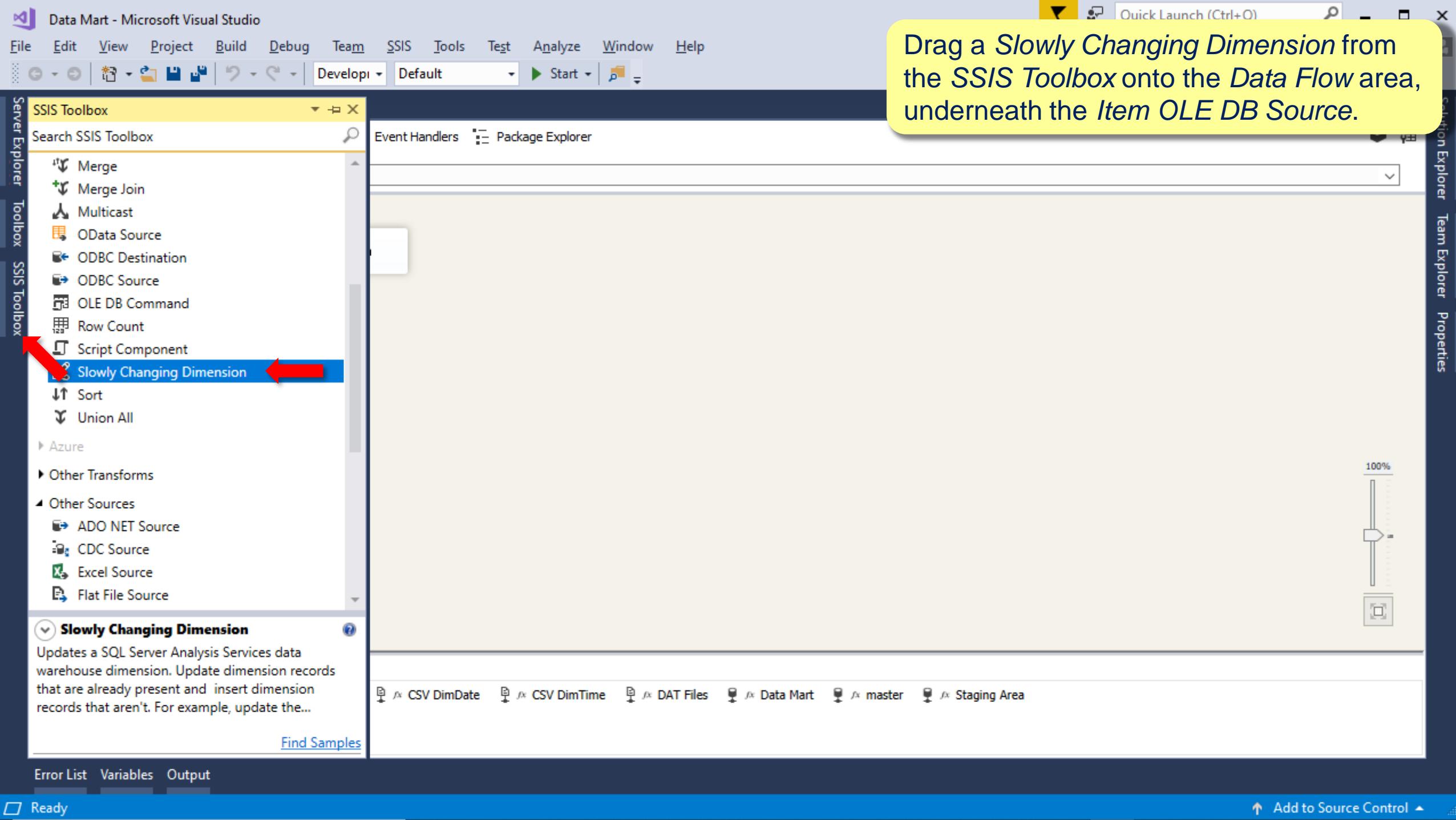
Close

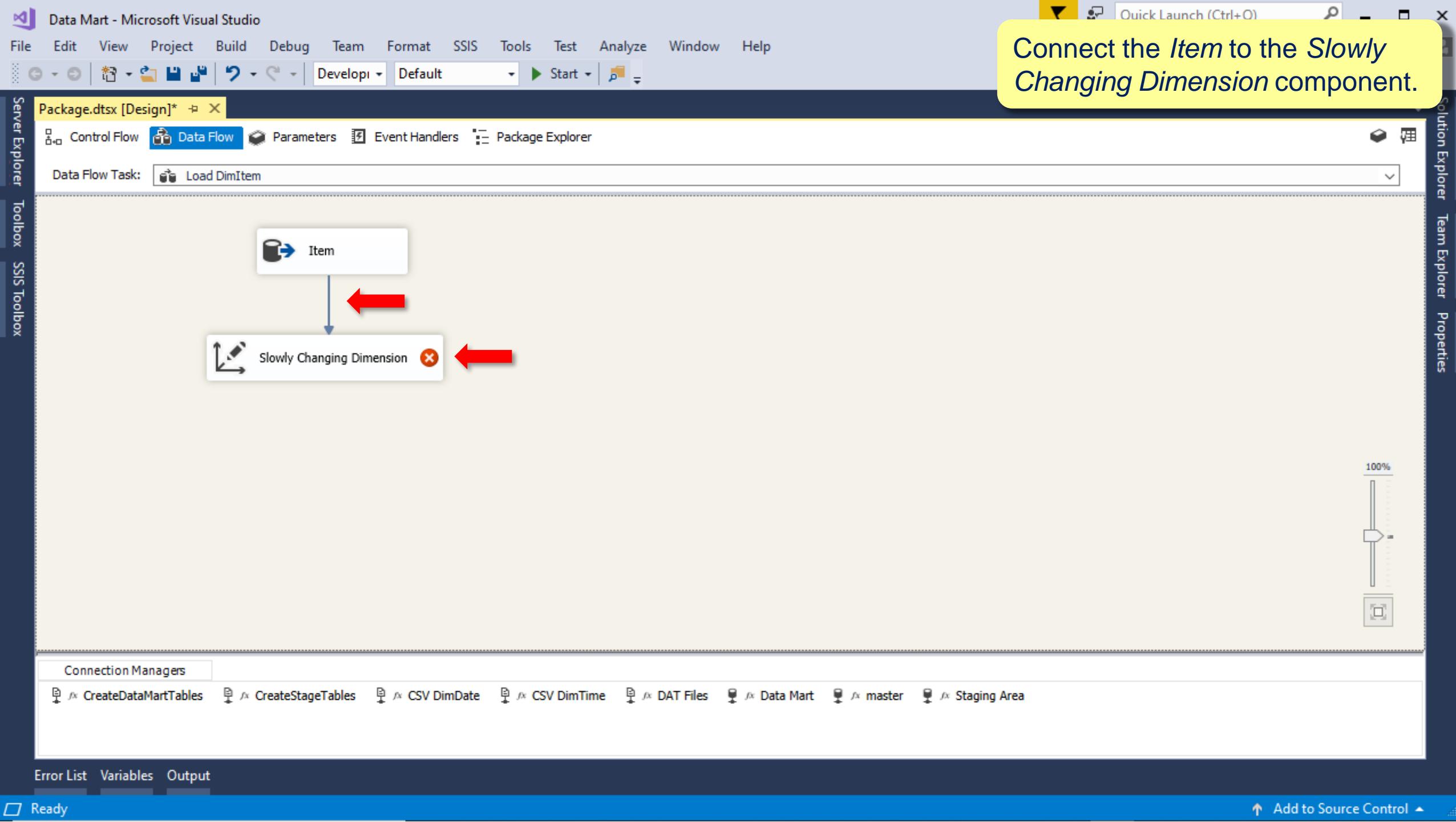
OK Cancel Help

Add to Source Control

Ready







Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Quick Launch (Ctrl+O)

Package.dtsx [Design]*

Control Flow Data Flow Parameters Event Handlers Package Explorer

Data Flow Task: Load DimItem

Server Explorer Toolbox SSIS Toolbox

Connection Managers

- CreateDataMartTables
- CreateStageTables
- CSV DimDate
- CSV DimTime
- DAT Files
- Data Mart
- master
- Staging Area

Error List Variables Output

Ready Add to Source Control

Double click the *Slowly Changing Dimension* component to configure it. The configuration is done through a wizard.

The screenshot shows the Microsoft Visual Studio interface for an SSIS package named "Package.dtsx". The "Data Flow" tab is selected in the ribbon. On the left, a data flow diagram shows a source component "Item" connected to a "Slowly Changing Dimension" transformation component. In the center, the "Slowly Changing Dimension Wizard" dialog box is open, displaying the "Welcome to the Slowly Changing Dimension Wizard" page. The "Next >" button at the bottom of the dialog is highlighted with a red arrow. A yellow callout bubble points to this button with the text: "Double click the Slowly Changing Dimension component to configure it. The configuration is done through a wizard." At the bottom of the screen, connection managers are listed: CreateDataMartTables, CreateStageTables, CSV DimDate, CSV DimTime, DAT Files, Data Mart, master, and Staging Area. The status bar at the bottom indicates "Ready" and "Add to Source Control".

Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analy

Quick Launch (Ctrl+O)

Server Explorer

Toolbox

SSIS Toolbox

Team Explorer

Properties

Package.dtsx [Design]*

Control Flow Data Flow Parameters Event

Data Flow Task: Load DimItem

Item

Slowly Changing Dimension

Select a Dimension Table

Select a dimension table to load and map columns in the transformation input to columns in the dimension table.

Connection manager: Data Mart

Table or view: [dbo].[DimItem]

Input Columns Dimension Columns Key Type

Input Columns	Dimension Columns	Key Type
BrandDescription	BrandDescription	Not a key column
CategDescription	CategDescription	Not a key column
	EffectiveDate	
	ExpiredDate	
	IsCurrent	
ItemDescription	ItemDescription	Not a key column
ItemCode	ItemID	Business key
SubCategDescrip	SubCategDescrip	Not a key column
UpmarketFlag	UpmarketFlag	Not a key column

Help < Back Next > Finish > Cancel

100%

CreateDataMartTables CreateStageTables

Error List Variables Output

Add to Source Control

Select the connection manager for the Data Mart, the destination table/dimension (*DimItem*), and establish the mappings between the source (*Item* table) attributes and the destination table (*DimItem* table) attributes. Select the attribute which is the business key (i.e., primary key) in the source table.

The screenshot shows the 'Slowly Changing Dimension Wizard' dialog in Microsoft Visual Studio. The 'Connection manager' dropdown is set to 'Data Mart' and the 'Table or view' dropdown is set to '[dbo].[DimItem]'. In the 'Input Columns' grid, the 'ItemCode' column is highlighted as the 'Business key'. The 'Next >' button is highlighted with a red arrow. A large yellow callout box on the right side provides instructions for selecting the connection manager, destination table, and establishing mappings, specifically mentioning the business key attribute.

Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze

Package.dtsx [Design]*

Control Flow Data Flow Parameters Event

Data Flow Task: Load DimItem

Item

Slowly Changing Dimension

Slowly Changing Dimension Wizard

Slowly Changing Dimension Columns

Manage the changes to column data in your slowly changing dimensions by setting the change type for dimension columns.

Fixed Attribute
Select this type when the value in a column should not change. Changes are treated as errors.

Changing Attribute
Select this type when changed values should overwrite existing values. This is a Type 1 change.

Historical Attribute
Select this type when changes in column values are saved in new records. Previous values are saved in records marked as outdated. This is a Type 2 change.

Select a change type for slowly changing dimension columns:

Dimension Columns	Change Type
BrandDescription	Historical attribute
CategDescription	Historical attribute
SubCategDescrip	Historical attribute
ItemDescription	Changing attribute
UpmarketFlag	Historical attribute

Remove

Help < Back Next > Finish >> Cancel

Connection Managers

CreateDataMartTables CreateStageTables

Error List Variables Output

Ready Add to Source Control

Select the attributes for which you want to keep the history of the changes (i.e., Type 2 SCD) and the one (*ItemDescription*) that you just want to update it with the changes (i.e., Type 1 SCD) but without keeping the history of the changes.

The screenshot shows the 'Slowly Changing Dimension Wizard' dialog box in Microsoft Visual Studio. The 'Slowly Changing Dimension Columns' step is displayed. A table lists five dimension columns and their corresponding change types: BrandDescription, CategDescription, SubCategDescrip, ItemDescription, and UpmarketFlag. Red arrows point from the text instructions above to the 'ItemDescription' row, indicating it should be set to 'Changing attribute'. The 'UpmarketFlag' row is also highlighted with a red arrow. The 'Next >' button at the bottom is highlighted with a red arrow, indicating the next step in the wizard.

Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Quick Launch (Ctrl+O)

Package.dtsx [Design]*

Control Flow Data Flow Parameters Event

Data Flow Task: Load DimItem

Item

Slowly Changing Dimension

Fixed and Changing Attribute Options

Fixed attributes

Fail the transformation if changes are detected in a fixed attribute

Changing attributes

Change all the matching records, including outdated records, when changes are detected in a changing attribute

Help < Back Next > Finish >> Cancel

Select the option to update all the records when a change occurs in a changing attribute (Type 1 SCD).

Server Explorer Solution Explorer Team Explorer Properties

100%

CreateDataMartTables CreateStageTables

Error List Variables Output

Add to Source Control

```
graph TD; Item[Item] --> SCD[Slowly Changing Dimension]; SCD --> Wizard[Fixed and Changing Attribute Options]; Wizard --> Next[Next >]
```

Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Quick Launch (Ctrl+O)

Package.dtsx [Design]*

Control Flow Data Flow Parameters Event Handlers Package Explorer

Data Flow Task: Load DimItem

Historical Attribute Options

You can record historical attributes using a single column or start and end date columns.

Use a single column to show current and expired records
Column to indicate current record:
Value when current:
Expiration value:

Use start and end dates to identify current and expired records
Start date column: EffectiveDate
End date column: ExpiredDate
Variable to set date values: System::ContainerStartTime

Help < Back Next > Finish >> Cancel

Connection Managers

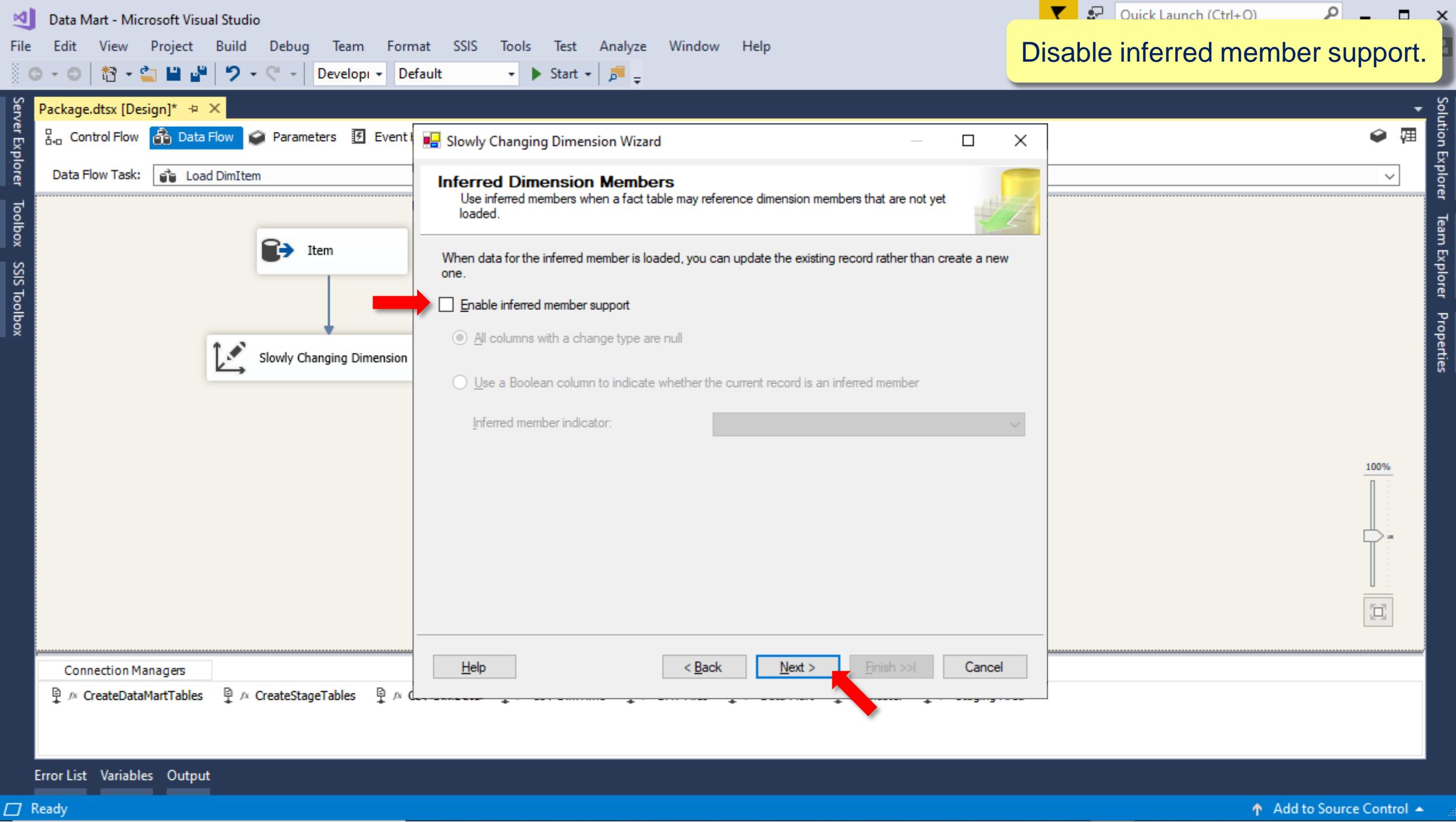
CreateDataMartTables CreateStageTables CSV DimDate CSV DimTime DAT Files Data Mart master Staging Area

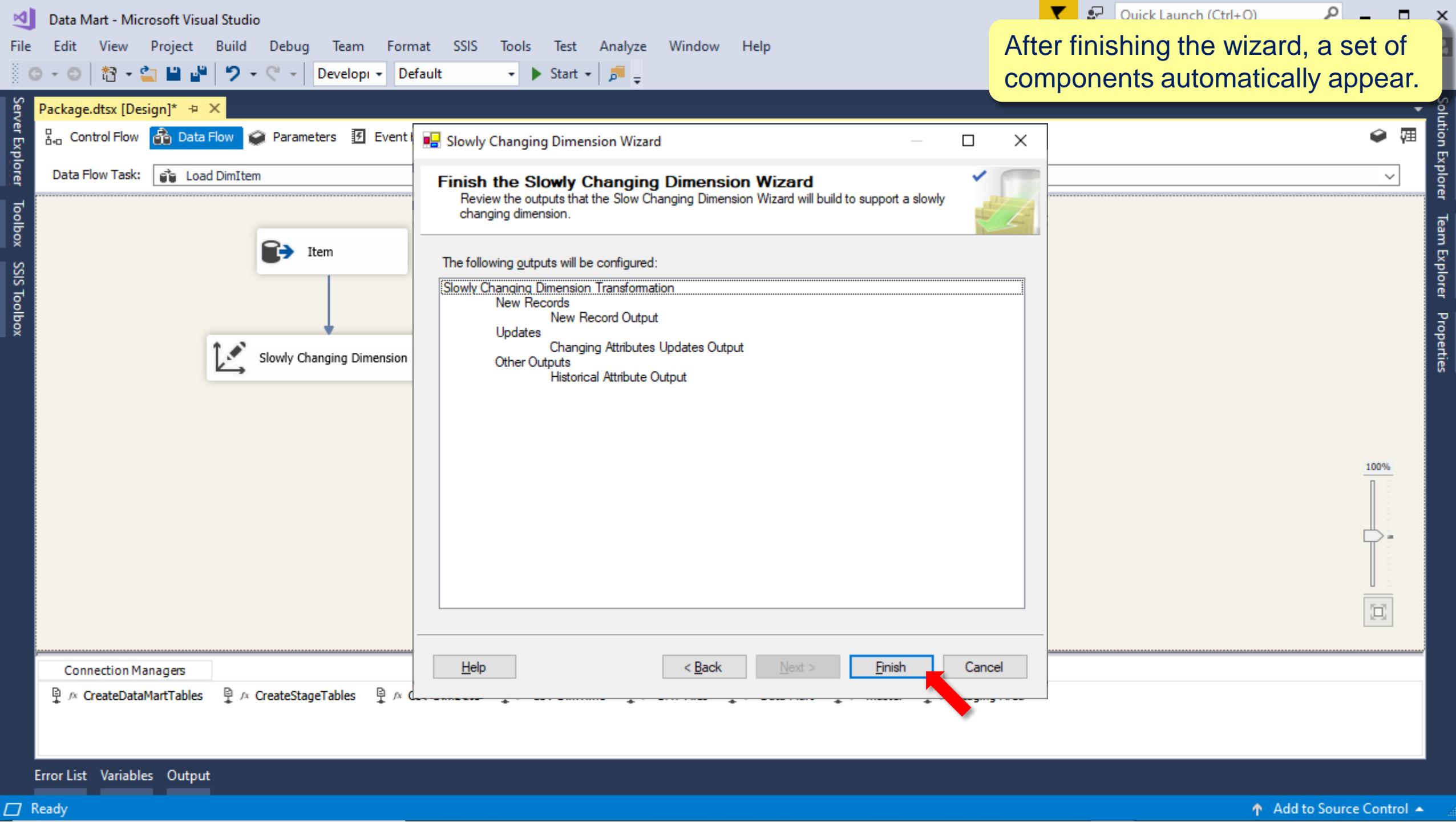
Error List Variables Output

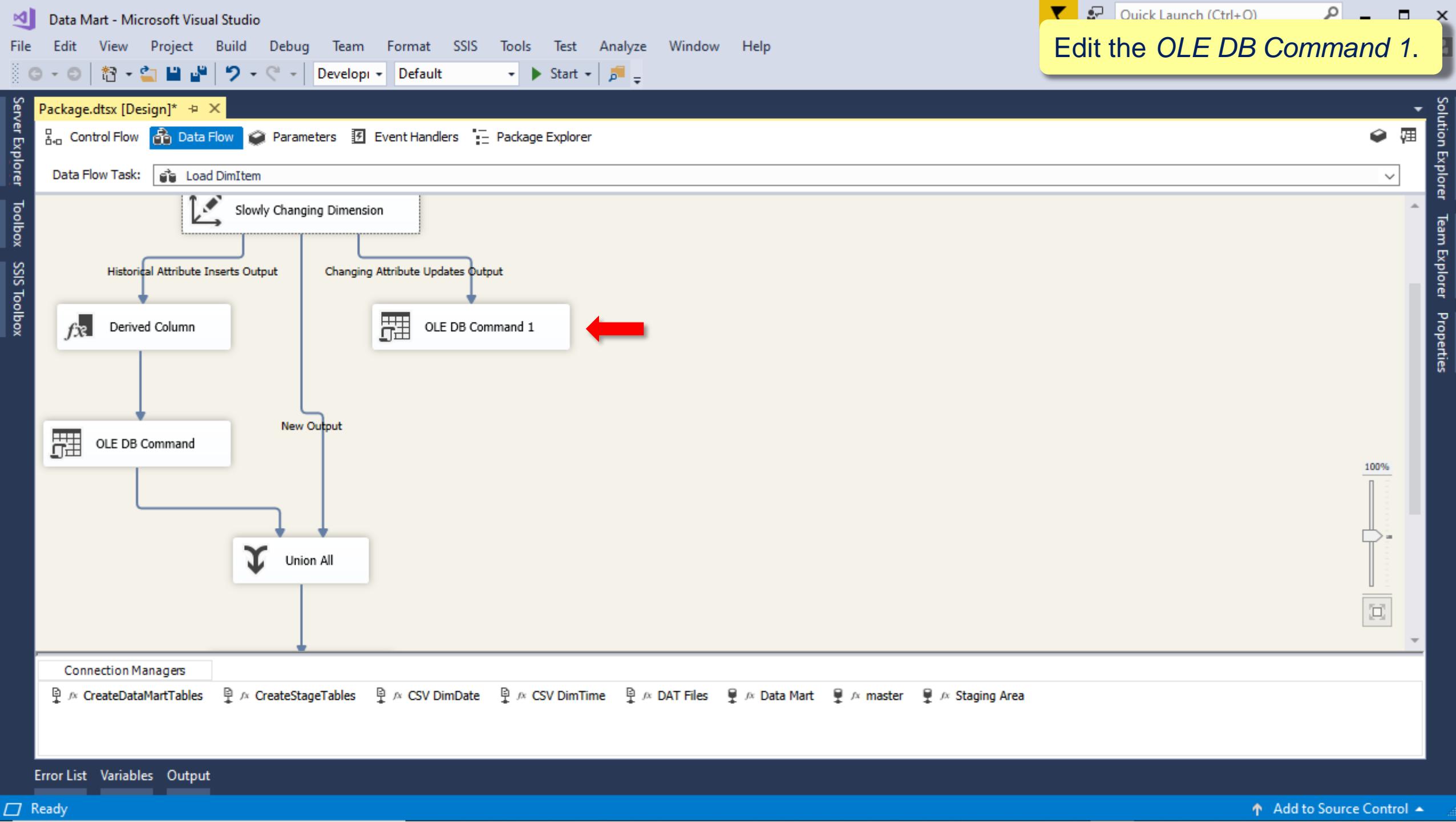
Add to Source Control

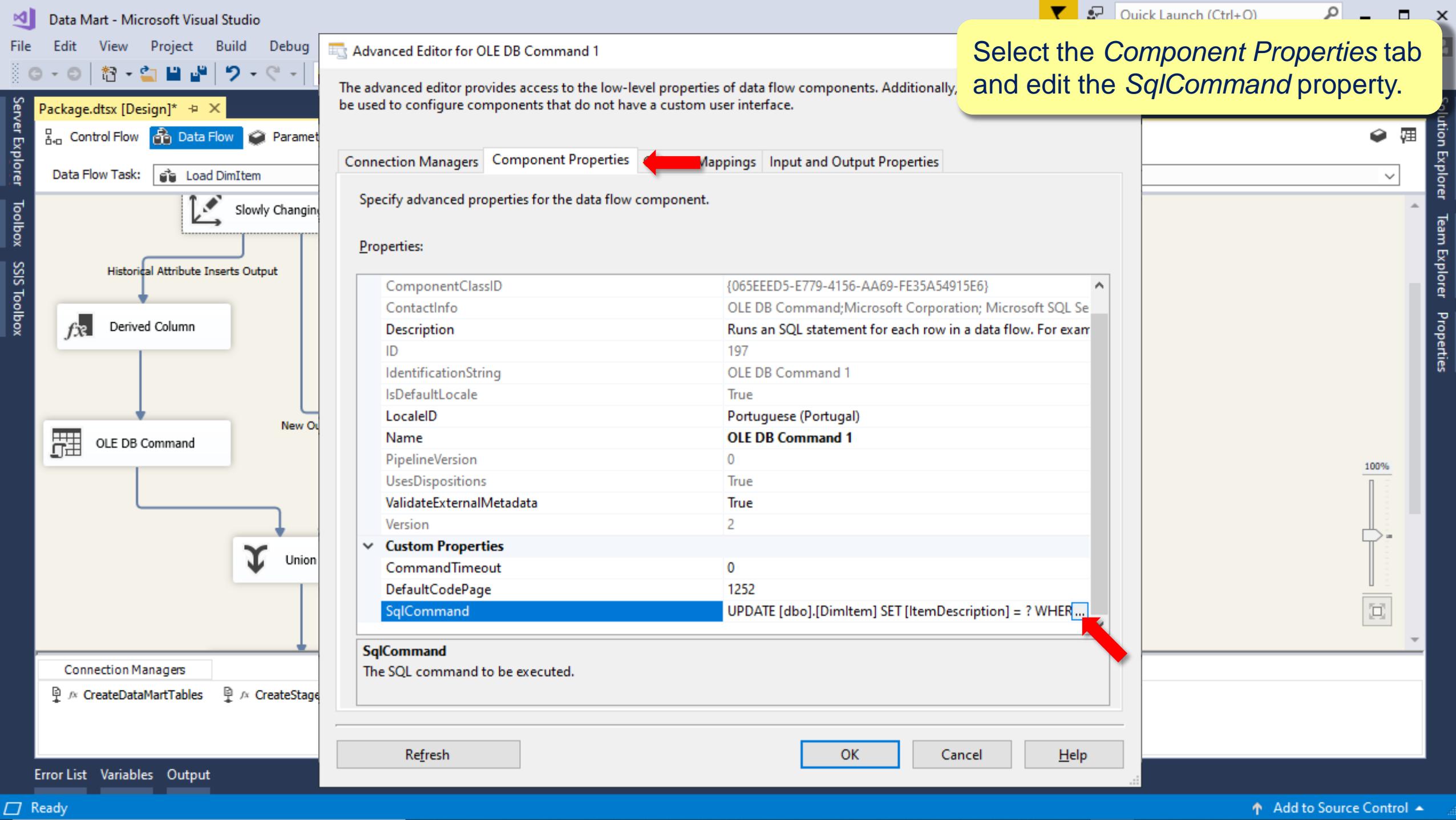
Select the attributes that store the start date and end date of the records (for Type 2 SCD), and the system variable to use to update them.

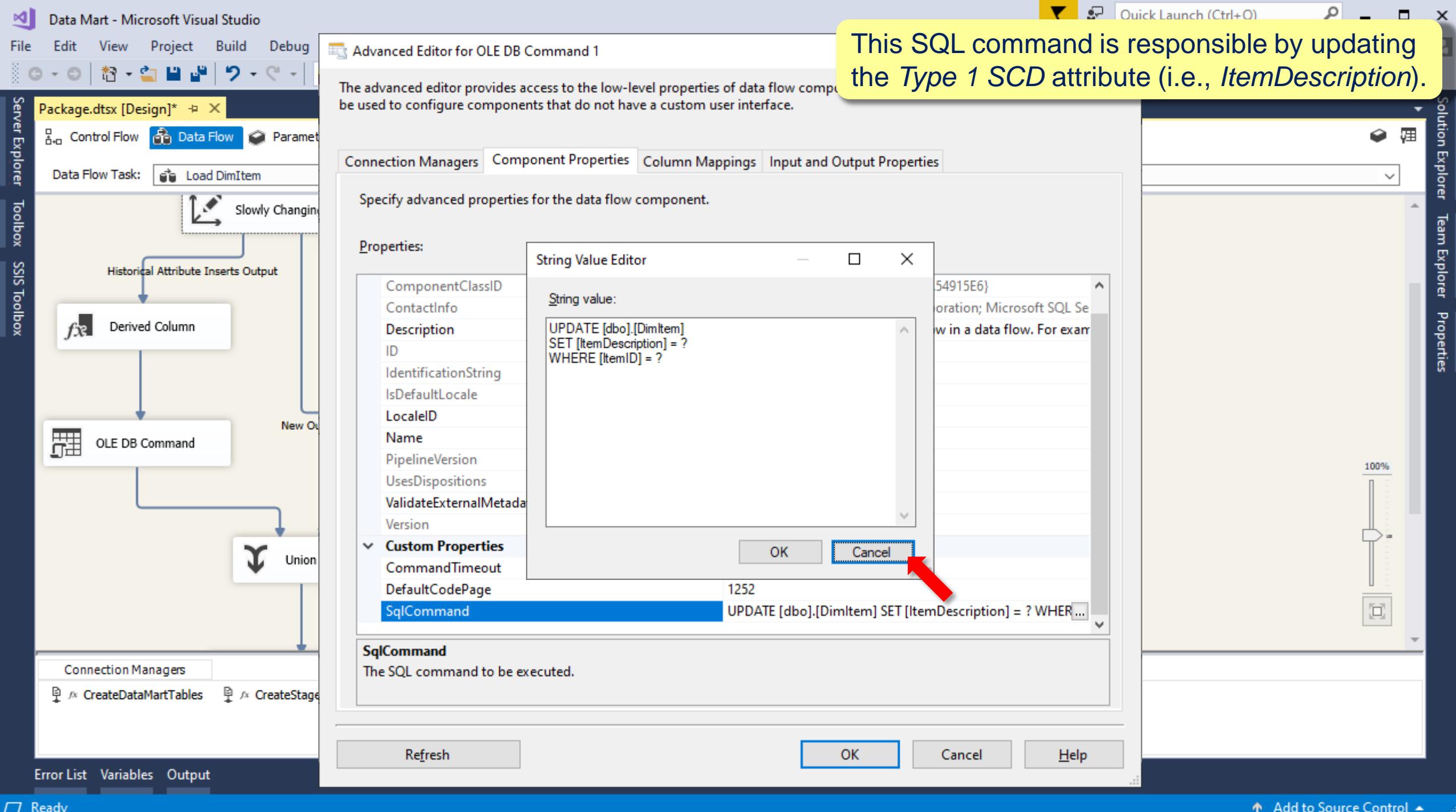
```
graph TD; Start(( )) --> Item[Item]; Item --> SCD[Slowly Changing Dimension]; SCD --> Wizard[Slowly Changing Dimension Wizard]; Wizard --> Next[Next >]
```

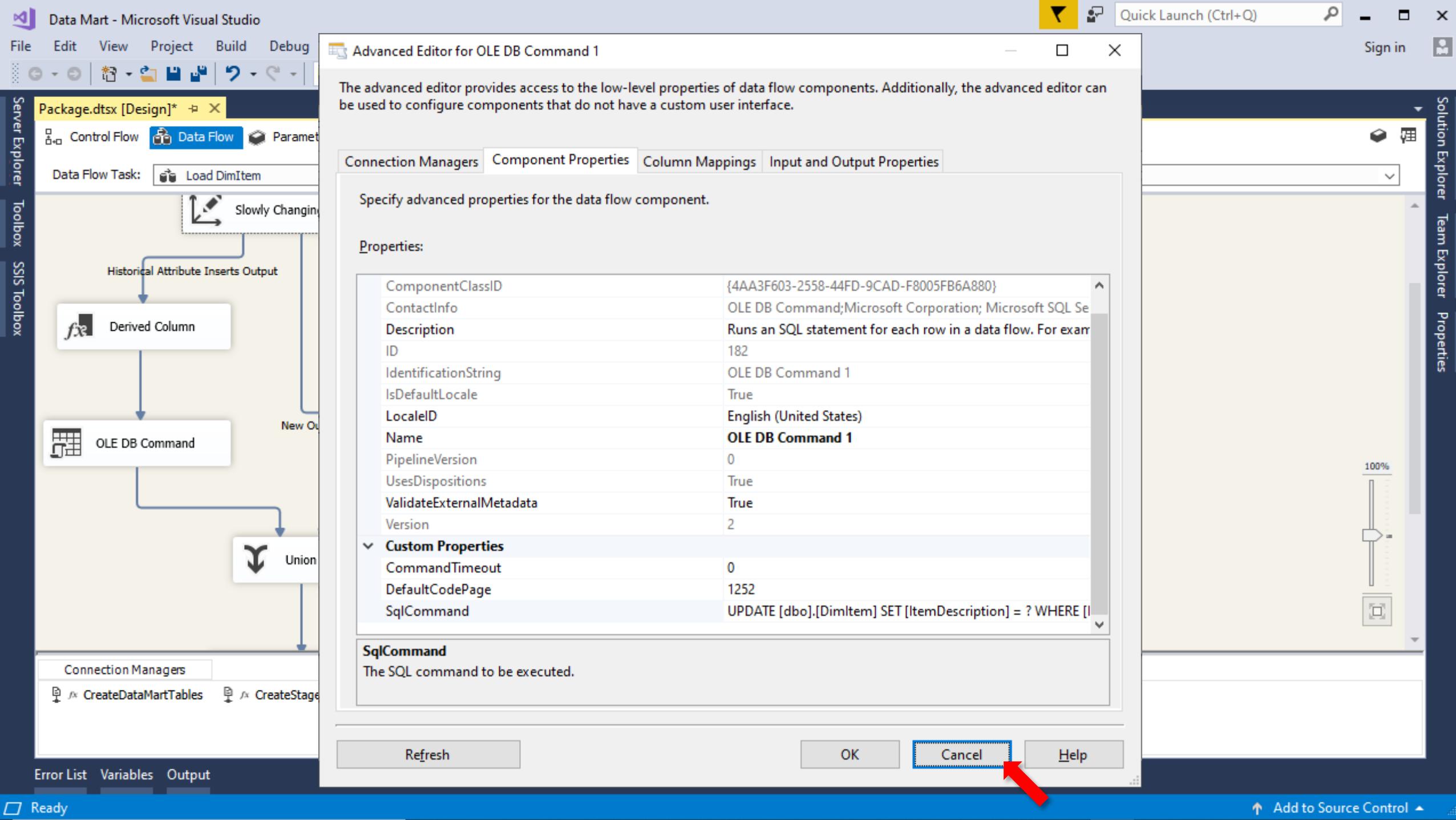


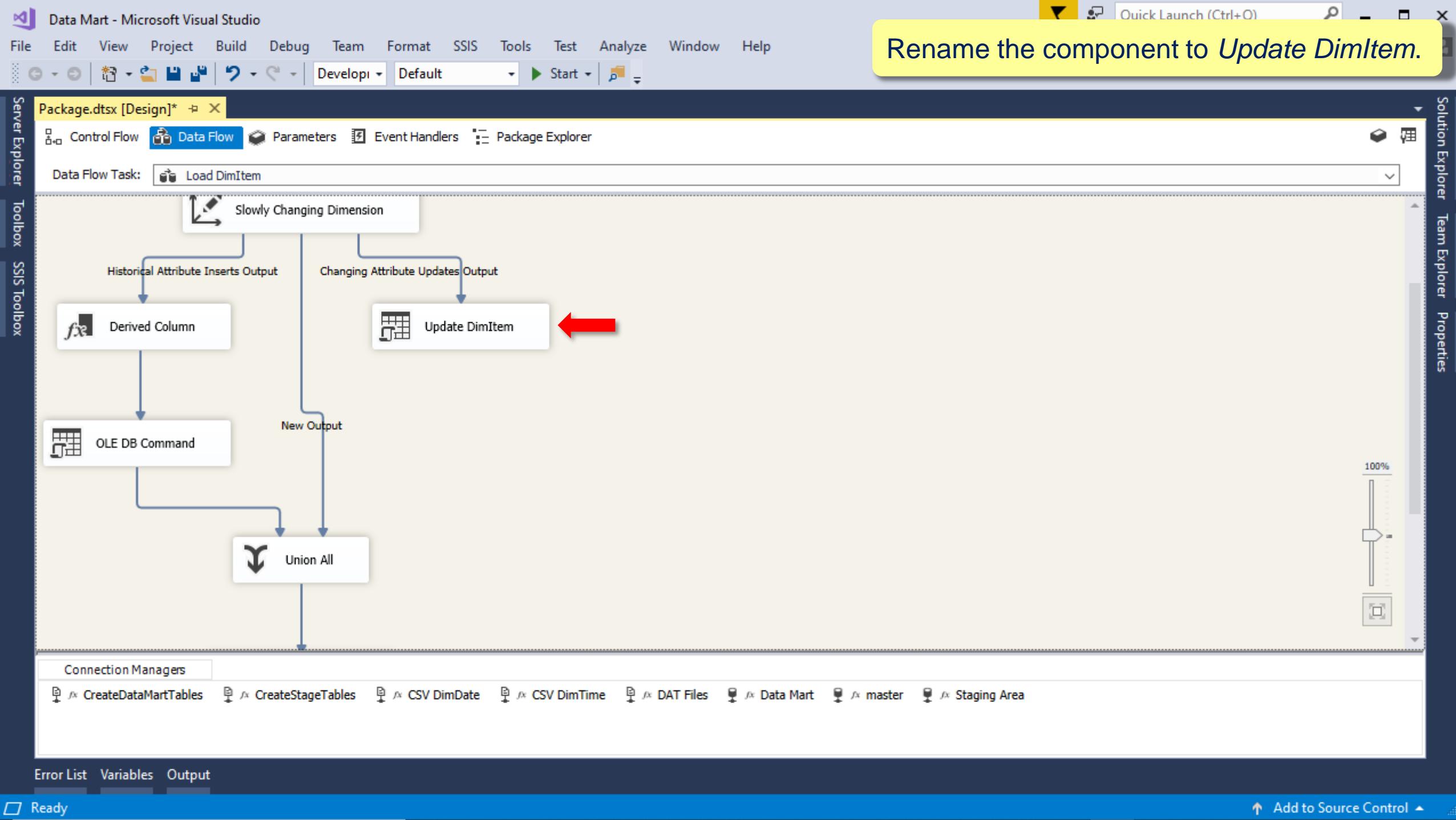


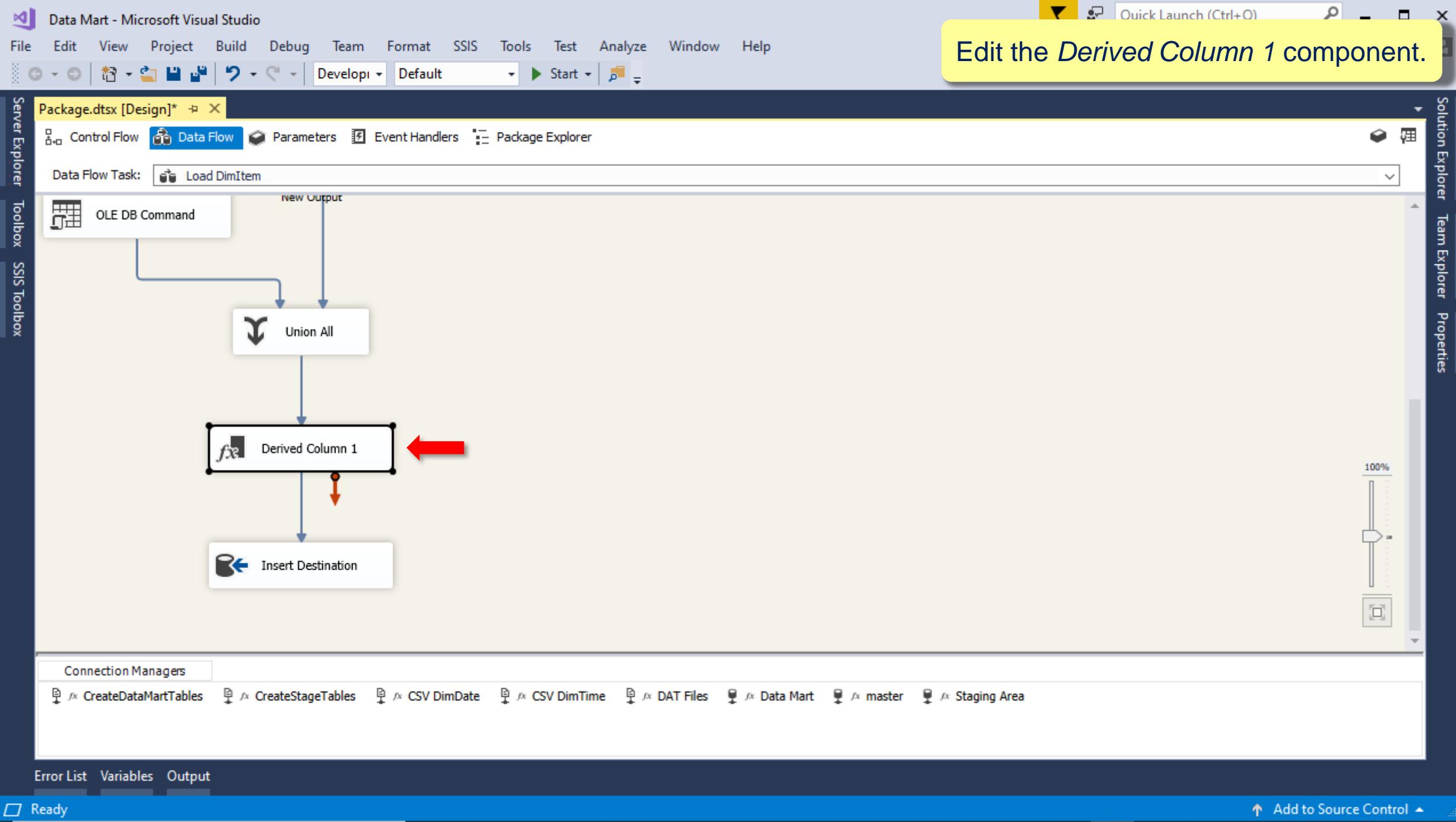


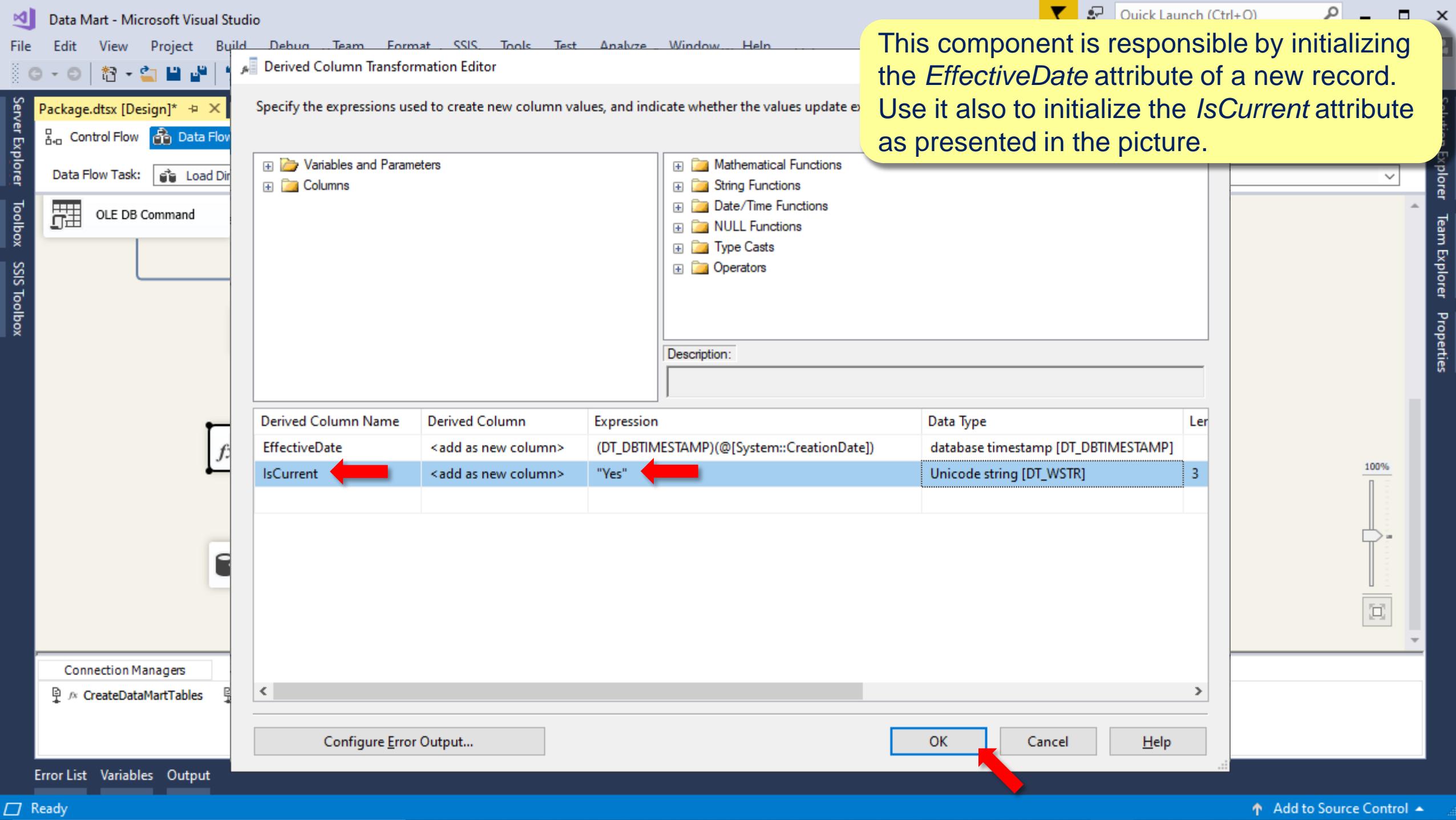


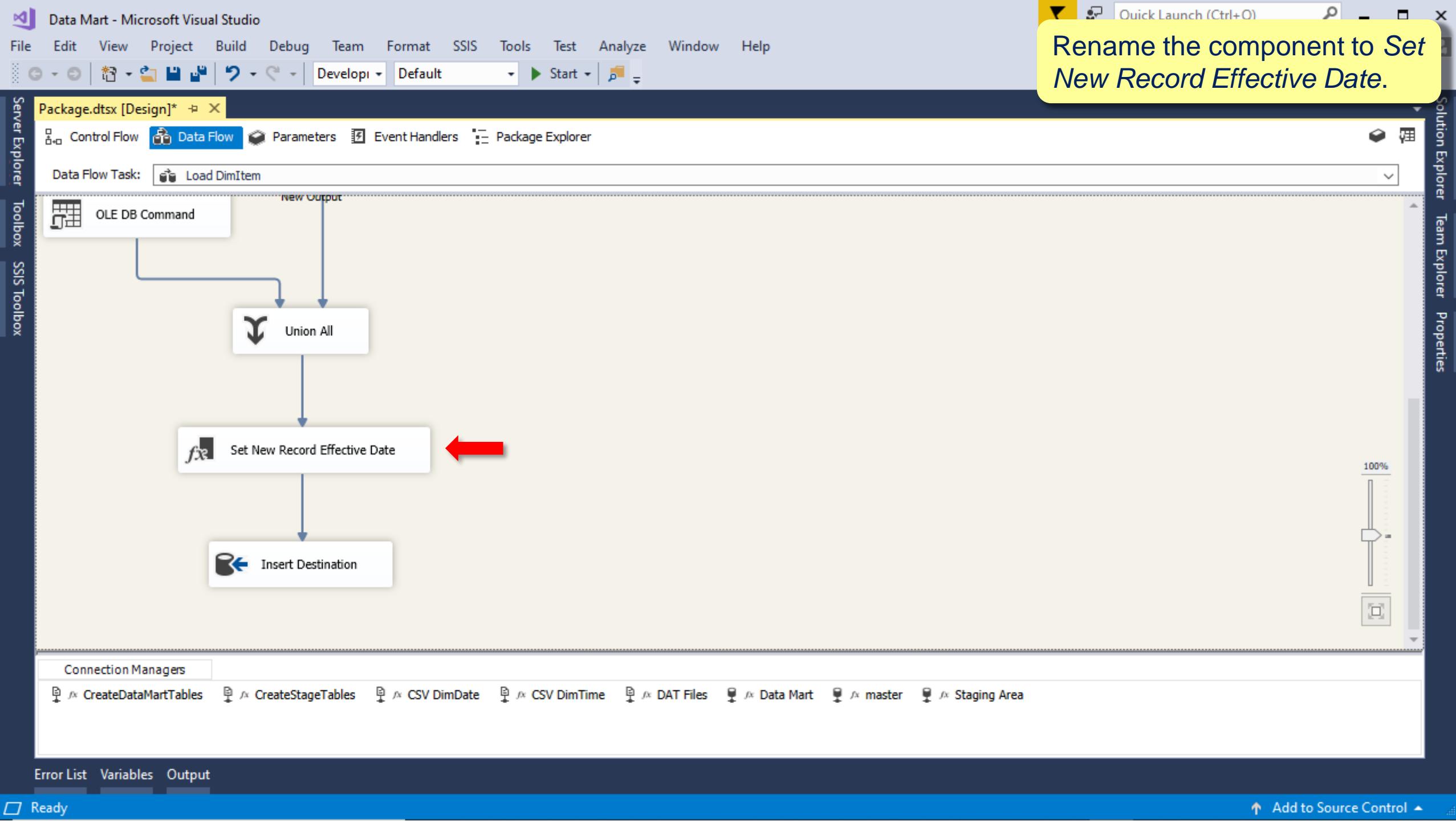


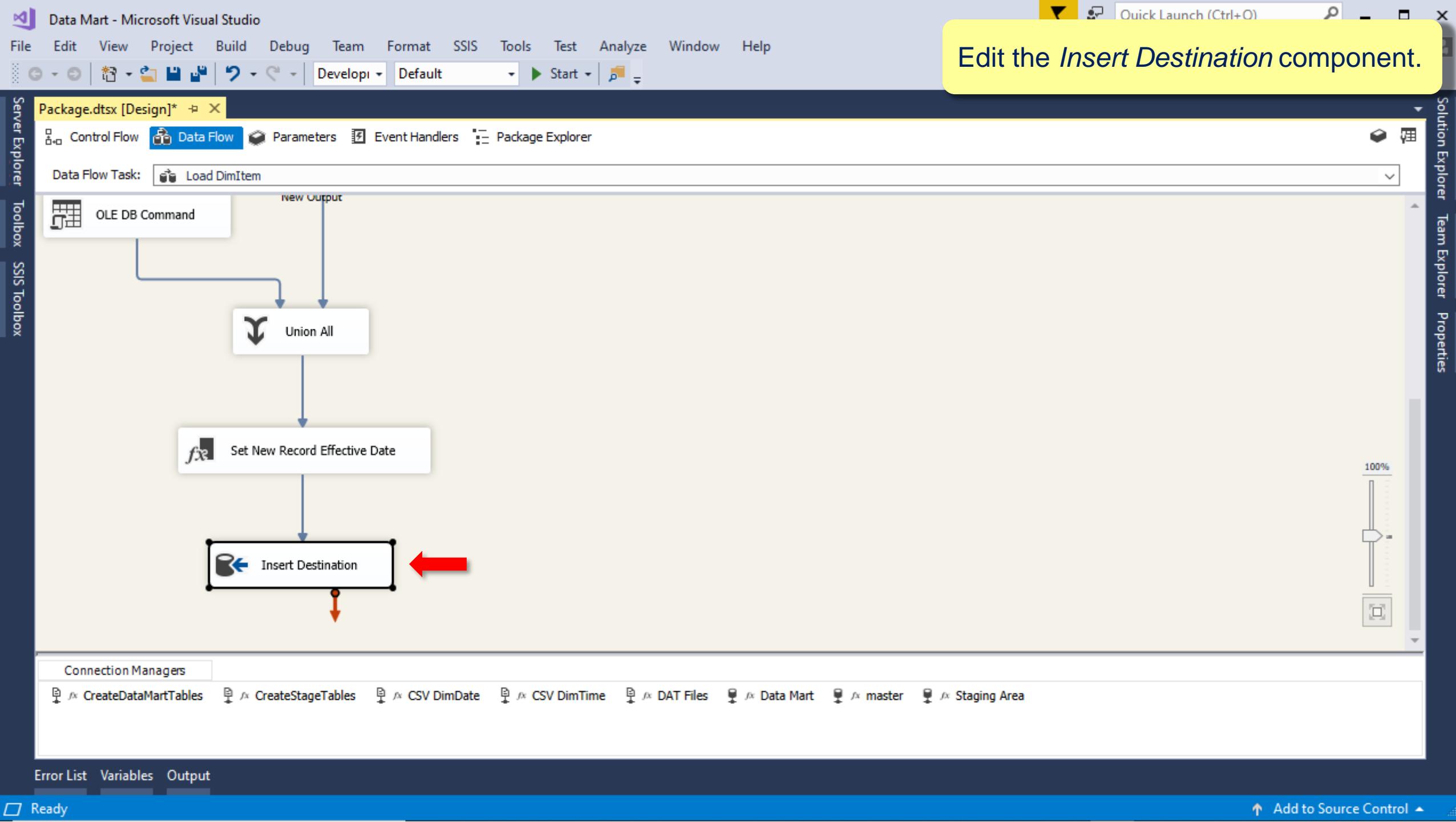












Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug

Server Explorer Solution Explorer

Toolbox Team Explorer Properties

OLE DB Destination Editor

Configure the properties used to insert data into a relational database using an OLE DB provider.

Package.dtsx [Design]*

Control Flow Data Flow Parameters

Data Flow Task: Load DimItem

OLE DB Command

Unit

Set New Record

Insert D

Connection Managers

CreateDataMartTables CreateSt

Error List Variables Output

Quick Launch (Ctrl+O)

Add to Source Control

Map the *IsCurrent* attribute just created with the *IsCurrent* dimension attribute.

Connection Manager

Mappings **←**

Error Output

Available Input Col...

Name
ItemCode
ItemDescription
CategDescription
SubCategDescrip
BrandDescription
UpmarketFlag
EffectiveDate

Available Destination...

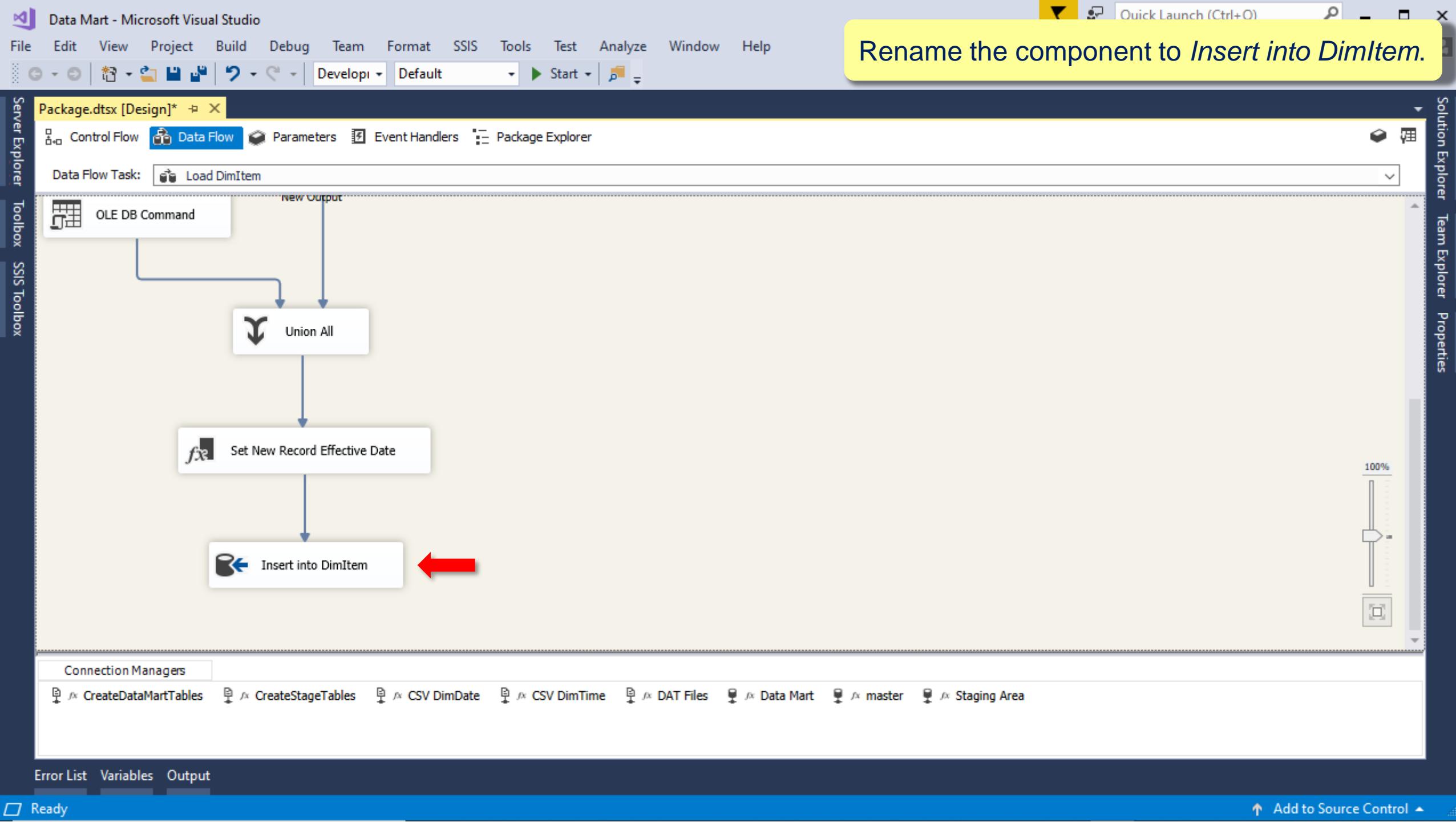
Name
ItemKey
ItemID
ItemDescription
CategDescription
SubCategDescrip
BrandDescription
UpmarketFlag

Input Column Destination Column

Input Column	Destination Column
<ignore>	ItemKey
ItemCode	ItemID
ItemDescription	ItemDescription
CategDescription	CategDescription
SubCategDescrip	SubCategDescrip
BrandDescription	BrandDescription
UpmarketFlag	UpmarketFlag
EffectiveDate	EffectiveDate
<ignore>	ExpiredDate
IsCurrent	IsCurrent ←

OK Cancel Help

The screenshot shows the Microsoft Visual Studio Data Flow Designer interface. On the left, there's a control flow diagram with an 'OLE DB Command' source and a 'Load DimItem' data flow task. The 'Data Flow' tab is selected. In the center, the 'OLE DB Destination Editor' is open, showing how to map input columns from a source to destination columns in a database. The 'Mappings' tab is active. A red arrow points to the 'IsCurrent' row in the mapping grid, which maps the 'IsCurrent' input column to the 'IsCurrent' destination column. Another red arrow points to the 'OK' button at the bottom right of the editor. A yellow callout bubble in the top right corner contains the text: 'Map the IsCurrent attribute just created with the IsCurrent dimension attribute.' The status bar at the bottom left says 'Ready'.



Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Quick Launch (Ctrl+O)

Edit the *Derived Column* component.

Package.dtsx [Design]*

Control Flow Data Flow Parameters Event Handlers Package Explorer

Data Flow Task: Load DimItem

Server Explorer Solution Explorer

Toolbox Team Explorer

SSIS Toolbox Properties

100%

Item

Slowly Changing Dimension

Historical Attribute Inserts Output

Derived Column

Changing Attribute Updates Output

Update DimItem

New Output

OLE DB Command

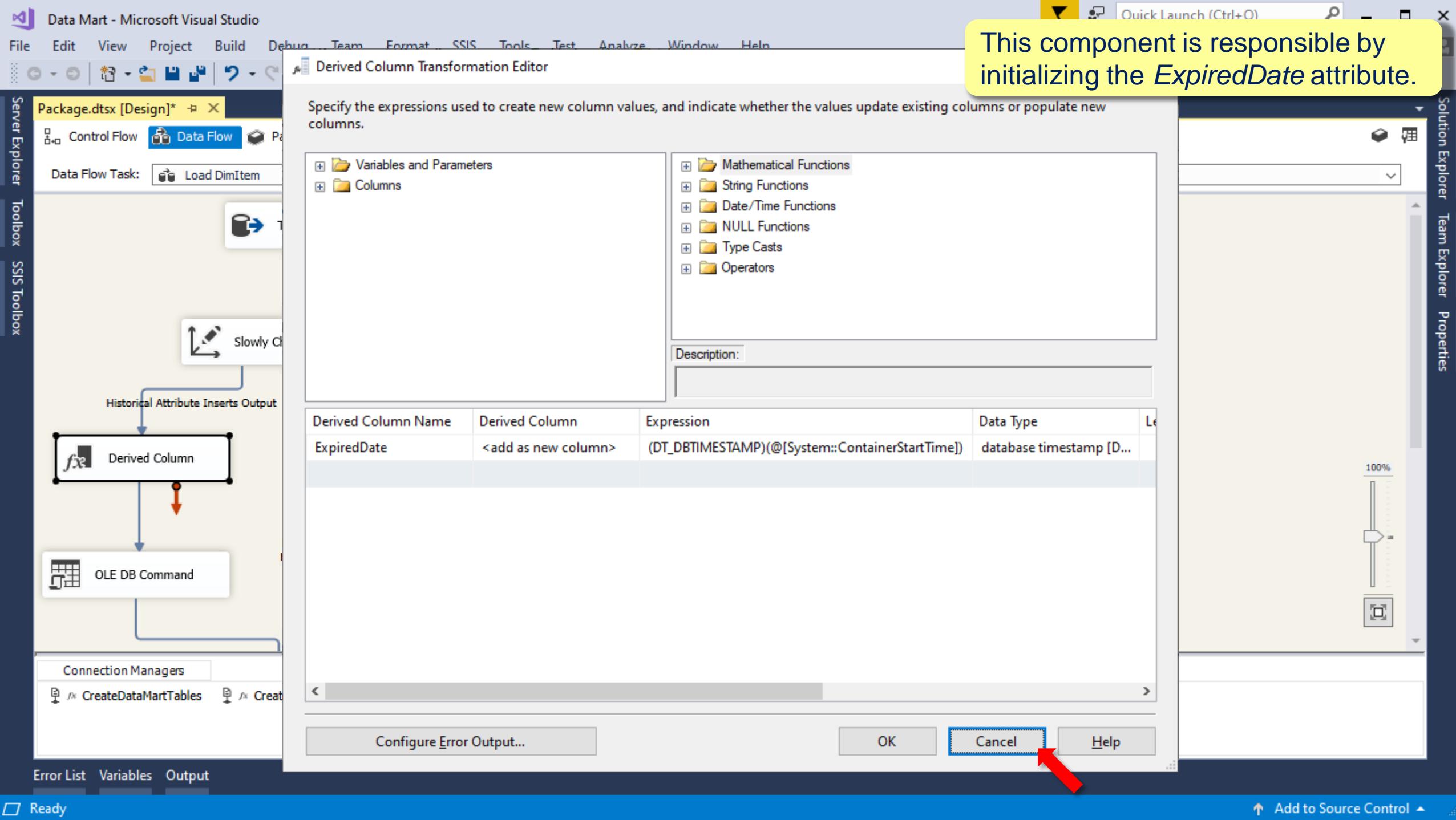
Connection Managers

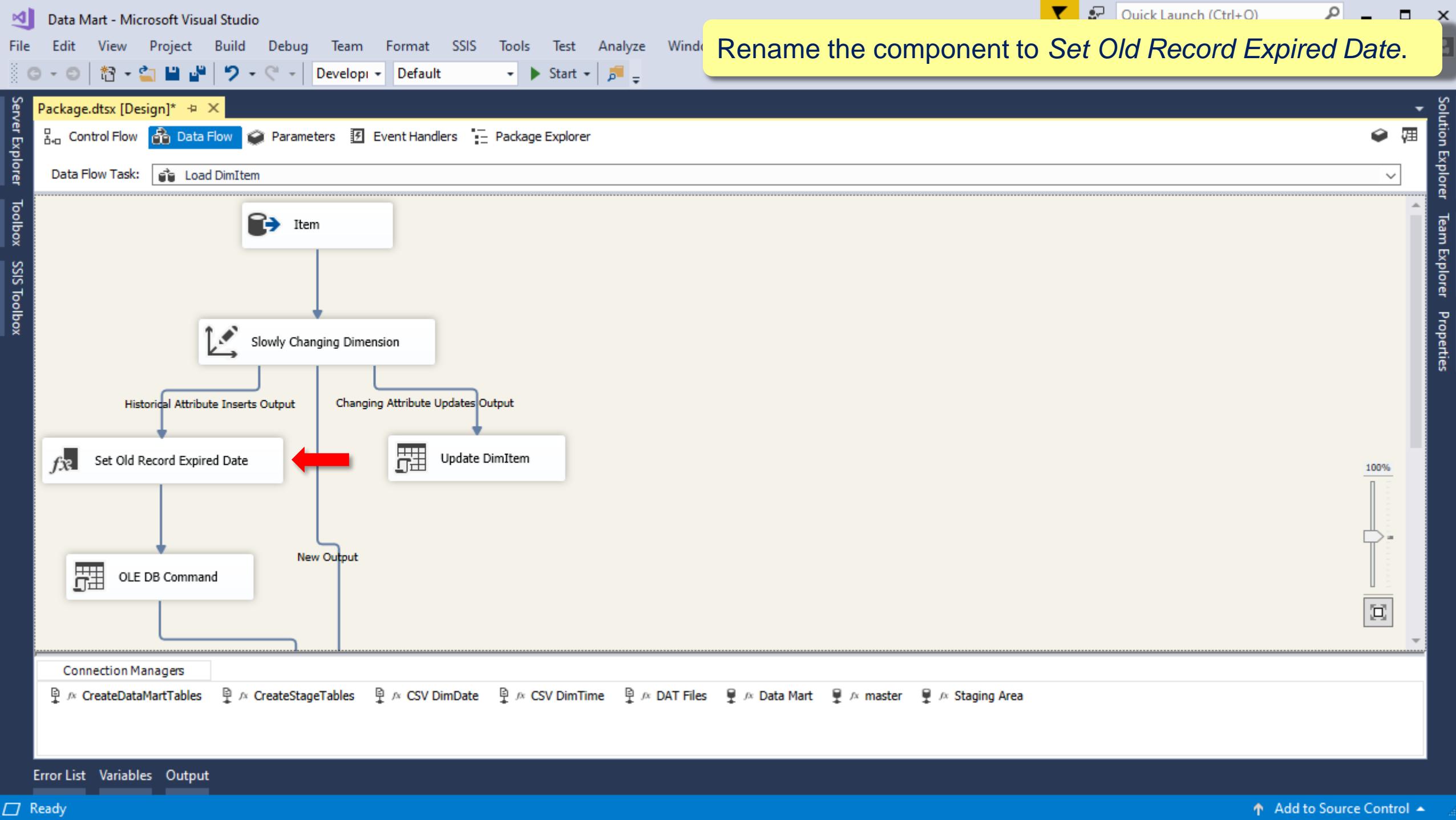
- CreateDataMartTables
- CreateStageTables
- CSV DimDate
- CSV DimTime
- DAT Files
- Data Mart
- master
- Staging Area

Error List Variables Output

Ready Add to Source Control

The diagram illustrates a Data Flow Task named 'Load DimItem'. It begins with an 'Item' source, which feeds into a 'Slowly Changing Dimension' component. This component has two outputs: 'Historical Attribute Inserts Output' and 'Changing Attribute Updates Output'. These outputs feed into a 'Derived Column' component, which is highlighted with a red arrow. The 'Derived Column' component then outputs to an 'OLE DB Command' component. A 'New Output' line originates from the 'Derived Column' component and points to the 'Update DimItem' component. The 'Update DimItem' component is also connected to the 'OLE DB Command' component. The 'OLE DB Command' component finally connects to a connection manager named 'CreateDataMartTables'.





Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Quick Launch (Ctrl+O)

Edit the OLE DB Command component.

Package.dtsx [Design]*

Control Flow Data Flow Parameters Event Handlers Package Explorer

Data Flow Task: Load DimItem

Historical Attribute Inserts Output

Set Old Record Expired Date

Changing Attribute Updates Output

Update DimItem

OLE DB Command

New Output

Union All

Set New Record Effective Date

Connection Managers

CreateDataMartTables CreateStageTables CSV DimDate CSV DimTime DAT Files Data Mart master Staging Area

Error List Variables Output

Add to Source Control

The diagram illustrates a Data Flow Task named "Load DimItem". It consists of several components and data flows:

- Set Old Record Expired Date**: An OLE DB Command component with an output arrow labeled "Historical Attribute Inserts Output" pointing to the "OLE DB Command" component.
- Update DimItem**: An OLE DB Command component with an output arrow labeled "Changing Attribute Updates Output" pointing to the "OLE DB Command" component.
- OLE DB Command**: An OLE DB Command component receiving two inputs: "Historical Attribute Inserts Output" and "Changing Attribute Updates Output". It has an output arrow labeled "New Output" pointing to the **Union All** component.
- Union All**: A Union All component receiving input from the "OLE DB Command" component and the "Set New Record Effective Date" component.
- Set New Record Effective Date**: An OLE DB Command component with an input arrow pointing to the **Union All** component.

A red arrow points to the "OLE DB Command" component, highlighting it for editing.

Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug

Server Explorer

Toolbox

SSIS Toolbox

Package.dtsx [Design]*

Control Flow Data Flow Parameters

Data Flow Task: Load DimItem

Historical Attribute Inserts Output

Set Old Record Expired Date

OLE DB Command

New

Set New Record

Connection Managers

CreateDataMartTables CreateStage

Error List Variables Output

Advanced Editor for OLE DB Command

The advanced editor provides access to the low-level properties of data flow components. Additionally, it can be used to configure components that do not have a custom user interface.

Connection Managers Component Properties Mappings Input and Output Properties

Specify advanced properties for the data flow component.

Properties:

ComponentClassID	{065EEED5-E779-4156-AA69-FE35A54915E6}
ContactInfo	OLE DB Command;Microsoft Corporation; Microsoft SQL Se
Description	Runs an SQL statement for each row in a data flow. For exam
ID	98
IdentificationString	OLE DB Command
IsDefaultLocale	True
LocaleID	Portuguese (Portugal)
Name	OLE DB Command
PipelineVersion	0
UsesDispositions	True
ValidateExternalMetadata	True
Version	2
Custom Properties	
CommandTimeout	0
DefaultCodePage	1252
SqlCommand	UPDATE [dbo].[DimItem] SET [ExpiredDate] = ? WHERE [It...]

SqlCommand

The SQL command to be executed.

Refresh OK Cancel Help

Select the *Component Properties* tab and edit the *SqlCommand* property.

Add to Source Control

```
graph TD; SetOldRecord[Set Old Record Expired Date] --> OLEDBCommand[OLE DB Command]; OLEDBCommand --> SetNewRecord[Set New Record]
```

Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug

Server Explorer Toolbox SSIS Toolbox

Package.dtsx [Design]* Advanced Editor for OLE DB Command

The advanced editor provides access to the low-level properties of data flow components. Additionally, be used to configure components that do not have a custom user interface.

Connection Managers Component Properties Column Mappings Input and Output Properties

Specify advanced properties for the data flow component.

Properties:

- ComponentClassID
- ContactInfo
- Description
- ID
- IdentificationString
- IsDefaultLocale
- LocaleID
- Name
- PipelineVersion
- UsesDispositions
- ValidateExternalMetadata
- Version

Custom Properties

- CommandTimeout
- DefaultCodePage
- SqlCommand

String Value Editor

String value:

```
UPDATE [dbo].[DimItem]
SET [ExpiredDate] = ?, IsCurrent = 'No'
WHERE [ItemID] = ? AND [ExpiredDate] IS NULL
```

OK Cancel

1252

SqlCommand

The SQL command to be executed.

Refresh OK Cancel Help

Historical Attribute Inserts Output

Set Old Record Expired Date

OLE DB Command

New

Set New Record

Connection Managers

CreateDataMartTables CreateStage

Error List Variables Output

Quick Launch (Ctrl+O)

Add to Source Control

Add the following to the SET clause in the SQL UPDATE command:
, IsCurrent = 'No'
The purpose is to set the *IsCurrent* attribute to *No* of the expired record.

```
UPDATE [dbo].[DimItem]
SET [ExpiredDate] = ?, IsCurrent = 'No'
WHERE [ItemID] = ? AND [ExpiredDate] IS NULL
```

Data Mart - Microsoft Visual Studio

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Server Explorer Toolbox SSIS Toolbox

Package.dtsx [Design]*

Control Flow Data Flow Parameters

Data Flow Task: Load DimItem

Historical Attribute Inserts Output

Set Old Record Expired Date

OLE DB Command

New

Set New Record

Connection Managers

CreateDataMartTables CreateStage

Error List Variables Output

Advanced Editor for OLE DB Command

The advanced editor provides access to the low-level properties of data flow components. Additionally, the advanced editor can be used to configure components that do not have a custom user interface.

Connection Managers Component Properties Column Mappings Input and Output Properties

Specify advanced properties for the data flow component.

Properties:

ComponentClassID	{065EEED5-E779-4156-AA69-FE35A54915E6}
ContactInfo	OLE DB Command;Microsoft Corporation; Microsoft SQL Se
Description	Runs an SQL statement for each row in a data flow. For exam
ID	98
IdentificationString	OLE DB Command
IsDefaultLocale	True
LocaleID	Portuguese (Portugal)
Name	OLE DB Command
PipelineVersion	0
UsesDispositions	True
ValidateExternalMetadata	True
Version	2
Custom Properties	
CommandTimeout	0
DefaultCodePage	1252
SqlCommand	UPDATE [dbo].[DimItem] SET [ExpiredDate] = ? WHERE [It...]

SqlCommand

The SQL command to be executed.

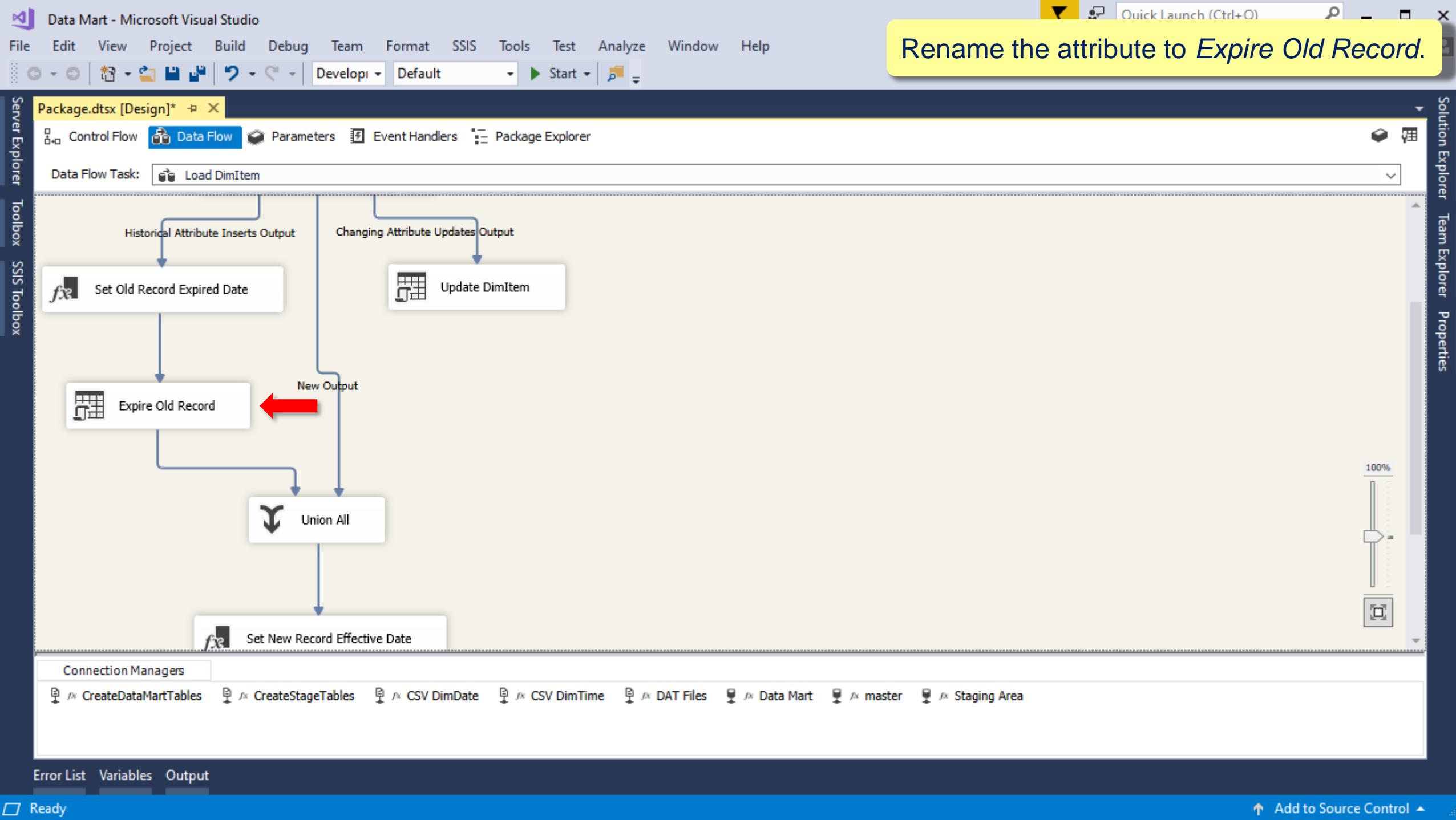
Refresh OK Cancel Help

Quick Launch (Ctrl+Q) Sign in

Solution Explorer Team Explorer Properties

Add to Source Control

```
graph TD; SetOldRecord[Set Old Record Expired Date] --> OLEDBCommand[OLE DB Command]; OLEDBCommand --> SetNewRecord[Set New Record]; OLEDBCommand -- "Historical Attribute Inserts Output" --> SetOldRecord;
```



Solution1 - Microsoft SQL Server Management Studio

File Edit View Tools Window Help

New Query NDX DMX XMLA DAX Execute

Object Explorer

localhost (SQL Server 16.0.1050.5 - A)

Databases (red arrow)

AdventureWorksDW2022

ARMDD_DataMart (red arrow)

Tables (red arrow)

dbo.DimCard

dbo.DimDate

dbo.DimItem (red arrow)

Columns

Keys

Constraints

Triggers

Indexes (red arrow)

PK_DimItem

Statistics

dbo.DimPay

dbo.DimSto

dbo.DimTim

dbo.FactSal

Dropped Le

Views

External P

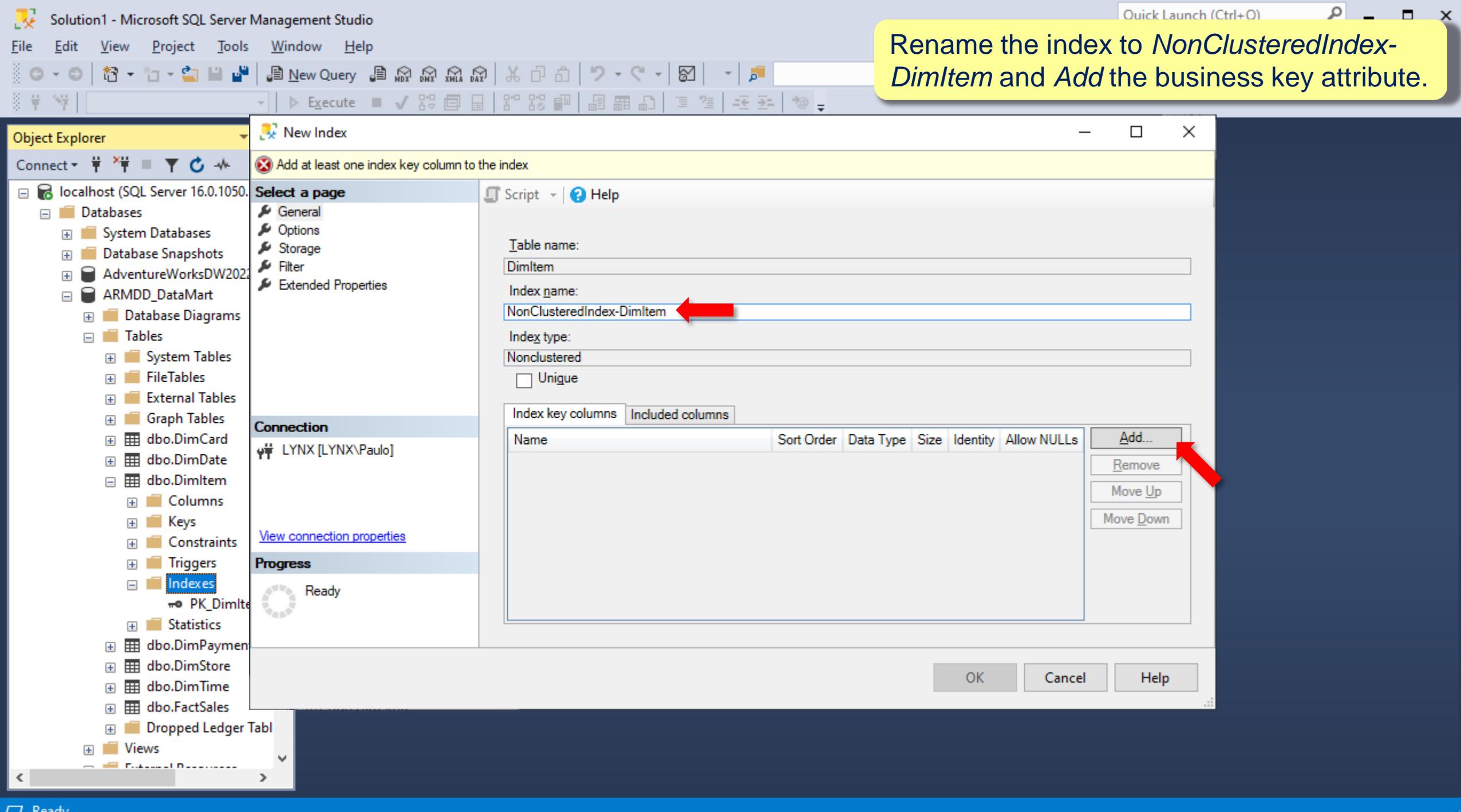
New Index

- Clustered Index...
- Non-Clustered Index...** (highlighted in yellow)
- Rebuild All
- Reorganize All
- Disable All
- Filter
- Start PowerShell
- Reports
- Refresh

When using the *Slowly Changing Dimension* component, you should always create an index for the business key attribute (i.e., source system primary key). So, by using SQL Server Management Studio, let's create a new *Non-Clustered Index* in the *DimItem* dimension.

Quick Launch (Ctrl+O)

The screenshot shows the Object Explorer in SQL Server Management Studio. A red arrow points from the 'Indexes' node under 'dbo.DimItem' in the tree view to the 'Indexes' button in the context menu. Another red arrow points to the 'Non-Clustered Index...' option in the expanded context menu, which is highlighted with a yellow background. The context menu also includes options like 'Clustered Index...', 'Rebuild All', 'Reorganize All', 'Disable All', 'Filter', 'Start PowerShell', 'Reports', and 'Refresh'.



Solution1 - Microsoft SQL Server Management Studio

File Edit View Project Tools Window Help

New Query MDX DAX XMLA DAX Execute

Quick Launch (Ctrl+O)

Select the *ItemID* attribute.

Object Explorer

localhost (SQL Server 16.0.1050.1) **Databases** **Tables** **dbo.DimItem** **Indexes** **PK_DimItem** **Statistics** **dbo.DimPayment** **dbo.DimStore** **dbo.DimTime** **dbo.FactSales** **Dropped Ledger Table** **Views**

New Index

Add at least one index key column to the index

Select a page

General Options Storage Filter Extended Properties

Select Columns from 'dbo.DimItem'

Ready

Select table columns to be added to the index:

	Name	Data Type	Size	Identity	Allow NULLs
<input type="checkbox"/>	ItemKey	int	4	Yes	No
<input checked="" type="checkbox"/>	ItemID	char(11)	11	No	No
<input type="checkbox"/>	ItemDescription	nvarchar(50)	100	No	No
<input type="checkbox"/>	CategDescription	nvarchar(50)	100	No	No
<input type="checkbox"/>	SubCategDescrip	nvarchar(50)	100	No	No
<input type="checkbox"/>	BrandDescription	nvarchar(50)	100	No	No
<input type="checkbox"/>	UpmarketFlag	char(1)	1	No	No
<input type="checkbox"/>	EffectiveDate	datetime	8	No	No
<input type="checkbox"/>	ExpiredDate	datetime	8	No	Yes
<input type="checkbox"/>	IsCurrent	nvarchar(3)	6	No	No

Connection

LYNX [LYNX\Paulo]

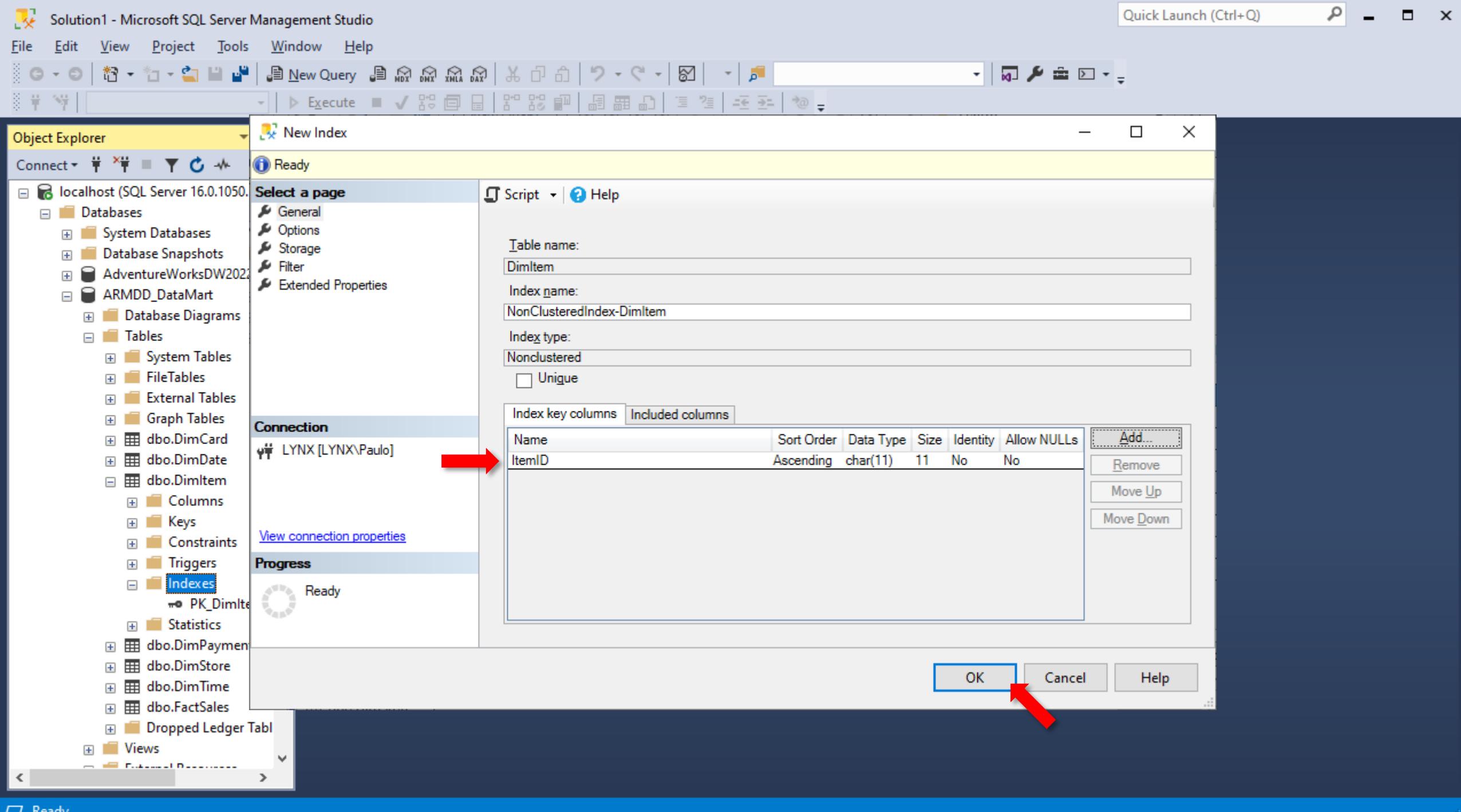
Progress

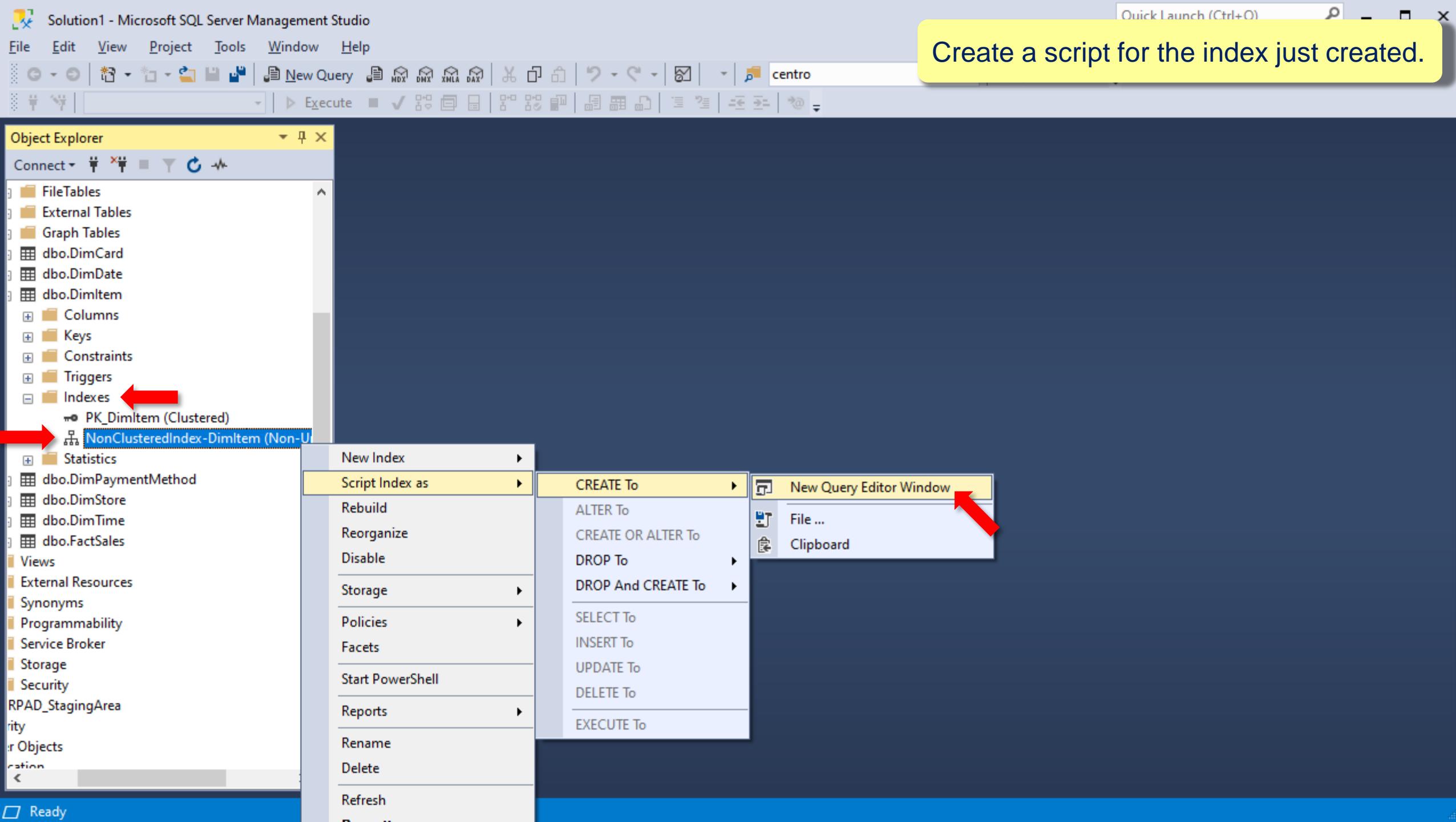
Ready

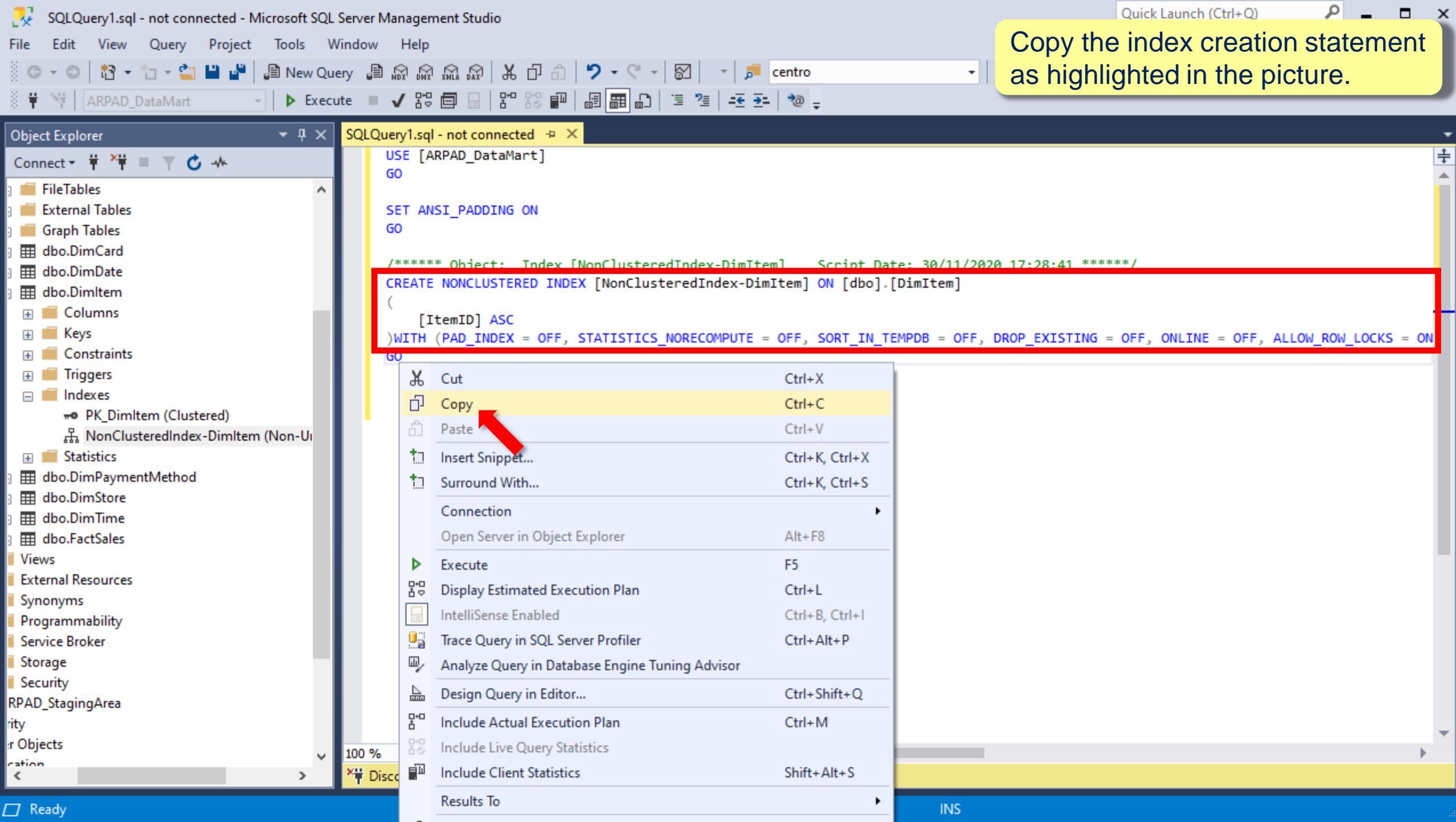
OK Cancel Help

OK Cancel Help

A red arrow points to the 'ItemID' column in the 'Select Columns from 'dbo.DimItem'' dialog. Another red arrow points to the 'OK' button in the same dialog.









File Home Share View

← → ↑ This PC > Windows 10 (C:) > Temp > ARMDD > Data Mart > SQL Scripts > Data Mart

Quick access

- Desktop
- Downloads
- Documents
- Pictures
- Data Mart
- Files
- PL
- Staging Area

OneDrive

- This PC
- 3D Objects
- Desktop
- Documents
- Downloads
- Music
- Pictures
- Videos

Windows 10 (C:)

- CD Drive (D:) Virtua
- Network
- DESKTOP-ACEDDKF
- VBOXSVR

7 items | 1 item selected 744 bytes

Name	Date modified	Type	Size
CreateDimCard	30/10/2023 12:47	Microsoft SQL Ser...	2 KB
CreateDimDate	09/10/2023 18:34	Microsoft SQL Ser...	1 KB
CreateDimItem	16/10/2023 10:52	Microsoft SQL Ser...	1 KB
CreateDimPaymentMethod	09/10/2023 18:34	Microsoft SQL Ser...	1 KB
CreateDimStore	09/10/2023 18:34	Microsoft SQL Ser...	1 KB
CreateDimTime	09/10/2023 18:34	Microsoft SQL Ser...	1 KB
CreateFactSales	09/10/2023 18:34	Microsoft SQL Ser...	1 KB

Use SSMS to open the *CreateDimCard* file stored in the *Data Mart* scripts folder.

CreateDimItem.sql - localhost.ARMDDataMart (AzureAD\PauloOliveira (53))* - Microsoft SQL Server Management Studio

File Edit View Project Tools Window Help

New Query MDX DAX XMLA DAX Execute

ARMDD_DataMart

Object Explorer Connect

localhost (SQL Server 16.0.1050.5 - /) Databases System Databases Database Snapshots AdventureWorksDW2022 ARMDD_DataMart Database Diagrams Tables System Tables FileTables External Tables Graph Tables dbo.DimCard dbo.DimDate dbo.DimItem Columns Keys Constraints Triggers Indexes PK_DimItem NonClustered Statistics dbo.DimPaymentMe dbo.DimStore dbo.DimTime dbo.FactSales Dropped Ledger Tabl

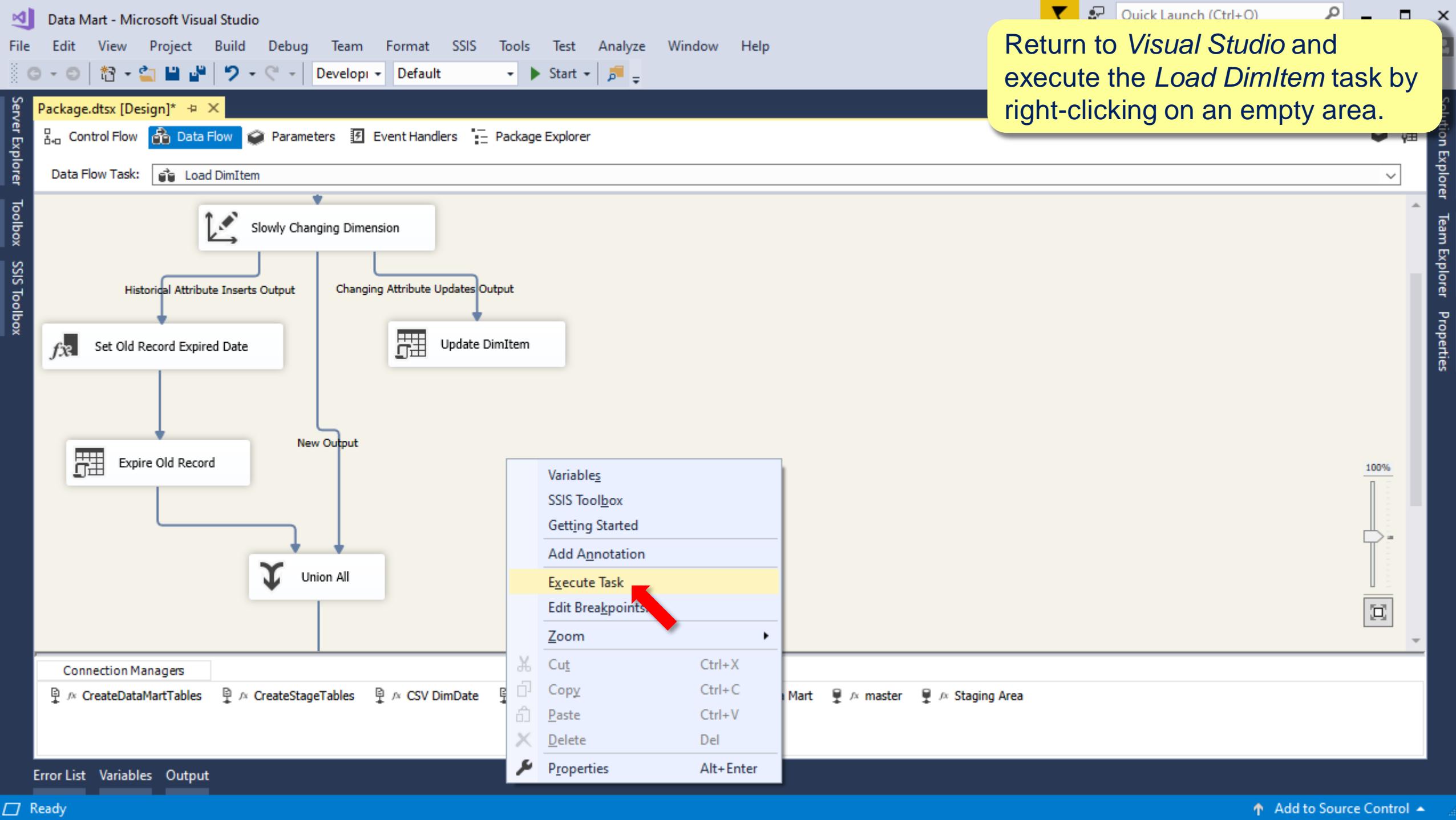
Connected. (1/1)

localhost (16.0 RTM) | AzureAD\PauloOliveira ... | ARMDD_DataMart | 00:00:00 | 0 rows

Quick Launch (Ctrl+O)

Paste the create index script in the file, make the changes as highlighted in the figure and save the changed script.

```
IF NOT EXISTS (SELECT name FROM sys.tables WHERE name = 'DimItem')
BEGIN
    CREATE TABLE [dbo].[DimItem](
        [ItemKey] [int] IDENTITY(1,1) NOT NULL,
        [ItemID] [char](11) NOT NULL,
        [ItemDescription] [nvarchar](50) NOT NULL,
        [CategDescription] [nvarchar](50) NOT NULL,
        [SubCategDescrip] [nvarchar](50) NOT NULL,
        [BrandDescription] [nvarchar](50) NOT NULL,
        [UpmarketFlag] [char](1) NOT NULL,
        [EffectiveDate] [datetime] NOT NULL,
        [ExpiredDate] [datetime] NULL,
        [IsCurrent] [nvarchar](3) NOT NULL
    CONSTRAINT [PK_DimItem] PRIMARY KEY CLUSTERED
    (
        [ItemKey] ASC
    )WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF, ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON) ON [PRIMARY]
)
CREATE NONCLUSTERED INDEX [NonClusteredIndex-DimItem] ON [dbo].[DimItem]
(
    [ItemID] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, SORT_IN_TEMPDB = OFF, DROP_EXISTING = OFF, ONLINE = OFF, ALLOW_ROW_LOCKS = ON,
END
```



Data Mart (Running) - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Process: [14644] DtsDebugHost.exe Lifecycle Events Thread: Stack Frame:

Quick Launch (Ctrl+O)

819 records are inserted into the DimItem.

Package.dtsx [Design]

Control Flow Data Flow Parameters Event Handlers Package Explorer Progress

Data Flow Task: Load DimItem

Union All

Set New Record Effective Date

Insert into DimItem

100%

Connection Managers

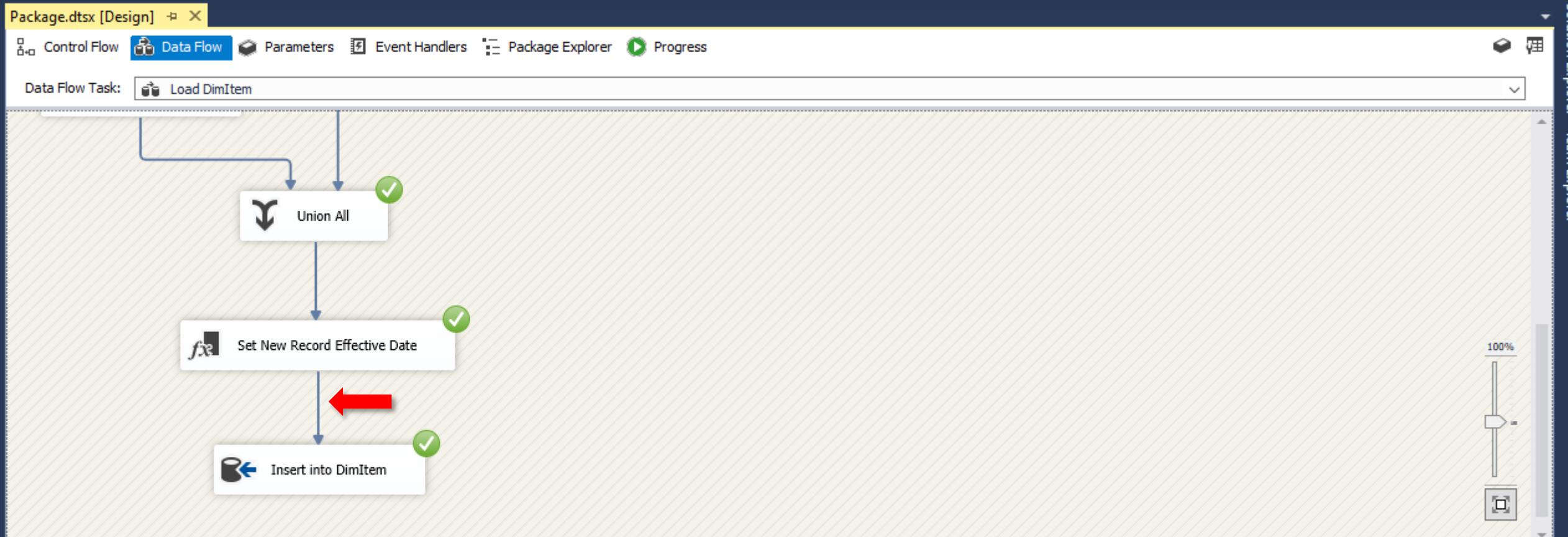
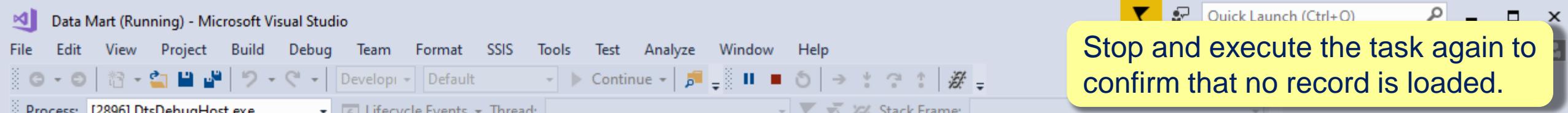
CreateDataMartTables CreateStageTables CSV DimDate CSV DimTime DAT Files Data Mart master Staging Area

Package execution completed. 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

Ready Add to Source Control

```
graph TD; Start(( )) --> UnionAll[Union All]; UnionAll -- "819 rows" --> SetDate[Set New Record Effective Date]; SetDate -- "819 rows" --> Insert[Insert into DimItem];
```



Connection Managers

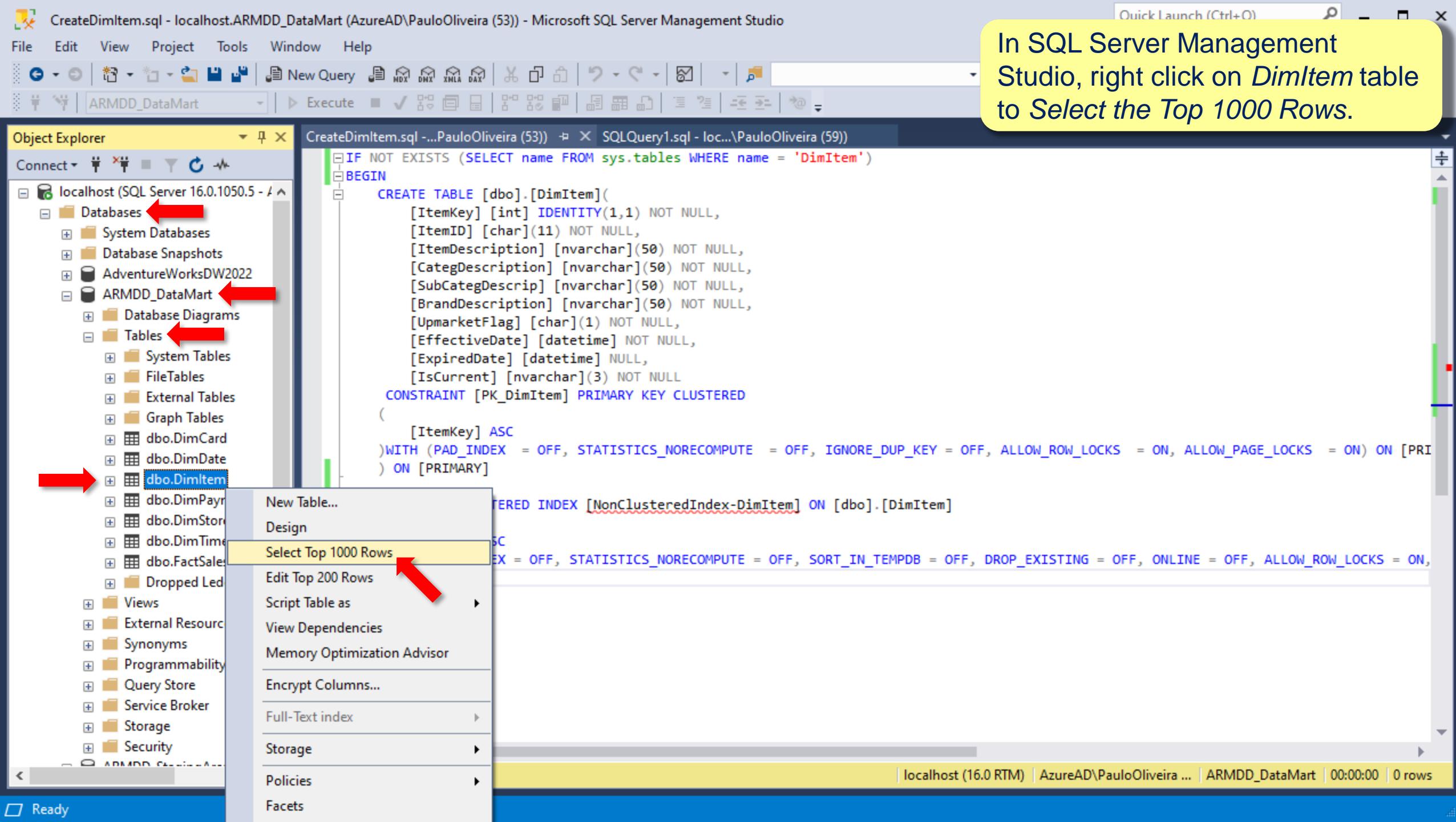
- CreateDataMartTables
- CreateStageTables
- CSV DimDate
- CSV DimTime
- DAT Files
- Data Mart
- master
- Staging Area

Package execution completed. 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

Ready

Add to Source Control ▾



SQLQuery2.sql - localhost.ARMDDataMart (AzureAD\PauloOliveira (52)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

New Query MDX DMX XMLA DAX Execute

ARMDD_DataMart

Object Explorer

localhost (SQL Server 16.0.1050.5 - /) Databases System Databases Database Snapshots AdventureWorksDW2022 ARMDD_DataMart Database Diagrams Tables System Tables FileTables External Tables Graph Tables dbo.DimCard dbo.DimDate dbo.DimItem dbo.DimPaymentMe dbo.DimStore dbo.DimTime dbo.FactSales Dropped Ledger Table Views External Resources Synonyms Programmability Query Store Service Broker Storage Security ARMDD_DataMart

SQLQuery2.sql - loc...\\PauloOliveira (52) CreateDimItem.sql - ...\\PauloOliveira (53) SQLQuery1.sql - loc...\\PauloOliveira (59)

`SELECT TOP (1000) [ItemKey], [ItemID], [ItemDescription], [CategDescription], [SubCategDescrip], [BrandDescription], [UpmarketFlag], [EffectiveDate], [ExpiredDate], [IsCurrent] FROM [ARMDD_DataMart].[dbo].[DimItem]`

100 % Results Messages

	ItemKey	ItemID	ItemDescription	CategDescription	SubCategDescrip	BrandDescription	UpmarketFlag	EffectiveDate	ExpiredDate	IsCurrent
1	1	I0000000001	BXT - Listen2This1	Accesoires	Mini Speakers	BXT	F	2023-11-06 11:41:18.000	NULL	Yes
2	2	I0000000002	BXT - Listen2This2	Accesoires	Mini Speakers	BXT	F	2023-11-06 11:41:18.000	NULL	Yes
3	3	I0000000003	BXT - Listen2This3	Accesoires	Mini Speakers	BXT	F	2023-11-06 11:41:18.000	NULL	Yes
4	4	I0000000004	ENDOS - ENSP1	Accesoires	Mini Speakers	Endos	F	2023-11-06 11:41:18.000	NULL	Yes
5	5	I0000000005	ENDOS - ENSP2	Accesoires	Mini Speakers	Endos	F	2023-11-06 11:41:18.000	NULL	Yes
6	6	I0000000006	ENDOS - ENSP3	Accesoires	Mini Speakers	Endos	F	2023-11-06 11:41:18.000	NULL	Yes
7	7	I0000000007	ENDOS - ENSP4	Accesoires	Mini Speakers	Endos	F	2023-11-06 11:41:18.000	NULL	Yes
8	8	I0000000008	ENDOS - ENSP5	Accesoires	Mini Speakers	Endos	F	2023-11-06 11:41:18.000	NULL	Yes
9	9	I0000000009	TTP - TTP SuperSpeakers	Accesoires	Mini Speakers	TTP	F	2023-11-06 11:41:18.000	NULL	Yes
10	10	I0000000010	BXT - Adapt2This1	Accesoires	Adaptor	BXT	F	2023-11-06 11:41:18.000	NULL	Yes
11	11	I0000000011	BXT - Adapt2This2	Accesoires	Adaptor	BXT	F	2023-11-06 11:41:18.000	NULL	Yes

Query executed successfully.

localhost (16.0 RTM) AzureAD\\PauloOliveira ... ARMDD_DataMart 00:00:00 819 rows

You can now see the data loaded into the DimItem. All the records are the current ones.

SQLQuery2.sql - localhost.ARMDDataMart (AzureAD\PauloOliveira (52)) - Microsoft SQL Server Management Studio

File Edit View Project Tools Window Help

Quick Launch (Ctrl+O)

Object Explorer

Connect ▾

localhost (SQL Server 16.0.1050.5 - A) ▾

- Databases
 - System Databases
 - Database Snapshots
 - AdventureWorksDW2022
 - ARMDD_DataMart
 - ARMDD_StagingArea
- Tables
 - System Tables
 - FileTables
 - External Tables
 - Graph Tables
 - dbo.Brand
 - dbo.Card
 - dbo.CardDQP
 - dbo.Category
 - dbo.Item
 - dbo.Mari
 - dbo.SubC
 - dbo.Tran
 - dbo.Tran
 - Dropped
- Views
- External Reso
- Synonyms
- Programmab
- Query Store
- Custom Re...

SQLQuery2.sql - loc...\\PauloOliveira (52) CreateDimItem.sql - loc...\\PauloOliveira (53) SQLQuery1.sql - loc...\\PauloOliveira (59)

SELECT TOP (1000) [ItemKey]
,[ItemID]
,[ItemDescription]
,[CategDescription]
,[SubCategDescrip]
,[BrandDescription]
,[UpmarketFlag]
,[EffectiveDate]
,[ExpiredDate]
,[IsCurrent]
FROM [ARMDD_DataMart].[dbo].[DimItem]

100 %

Results Messages

	ItemKey	ItemID	ItemDescription	CategDescription	SubCategDescrip	BrandDescription	UpmarketFlag	EffectiveDate	ExpiredDate	IsCurrent
1	1	10000000001	BXT - Listen2This1	Accesoires	Mini Speakers	BXT	F	2023-11-06 11:41:18.000	NULL	Yes
2		10000000002	BXT - Listen2This2	Accesoires	Mini Speakers	BXT	F	2023-11-06 11:41:18.000	NULL	Yes
3		10000000003	BXT - Listen2This3	Accesoires	Mini Speakers	BXT	F	2023-11-06 11:41:18.000	NULL	Yes
4		10000000004	ENDOS - ENSP1	Accesoires	Mini Speakers	Endos	F	2023-11-06 11:41:18.000	NULL	Yes
5		10000000005	ENDOS - ENSP2	Accesoires	Mini Speakers	Endos	F	2023-11-06 11:41:18.000	NULL	Yes
6		10000000006	ENDOS - ENSP3	Accesoires	Mini Speakers	Endos	F	2023-11-06 11:41:18.000	NULL	Yes
7		10000000007	ENDOS - ENSP4	Accesoires	Mini Speakers	Endos	F	2023-11-06 11:41:18.000	NULL	Yes
8		10000000008	ENDOS - ENSP5	Accesoires	Mini Speakers	Endos	F	2023-11-06 11:41:18.000	NULL	Yes
9		10000000009	TTP - TTP SuperSpeakers	Accesoires	Mini Speakers	TTP	F	2023-11-06 11:41:18.000	NULL	Yes
10		10000000010	BXT - Adapt2This1	Accesoires	Adaptor	BXT	F	2023-11-06 11:41:18.000	NULL	Yes
11		10000000011	BXT - Adapt2This2	Accesoires	Adaptor	BXT	F	2023-11-06 11:41:18.000	NULL	Yes

New Table... Design Select Top 1000 Rows Edit Top 200 Rows Script Table as View Dependencies Memory Optimization Advisor Encrypt Columns... Full-Text index

successfully.

localhost (16.0 RTM) | AzureAD\PauloOliveira ... | ARMDD_DataMart | 00:00:00 | 819 rows

Ready

Storage

A yellow callout box in the top right corner contains the text: "Edit the Item table stored in the Staging Area to perform a small change to an attribute value."

Three red arrows point from the left side of the Object Explorer pane towards the "dbo.Item" node, indicating the target for modification.

A red arrow points to the "Edit Top 200 Rows" option in the context menu for the "dbo.Item" table.

DESKTOP-ACEDDKF.ARMD_StagingArea - dbo.Item - Microsoft SQL Server Management Studio

File Edit View Project Query Designer Tools Window Help

New Query MDX DMX XMLA DAX Execute

ARMDD_DataMart

Object Explorer

Connect localhost (SQL Server 16.0.1050.5 - A) Databases System Databases Database Snapshots AdventureWorksDW2022 ARMDD_DataMart ARMDD_StagingArea Database Diagrams Tables System Tables FileTables External Tables Graph Tables dbo.Brand dbo.Card dbo.CardDQP dbo.Category dbo.Item dbo.MaritalStatusDes dbo.SubCategory dbo.Transaction dbo.Transaction_Item Dropped Ledger Table Views External Resources Synonyms Programmability Query Store Session Results

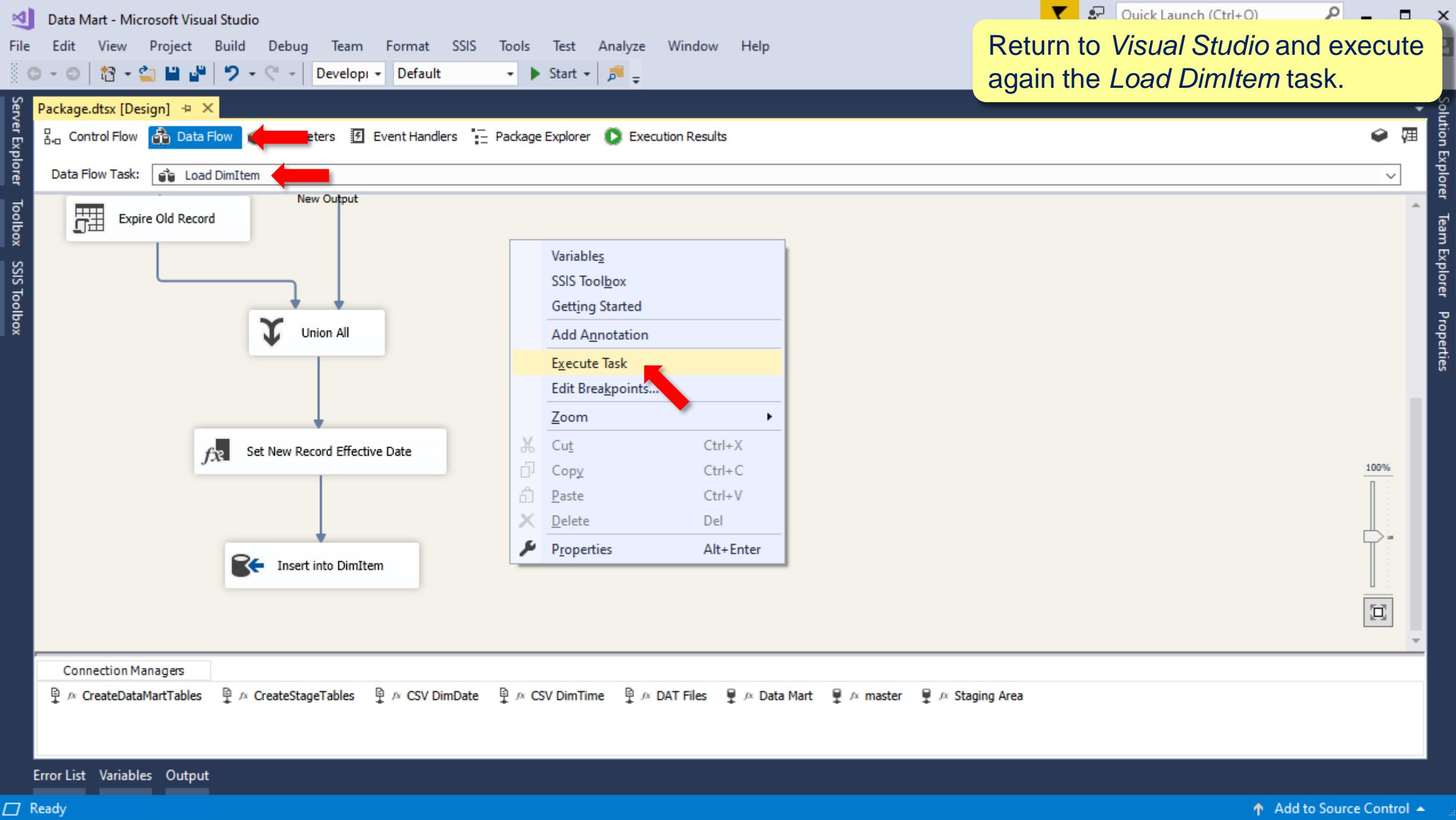
DESKTOP-ACEDDKF....ngArea - dbo.Item SQLQuery2.sql - loc...\\PauloOliveira (52) CreateDimItem.sql - ...PauloOliveira (53)

Change the *UpmarketFlag* of the first record/row to T and tab to the next record to save the change.

	ItemCode	ItemDescription	CategoryCode	SubCategoryC...	BrandCode	UpmarketFlag
	I0000000001	BXT - Listen2Th...	MACC	PMSPE	BBXT	T
	I0000000002	BXT - Listen2Th...	MACC	PMSPE	BBXT	F
	I0000000003	BXT - Listen2Th...	MACC	PMSPE	BBXT	F
	I0000000004	ENDOS - ENSP1	MACC	PMSPE	BENDOS	F
	I0000000005	ENDOS - ENSP2	MACC	PMSPE	BENDOS	F
	I0000000006	ENDOS - ENSP3	MACC	PMSPE	BENDOS	F
	I0000000007	ENDOS - ENSP4	MACC	PMSPE	BENDOS	F
	I0000000008	ENDOS - ENSP5	MACC	PMSPE	BENDOS	F
	I0000000009	TTP - TTP Super...	MACC	PMSPE	BTTP	F
	I0000000010	BXT - Adapt2Th...	MACC	PADAP	BBXT	F
	I0000000011	BXT - Adapt2Th...	MACC	PADAP	BBXT	F
	I0000000012	ENDOS - ENAD1	MACC	PADAP	BENDOS	F
	I0000000013	ENDOS - ENAD2	MACC	PADAP	BENDOS	F
	I0000000014	TTP - TTP Super...	MACC	PADAP	BTTP	F
	I0000000015	BXT - AA	MACC	PBATT	BBXT	F
	I0000000016	BXT - AAA	MACC	PBATT	BBXT	F
	I0000000017	BXT - 9V	MACC	PBATT	BBXT	F
	I0000000018	BXT - AA - 5 Pack	MACC	PBATT	BBXT	F
	I0000000019	BXT - AAA - 5 P...	MACC	PBATT	BBXT	F
	I0000000020	BXT - 9V - 5 Pack	MACC	PBATT	BBXT	F
	I0000000021	BXT - AA - 10 P...	MACC	PBATT	BBXT	F
	I0000000022	BXT - AAA - 10 ...	MACC	PBATT	BBXT	F
	I0000000023	BXT - 9V - 10 Pa...	MACC	PBATT	BBXT	F

2 of 200

Ready



Data Mart (Running) - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Quick Launch (Ctrl+O)

Process: [14576] DtsDebugHost.exe Lifecycle Events Thread: Stack Frame:

Package.dtsx [Design]

Control Flow Data Flow Parameters Event Handlers Package Explorer Progress

Data Flow Task: Load DimItem

Expire Old Record → Union All → Set New Record Effective Date → Insert into DimItem

New Output

1 rows

1 rows

1 rows

100%

One record is loaded into the *DimItem* as result of the previous change.

Connection Managers

- CreateDataMartTables
- CreateStageTables
- CSV DimDate
- CSV DimTime
- DAT Files
- Data Mart
- master
- Staging Area

Package execution completed. 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

Ready Add to Source Control

```
graph TD; A[Expire Old Record] --> B[Union All]; B -- "1 rows" --> C[Set New Record Effective Date]; C -- "1 rows" --> D[Insert into DimItem]; style D fill:#0070C0,color:#fff
```

DESKTOP-ACEDDKF.ARMDDB_StagingArea - dbo.Item - Microsoft SQL Server Management Studio

File Edit View Project Query Designer Tools Window Help

New Query NDX DMX XMLA DAX

ARMDD_DataMart Execute

Object Explorer

localhost (SQL Server 16.0.1050.5 - A) Databases System Databases Database Snapshots AdventureWorksDW2022 ARMDD_DataMart ARMDD_StagingA Tables System Tables FileTables External Tables Graph Tables dbo.Brand dbo.Card dbo.CardD dbo.Catego dbo.Item dbo.Maria dbo.SubCa dbo.Transac dbo.Transac Dropped Le Views External Resou Synonyms Programmability Query Store

ItemCode ItemDescription CategoryCode SubCategoryC... BrandCode UpmarketFlag

I0000000001	BXT - Listen2Th...	MACC	PMSPE	BBXT	T
I0000000002	BXT - Listen2Th...	MACC	PMSPE	BBXT	F
I0000000003	BXT - Listen2Th...	MACC	PMSPE	BBXT	F
I0000000004	ENDOS - ENSP1	MACC	PMSPE	BENDOS	F
I0000000005	ENDOS - ENSP2	MACC	PMSPE	BENDOS	F
	DS - ENSP3	MACC	PMSPE	BENDOS	F
	DS - ENSP4	MACC	PMSPE	BENDOS	F
	DS - ENSP5	MACC	PMSPE	BENDOS	F
	TP Super...	MACC	PMSPE	BTTP	F
	Adapt2Th...	MACC	PADAP	BBXT	F
	Adapt2Th...	MACC	PADAP	BBXT	F
	DS - ENAD1	MACC	PADAP	BENDOS	F
	DS - ENAD2	MACC	PADAP	BENDOS	F
	TP Super...	MACC	PADAP	BTTP	F
AA	MACC	PBATT	BBXT	F	
AAA	MACC	PBATT	BBXT	F	
9V	MACC	PBATT	BBXT	F	
AA - 5 Pack	MACC	PBATT	BBXT	F	
AAA - 5 P...	MACC	PBATT	BBXT	F	
9V - 5 Pack	MACC	PBATT	BBXT	F	
AA - 10 P...	MACC	PBATT	BBXT	F	

In SQL Server Management Studio, create a new query window in the ARMDD_DataMart database.

SQLQuery3.sql - localhost.ARMDDataMart (AzureAD\PauloOliveira (69))* - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

New Query MDX DMX XMLA DAX

ARMDD_DataMart Execute

Object Explorer

localhost (SQL Server 16.0.1050.5 - /) Databases System Databases Database Snapshots AdventureWorksDW2022 ARMDD_DataMart ARMDD_StagingArea Database Diagrams Tables System Tables FileTables External Tables Graph Tables dbo.Brand dbo.Card dbo.CardDQP dbo.Category dbo.Item dbo.MaritalStatusDes dbo.SubCategory dbo.Transaction dbo.Transaction_Item Dropped Ledger Table Views External Resources Synonyms Programmability Query Store Service Broker

SQLQuery3.sql - localhost\PauloOliveira (60)* - DESKTOP-ACEDDKF...ngArea - dbo.Item SQLQuery2.sql - localhost\PauloOliveira (52)

SELECT *
FROM DimItem
WHERE ItemID = '10000000001'

Execute the following query to check that the history of the *UpmarketFlag* attribute is being recorded.

Results Messages

	ItemKey	ItemID	ItemDescription	CategDescription	SubCategDescrip	BrandDescription	UpmarketFlag	EffectiveDate	ExpiredDate	IsCurrent
1	1	10000000001	BXT - Listen2This1	Accesoires	Mini Speakers	BXT	F	2023-11-06 11:41:18.000	2023-11-06 11:52:11.000	No
2	820	10000000001	BXT - Listen2This1	Accesoires	Mini Speakers	BXT	T	2023-11-06 11:52:11.000	NULL	Yes

Query executed successfully.

localhost (16.0 RTM) | AzureAD\PauloOliveira ... | ARMDD_DataMart | 00:00:00 | 2 rows

Ln 3 Col 28 Ch 28 INS

DESKTOP-ACEDDKF.ARMD_D_StagingArea - dbo.Item - Microsoft SQL Server Management Studio

File Edit View Project Query Designer Tools Window Help

New Query MDX DAX XMLA DAX Execute

Object Explorer

localhost (SQL Server 16.0.1050.5 - /) Databases System Databases Database Snapshots AdventureWorksDW2022 ARMDD_DataMart ARMDD_StagingArea Database Diagrams Tables System Tables FileTables External Tables Graph Tables dbo.Brand dbo.Card dbo.CardDQP dbo.Category dbo.Item dbo.MaritalStatusDes dbo.SubCategory dbo.Transaction dbo.Transaction_Item Dropped Ledger Table Views External Resources Synonyms Programmability Query Store Session Results

SQLQuery3.sql - loc...\\PauloOliveira (6) DESKTOP-ACEDDKF....ngArea

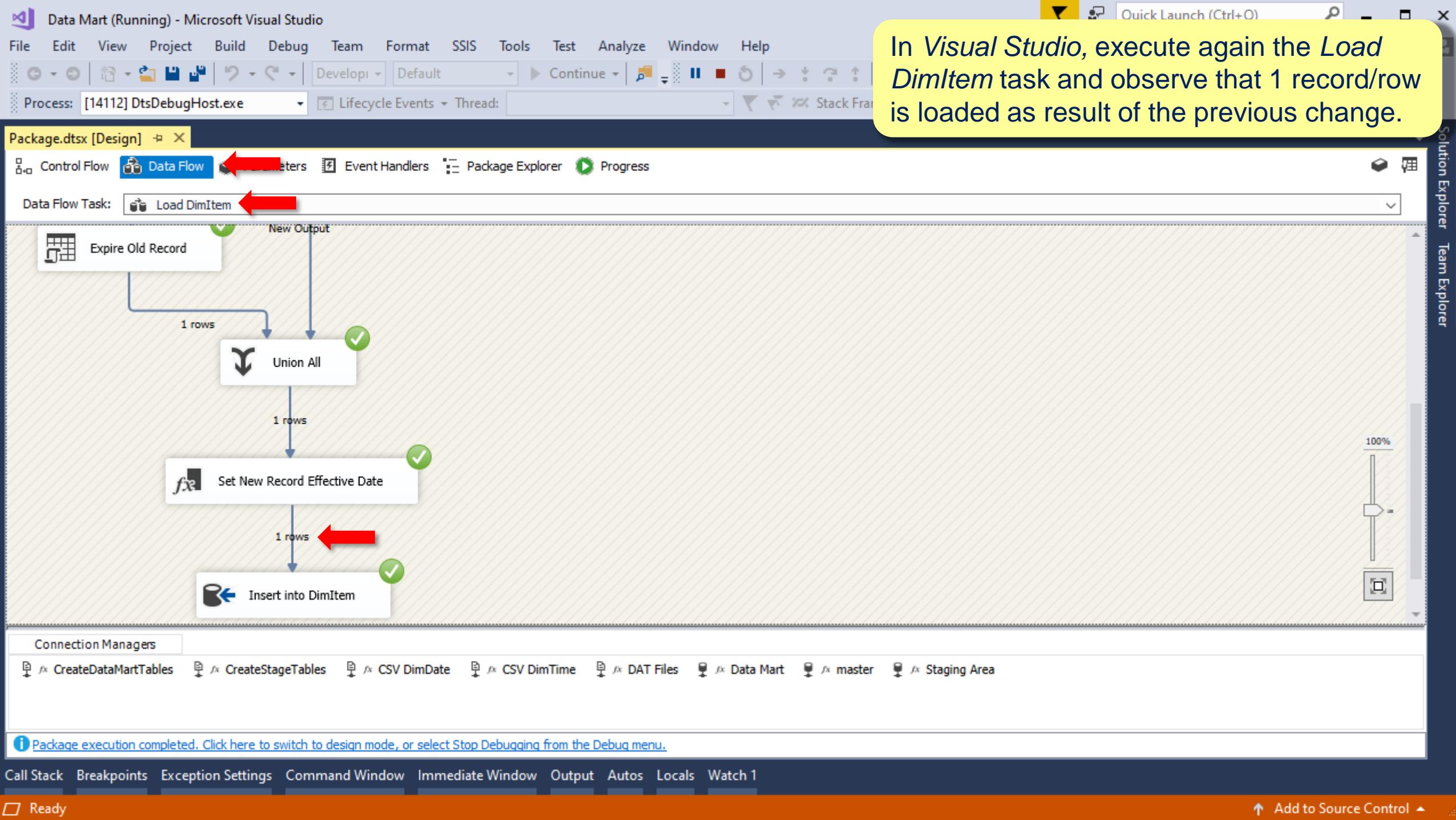
ItemCode ItemDescription CategoryCode SubCategoryC... BrandCode UpmarketFlag

I0000000001	BXT - Listen2Th...	MACC	PMSPE	BBXT	F
I0000000002	BXT - Listen2Th...	MACC	PMSPE	BBXT	F
I0000000003	BXT - Listen2Th...	MACC	PMSPE	BBXT	F
I0000000004	ENDOS - ENSP1	MACC	PMSPE	BENDOS	F
I0000000005	ENDOS - ENSP2	MACC	PMSPE	BENDOS	F
I0000000006	ENDOS - ENSP3	MACC	PMSPE	BENDOS	F
I0000000007	ENDOS - ENSP4	MACC	PMSPE	BENDOS	F
I0000000008	ENDOS - ENSP5	MACC	PMSPE	BENDOS	F
I0000000009	TTP - TTP Super...	MACC	PMSPE	BTTP	F
I0000000010	BXT - Adapt2Th...	MACC	PADAP	BBXT	F
I0000000011	BXT - Adapt2Th...	MACC	PADAP	BBXT	F
I0000000012	ENDOS - ENAD1	MACC	PADAP	BENDOS	F
I0000000013	ENDOS - ENAD2	MACC	PADAP	BENDOS	F
I0000000014	TTP - TTP Super...	MACC	PADAP	BTTP	F
I0000000015	BXT - AA	MACC	PBATT	BBXT	F
I0000000016	BXT - AAA	MACC	PBATT	BBXT	F
I0000000017	BXT - 9V	MACC	PBATT	BBXT	F
I0000000018	BXT - AA - 5 Pack	MACC	PBATT	BBXT	F
I0000000019	BXT - AAA - 5 P...	MACC	PBATT	BBXT	F
I0000000020	BXT - 9V - 5 Pack	MACC	PBATT	BBXT	F
I0000000021	BXT - AA - 10 P...	MACC	PBATT	BBXT	F
I0000000022	BXT - AAA - 10 ...	MACC	PBATT	BBXT	F
I0000000023	BXT - 9V - 10 Pa...	MACC	PBATT	BBXT	F

2 of 200

Ready

Return to the *Item* table edit window and change the *UpmarketFlag* to the original value (F). Don't forget to tab to the next record to save the change.



SQLQuery3.sql - localhost.ARMDDataMart (AzureAD\PauloOliveira (69))* - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

New Query MDX DAX XMLA DAX Execute

ARMDD_DataMart

Object Explorer

localhost (SQL Server 16.0.1050.5 - /) Databases System Databases Database Snapshots AdventureWorksDW2022 ARMDD_DataMart ARMDD_StagingArea Database Diagrams Tables System Tables FileTables External Tables Graph Tables dbo.Brand dbo.Card dbo.CardDQP dbo.Category dbo.Item dbo.MaritalStatusDes dbo.SubCategory dbo.Transaction dbo.Transaction_Item Dropped Ledger Table Views External Resources Synonyms Programmability Query Store Service Broker

SQLQuery3.sql - localhost.ARMDDataMart (AzureAD\PauloOliveira (69))* - Microsoft SQL Server Management Studio

Execute

SELECT *
FROM DimItem
WHERE ItemID = '10000000001'

In SQL Server Management Studio, execute the query again on the *DimItem* to check that the history of the *UpmarketFlag* attribute is recorded once again.

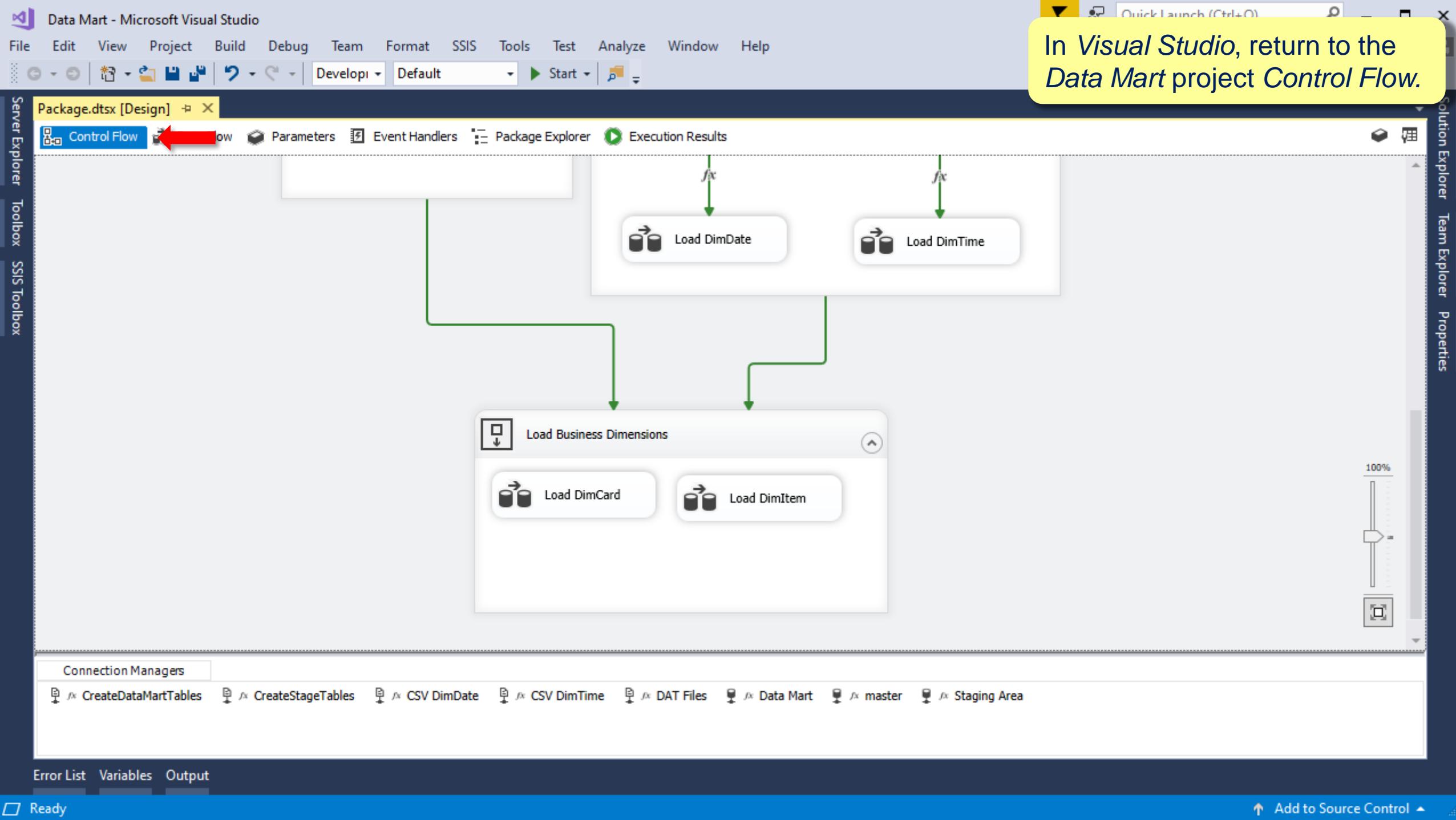
Results Messages

	ItemKey	ItemID	ItemDescription	CategDescription	SubCategDescrip	BrandDescription	UpmarketFlag	EffectiveDate	ExpiredDate	IsCurrent
1	1	10000000001	BXT - Listen2This1	Accessoires	Mini Speakers	BXT	F	2023-11-06 11:41:18.000	2023-11-06 11:52:11.000	No
2	820	10000000001	BXT - Listen2This1	Accessoires	Mini Speakers	BXT	T	2023-11-06 11:52:11.000	2023-11-06 12:01:30.000	No
3	821	10000000001	BXT - Listen2This1	Accessoires	Mini Speakers	BXT	F	2023-11-06 12:01:30.000	NULL	Yes

Query executed successfully.

localhost (16.0 RTM) | AzureAD\PauloOliveira ... | ARMDD_DataMart | 00:00:00 | 3 rows

Ln 3 Col 28 Ch 28 INS



Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team SSIS Tools Test Analyze Window Help

Developer Default Start

Quick Launch (Ctrl+O)

SSIS Toolbox

Search SSIS Toolbox

Favorites

- Data Flow Task** ←
- Execute SQL Task

Common

- Analysis Services Processing Task
- Bulk Insert Task
- Data Profiling Task
- Execute Package Task
- Execute Process Task
- Expression Task
- File System Task
- FTP Task
- Hadoop File System Task
- Hadoop Hive Task
- Hadoop Pig Task
- Script Task
- Send Mail Task
- Web Service Task
- XML Task

Data Flow Task

Moves data between sources and destinations while transforming and cleaning. Data can be moved between tables and files while efficiently processing the data in memory with transformations. This is an...

Find Samples

Event Handlers Package Explorer Execution Results

Load DimDate

Load DimTime

Load Business Dimensions

Load DimCard

Load DimItem

CSV DimDate CSV DimTime DAT Files Data Mart master Staging Area

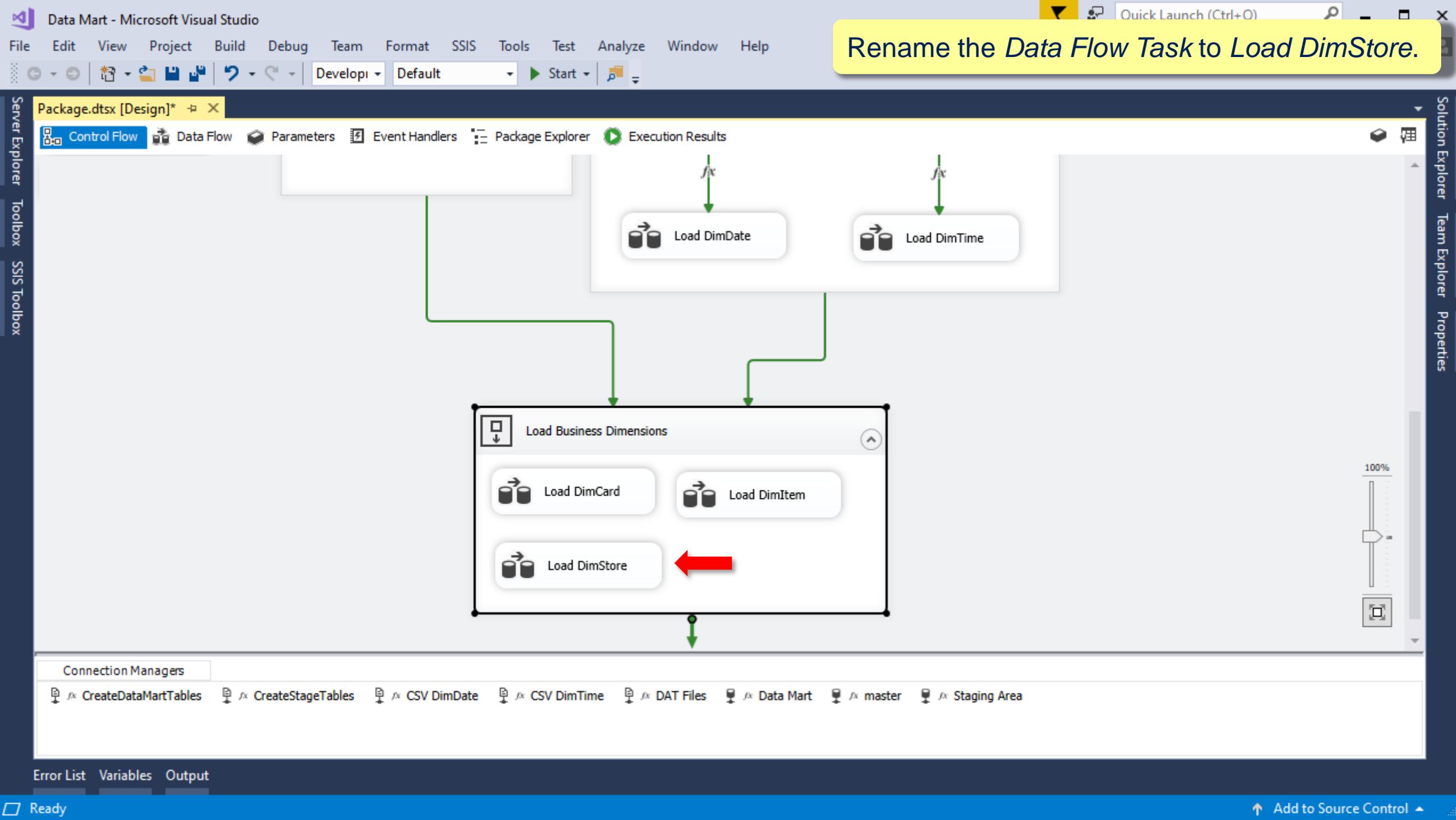
Error List Variables Output

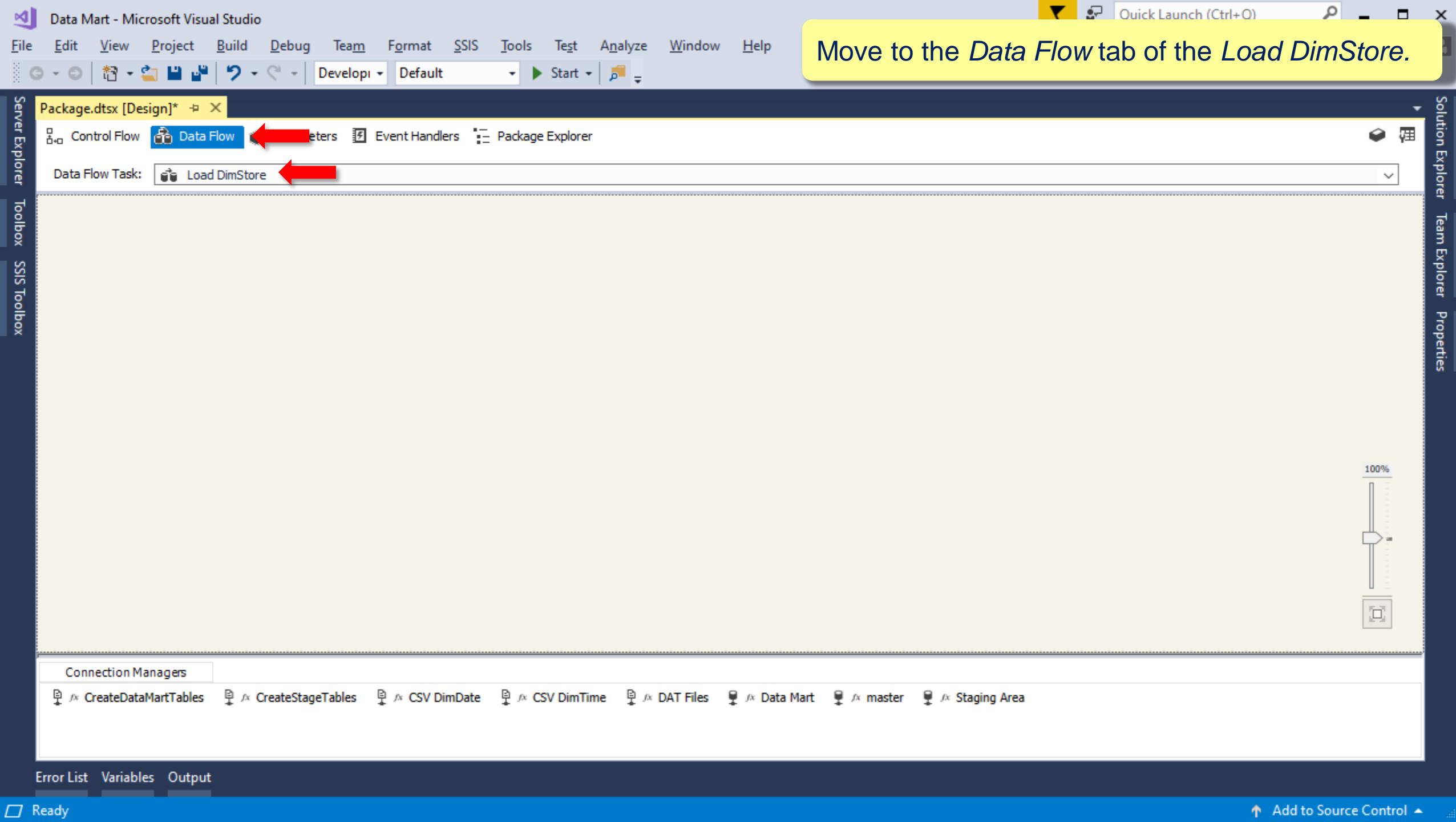
Add to Source Control

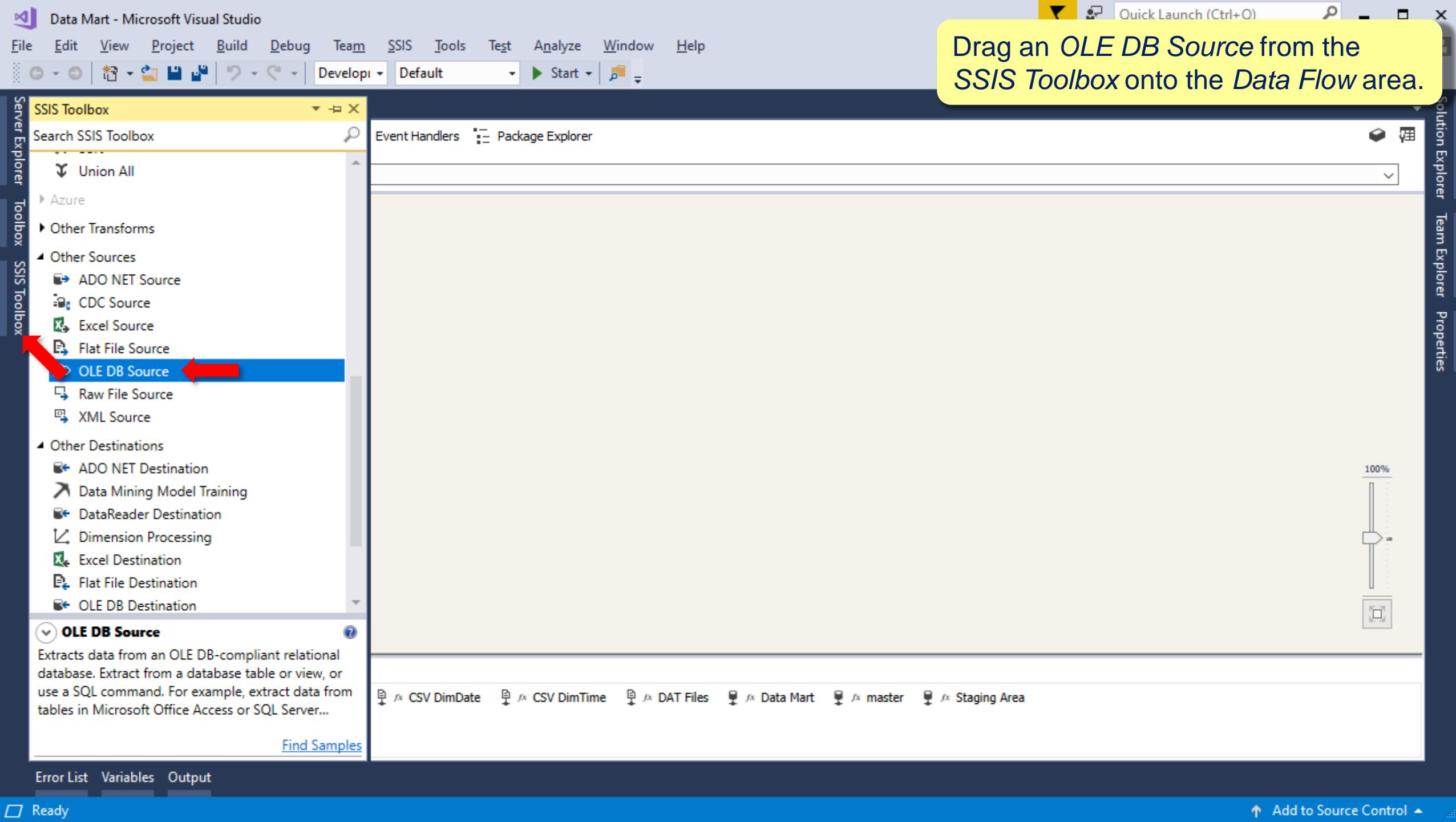
Server Explorer Solution Explorer Team Explorer Properties

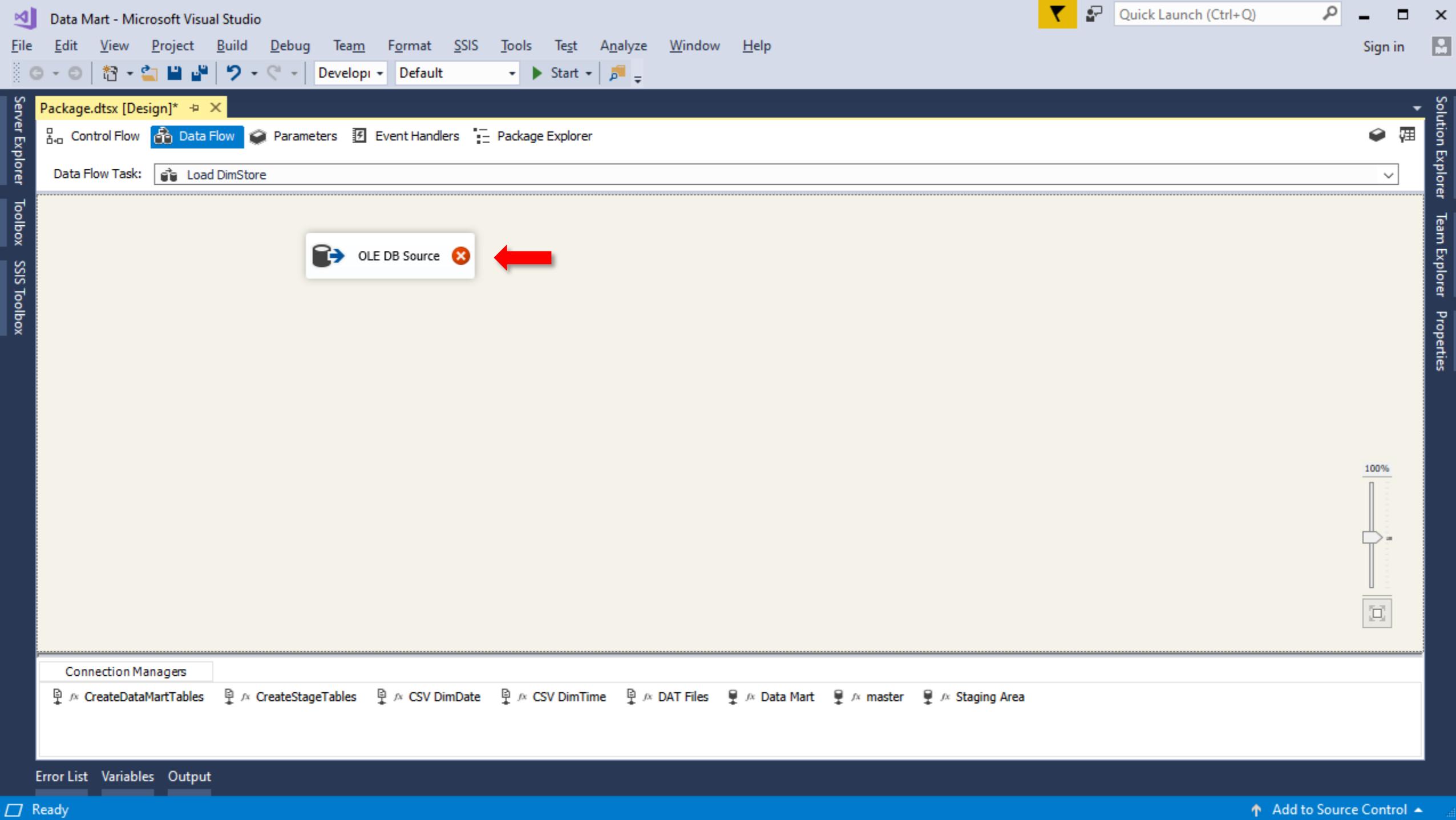
Drag a *Data Flow Task* from the *SSIS Toolbox* onto the *Load Business Dimensions Sequence Container*.

```
graph TD; subgraph LD [Load Business Dimensions]; LD1[Load DimDate]; LD2[Load DimTime]; LD3[Load DimCard]; LD4[Load DimItem]; end; LD --- LD1; LD --- LD2; LD --- LD3; LD --- LD4;
```









Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Quick Launch (Ctrl+O)

Rename the OLE DB Source to Transaction.

Package.dtsx [Design]*

Control Flow Data Flow Parameters Event Handlers Package Explorer

Data Flow Task: Load DimStore

Transaction

Connection Managers

- CreateDataMartTables
- CreateStageTables
- CSV DimDate
- CSV DimTime
- DAT Files
- Data Mart
- master
- Staging Area

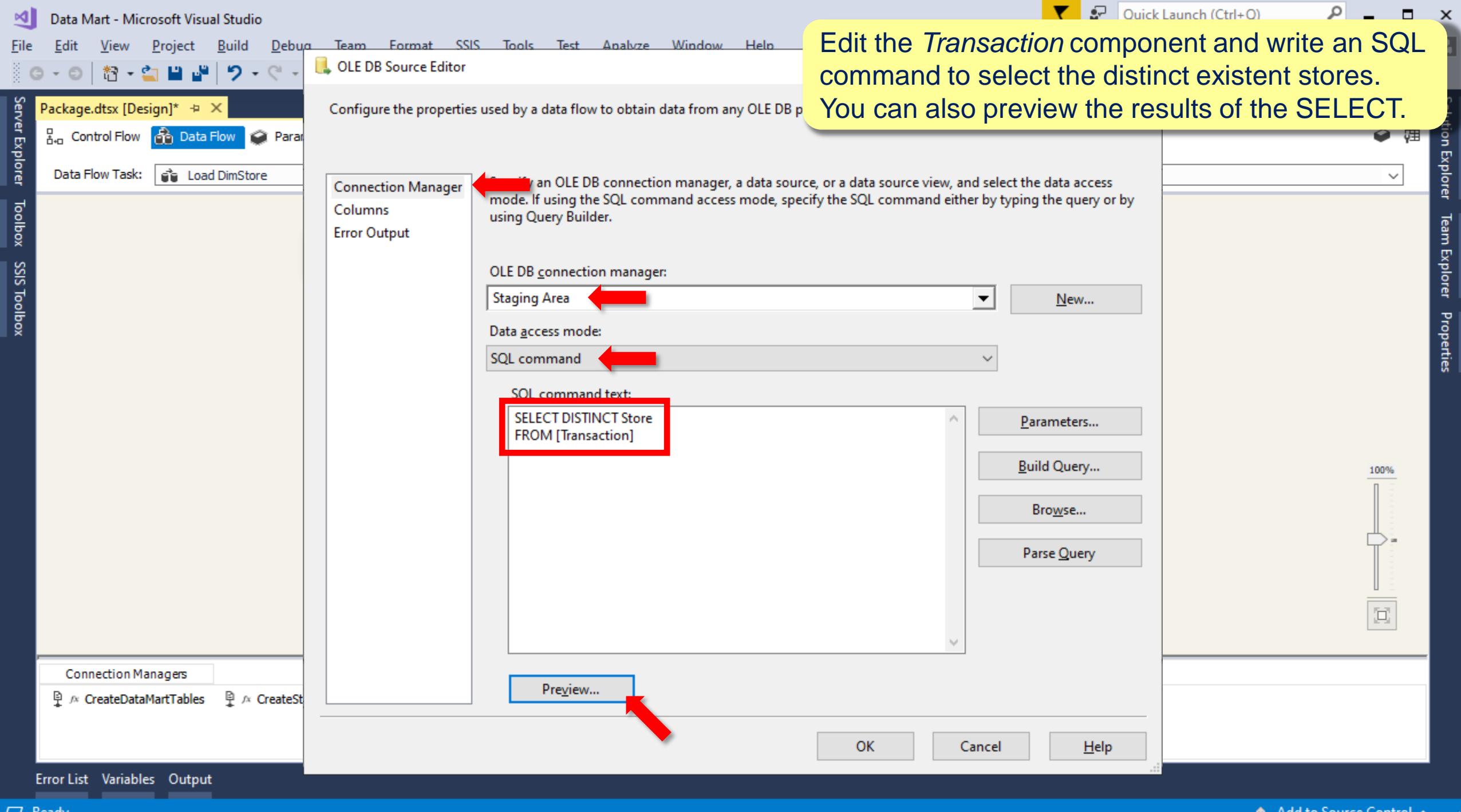
Error List Variables Output

Ready Add to Source Control

Server Explorer Toolbox SSIS Toolbox Solution Explorer Team Explorer Properties

100%

This screenshot shows the Microsoft Visual Studio interface for an SSIS package named 'Package.dtsx'. The main window displays the 'Data Flow' tab, which contains a 'Data Flow Task' list with one item: 'Load DimStore'. A red arrow points to the 'Transaction' component in this list. The 'Connection Managers' pane at the bottom lists several connection managers, including 'CreateDataMartTables', 'CreateStageTables', and various CSV and DAT files. The status bar at the bottom indicates 'Ready' and 'Add to Source Control'.



Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Quick Launch (Ctrl+Q)

Sign in

Server Explorer Solution Explorer

Toolbox Team Explorer

Properties

Package.dtsx [Design]*

Control Flow Data Flow Parameters

Data Flow Task: Load DimStore

OLE DB Source Editor

Configure the properties used by a data flow to obtain data from any OLE DB provider.

Connection Manager

Columns

Error Output

Specify an OLE DB connection manager, a data source, or a data source view, and select the data access type by typing the query or by

Preview Query Results

Query result (up to the first 200 rows):

Store
S0015
S0040
S0056
S0006
S0002
S0034

New...

Parameters...

Build Query...

Browse...

Parse Query

Close

Preview...

OK Cancel Help

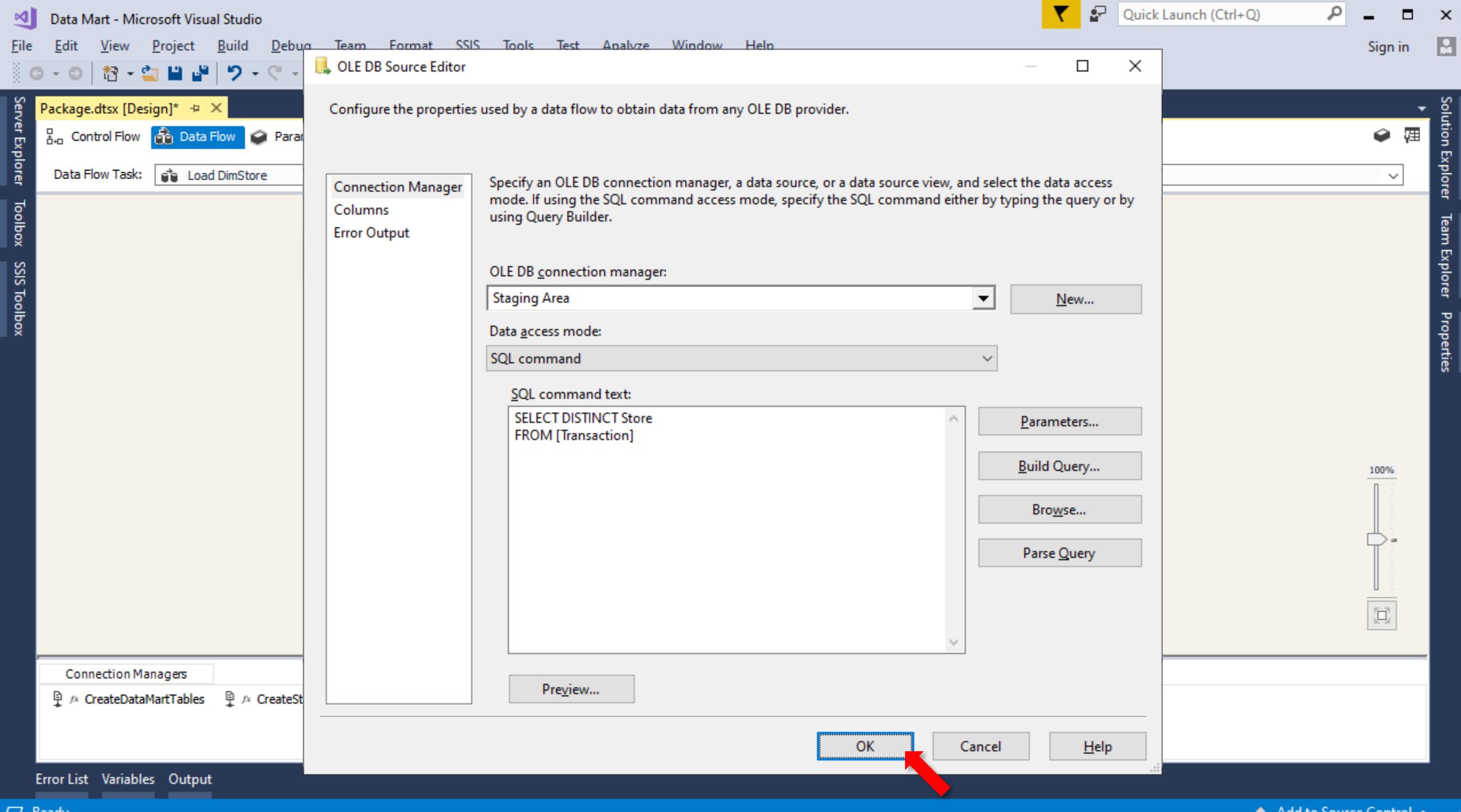
Connection Managers

CreateDataMartTables CreateSt

Error List Variables Output

Add to Source Control

The screenshot shows the Microsoft Visual Studio interface for an SSIS package named 'Package.dtsx'. The main window displays the 'OLE DB Source Editor' configuration. A modal dialog titled 'Preview Query Results' is open, showing a list of store IDs: S0015, S0040, S0056, S0006, S0002, and S0034. The 'Close' button at the bottom right of this dialog is highlighted with a red arrow. The 'Preview...' button at the bottom left of the dialog is also highlighted with a blue rectangle. The 'Connection Manager' tab is selected in the editor's sidebar. The status bar at the bottom indicates 'Ready'.



Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team SSIS Tools Test Analyze Window Help

Developer Default Start

Quick Launch (Ctrl+O)

SSIS Toolbox

Search SSIS Toolbox

- ADO.NET Source
- CDC Source
- Excel Source
- Flat File Source
- OLE DB Source
- Raw File Source
- XML Source

transaction

Other Destinations

- ADO.NET Destination
- Data Mining Model Training
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination** (highlighted with a blue arrow)
- Partition Processing
- Raw File Destination
- Recordset Destination
- SQL Server Compact Destination
- SQL Server Destination

OLE DB Destination

Loads data into an OLE DB-compliant relational database, such as SQL Server. Many types of databases are OLE DB-compliant. With minor reconfiguration, this destination can be used before...

Find Samples

Error List Variables Output

Add to Source Control

Drag an *OLE DB Destination* onto the *Control Flow* area, underneath the *Transaction* component.

Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Quick Launch (Ctrl+O)

Package.dtsx [Design]*

Control Flow Data Flow Parameters Event Handlers Package Explorer

Data Flow Task: Load DimStore

Server Explorer Solution Explorer Team Explorer Properties

Transaction

OLE DB Destination

Connection Managers

CreateDataMartTables CreateStageTables CSV DimDate CSV DimTime DAT Files Data Mart master Staging Area

Error List Variables Output

Add to Source Control

Connect the *Transaction* component to the *OLE DB Destination* component.

```
graph TD; Transaction[Transaction] --> OLE_DEST[OLE DB Destination]; OLE_DEST --> LoadDimStore[Load DimStore]
```

Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Quick Launch (Ctrl+O)

Package.dtsx [Design]*

Control Flow Data Flow Parameters Event Handlers Package Explorer

Data Flow Task: Load DimStore

Transaction

DimStore

Rename the *OLE DB Destination* to *DimStore* and double click to edit it.

Server Explorer Solution Explorer Team Explorer Properties

Connection Managers

CreateDataMartTables CreateStageTables CSV DimDate CSV DimTime DAT Files Data Mart master Staging Area

Error List Variables Output

Add to Source Control

```
graph TD; Transaction[Transaction] --> DimStore[DimStore]
```

Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug

Server Explorer Toolbox SSIS Toolbox

OLE DB Destination Editor

Configure the properties used to insert data into a relational database using an OLE DB provider.

Set the *DimStore* table of the Data Mart as the destination table.

Connection Manager
Mappings
Error Output

Specify an OLE DB connection manager, a data source, or a data source view, and select the data access mode. If using the SQL command access mode, specify the SQL command either by typing the query or by using Query Builder. For fast-load data access, set the table update options.

OLE DB connection manager:
Data Mart

Data access mode:
Table or view - fast load

Name of the table or the view:
[dbo].[DimStore]

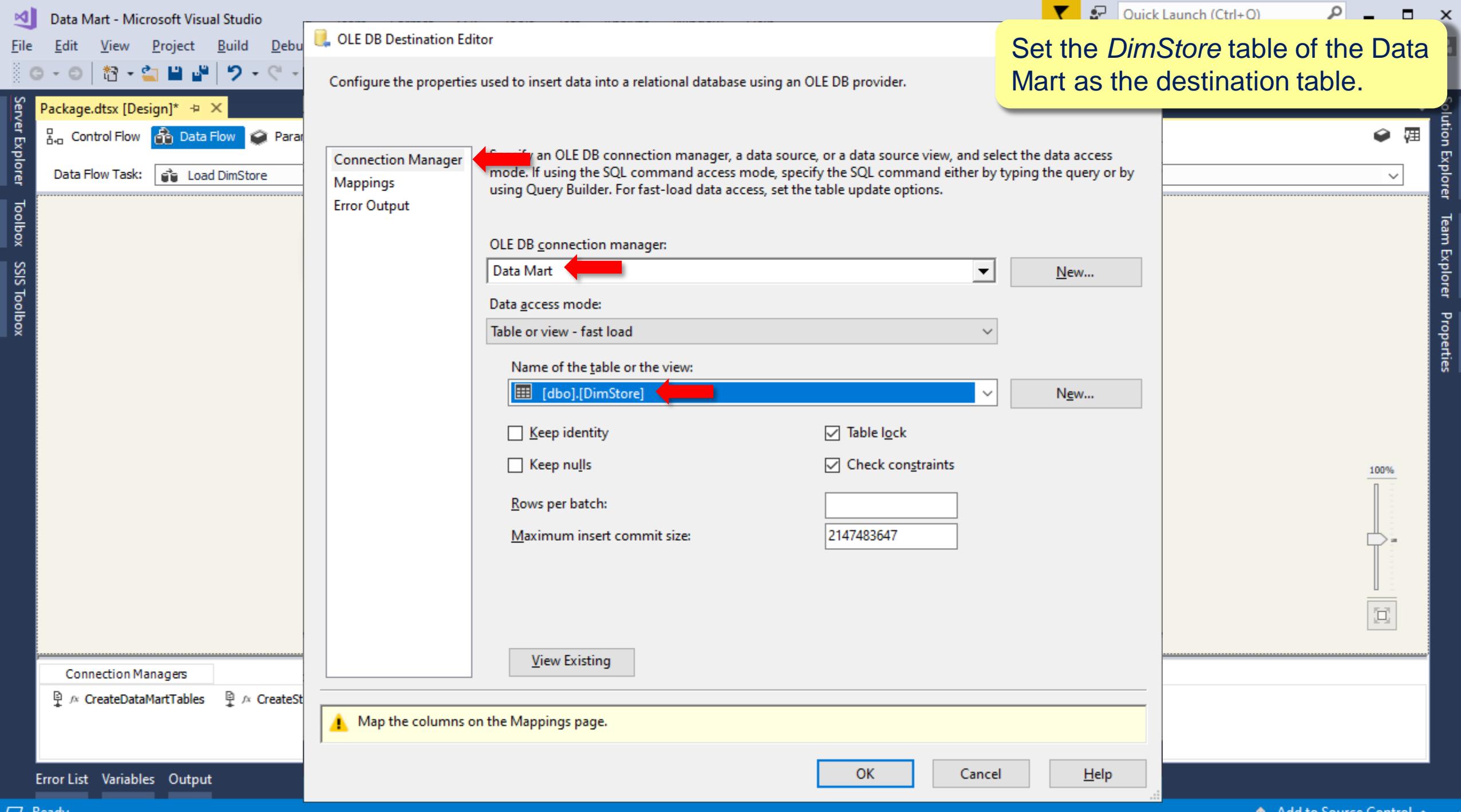
Keep identity Table lock
 Keep nulls Check constraints
Rows per batch:
Maximum insert commit size:
2147483647

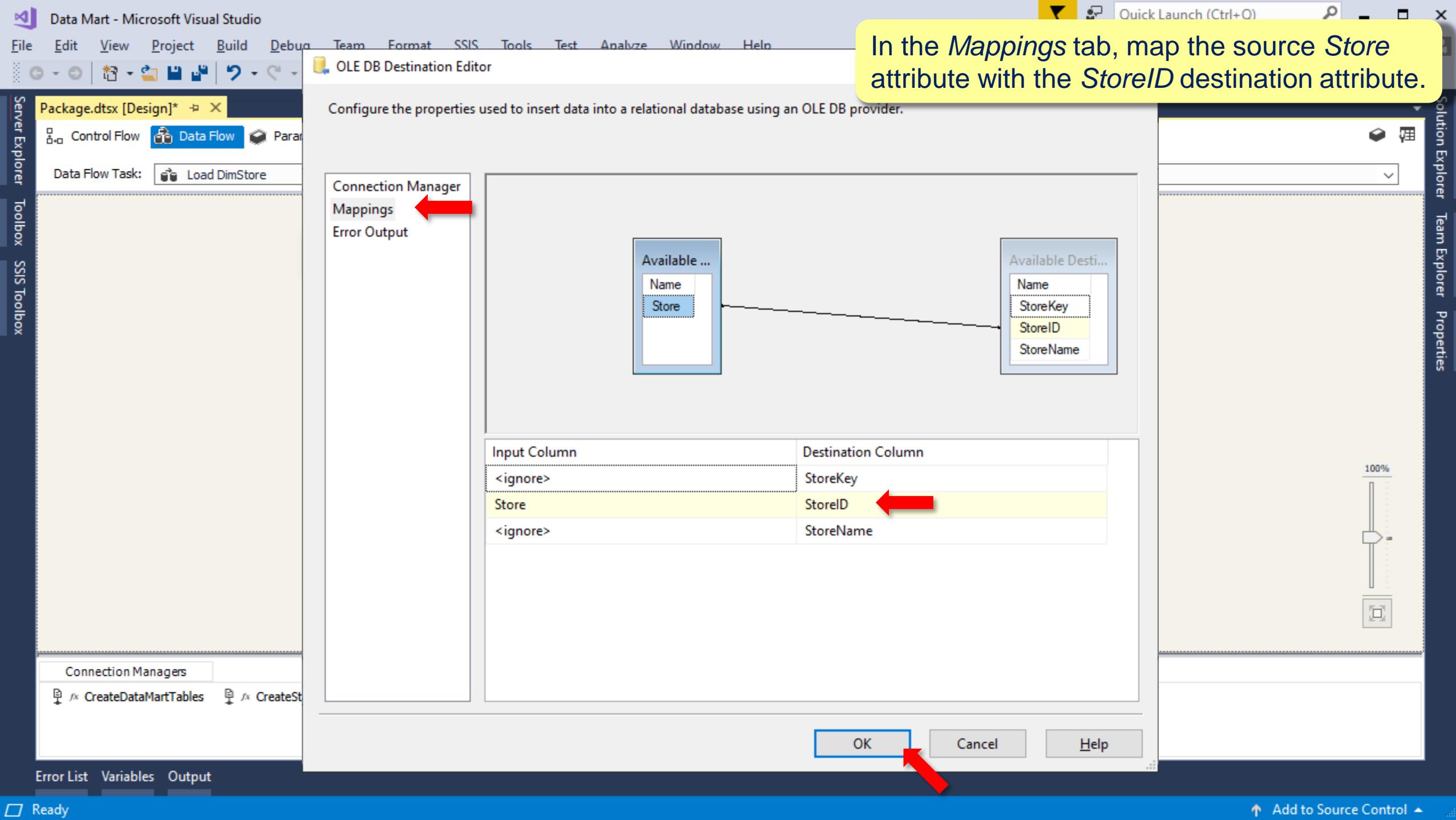
View Existing

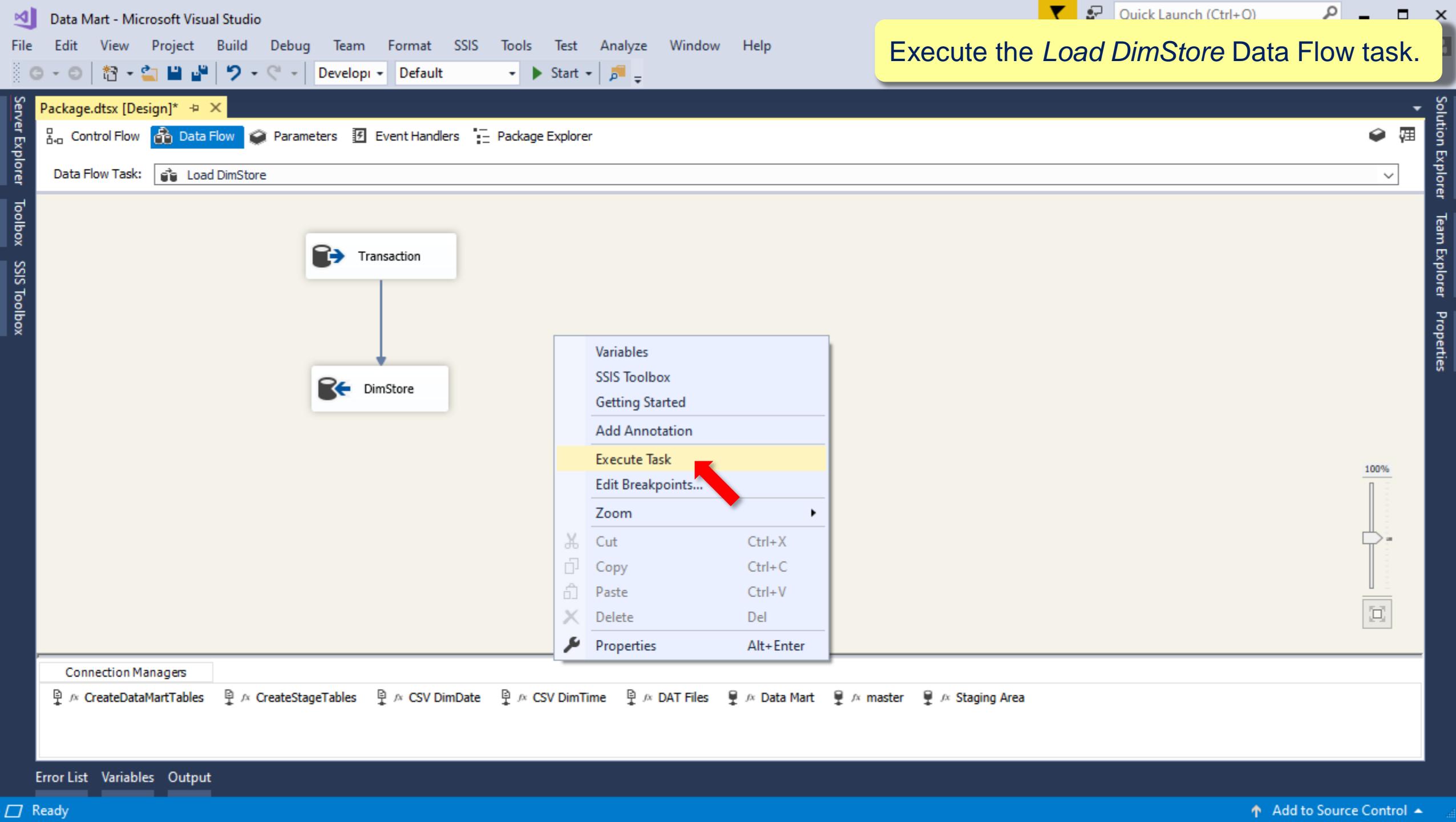
Map the columns on the Mappings page.

OK Cancel Help

Add to Source Control







Data Mart (Running) - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Quick Launch (Ctrl+O)

Process: [2804] DtsDebugHost.exe Lifecycle Events Thread Stack Frame:

Package.dtsx [Design]

Control Flow Data Flow Parameters Event Handlers Package Explorer Progress

Data Flow Task: Load DimStore

6 records/rows are loaded into the DimStore table.

Transaction

DimStore

6 rows

Connection Managers

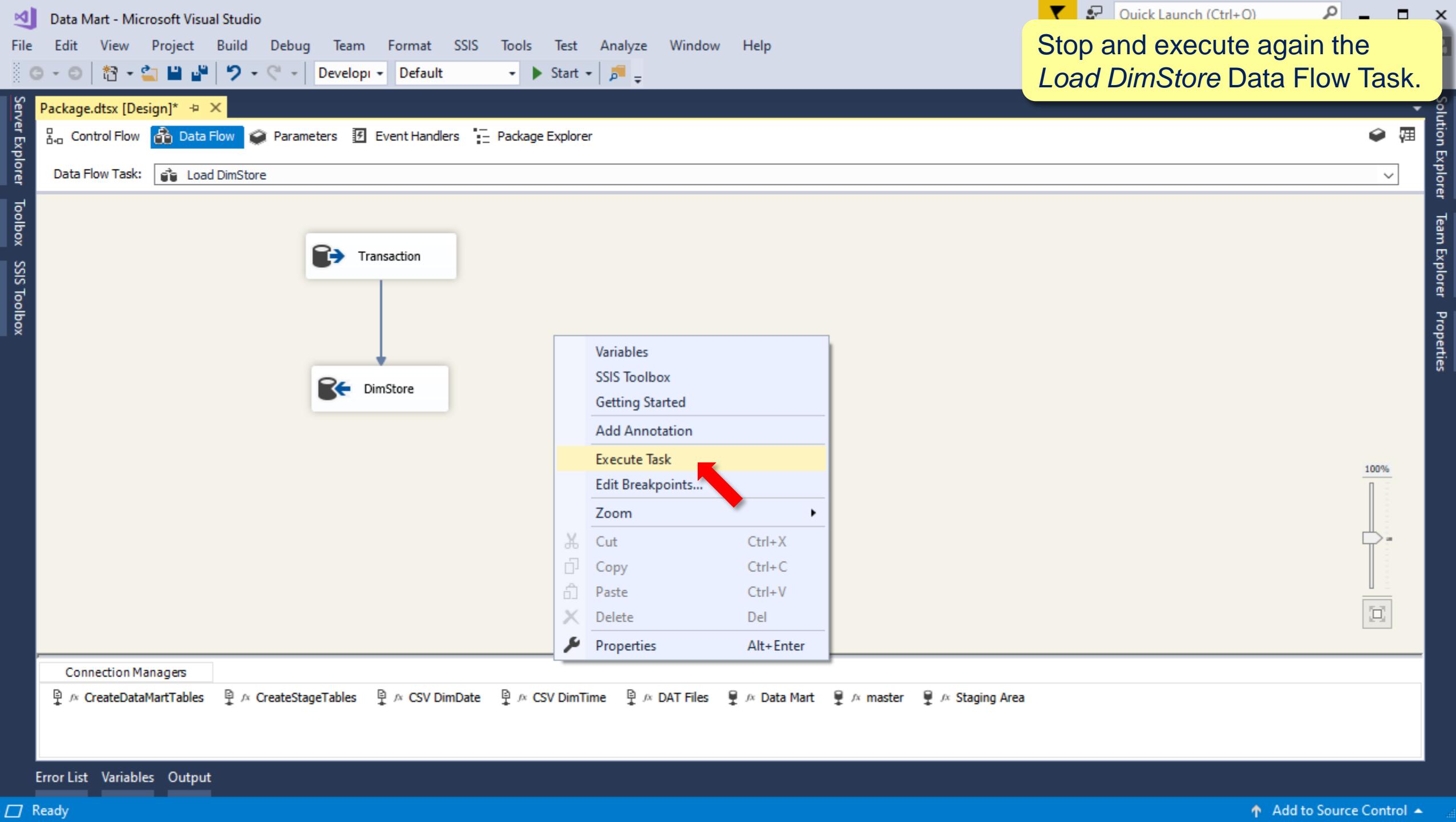
CreateDataMartTables CreateStageTables CSV DimDate CSV DimTime DAT Files Data Mart master Staging Area

Package execution completed. 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

Ready Add to Source Control

The screenshot shows the Microsoft Visual Studio interface for an SSIS package named 'Package.dtsx'. The 'Data Flow' tab is selected in the ribbon. A 'Data Flow Task' named 'Load DimStore' is displayed. The data flow diagram consists of two main components: a 'Transaction' source at the top and a 'DimStore' destination below it. A blue arrow points from the 'Transaction' source to the 'DimStore' destination, labeled '6 rows' above the arrow. Both components have green checkmarks in their top right corners. In the bottom left corner of the main window, there is a status message: 'Package execution completed. Click here to switch to design mode, or select Stop Debugging from the Debug menu.' The bottom navigation bar includes tabs for Call Stack, Breakpoints, Exception Settings, Command Window, Immediate Window, Output, Autos, Locals, Watch 1, and a 'Ready' indicator. The bottom right corner has an 'Add to Source Control' button. On the right side of the screen, there are 'Solution Explorer' and 'Team Explorer' windows.



Data Mart (Running) - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Quick Launch (Ctrl+O)

Process: [2804] DtsDebugHost.exe Lifecycle Events Thread: Stack Frame:

Package.dtsx [Design]

Control Flow Data Flow Parameters Event Handlers Package Explorer Progress

Data Flow Task: Load DimStore

The same 6 records/rows are wrongly loaded again in the *DimStore* table.

```
graph TD; Transaction[Transaction] -- "6 rows" --> DimStore[DimStore]
```

Connection Managers

- CreateDataMartTables
- CreateStageTables
- CSV DimDate
- CSV DimTime
- DAT Files
- Data Mart
- master
- Staging Area

Package execution completed. 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

Ready Add to Source Control

Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Quick Launch (Ctrl+O)

Server Explorer Solution Explorer Team Explorer Properties

Package.dtsx [Design]*

Control Flow Data Flow Parameters Event Handlers Package Explorer Execution Results

Data Flow Task: Load DimStore

Transaction

DimStore

Stop the execution, delete the data flow between the *Transaction* and the *DimStore* components and drag the *DimStore* to below.

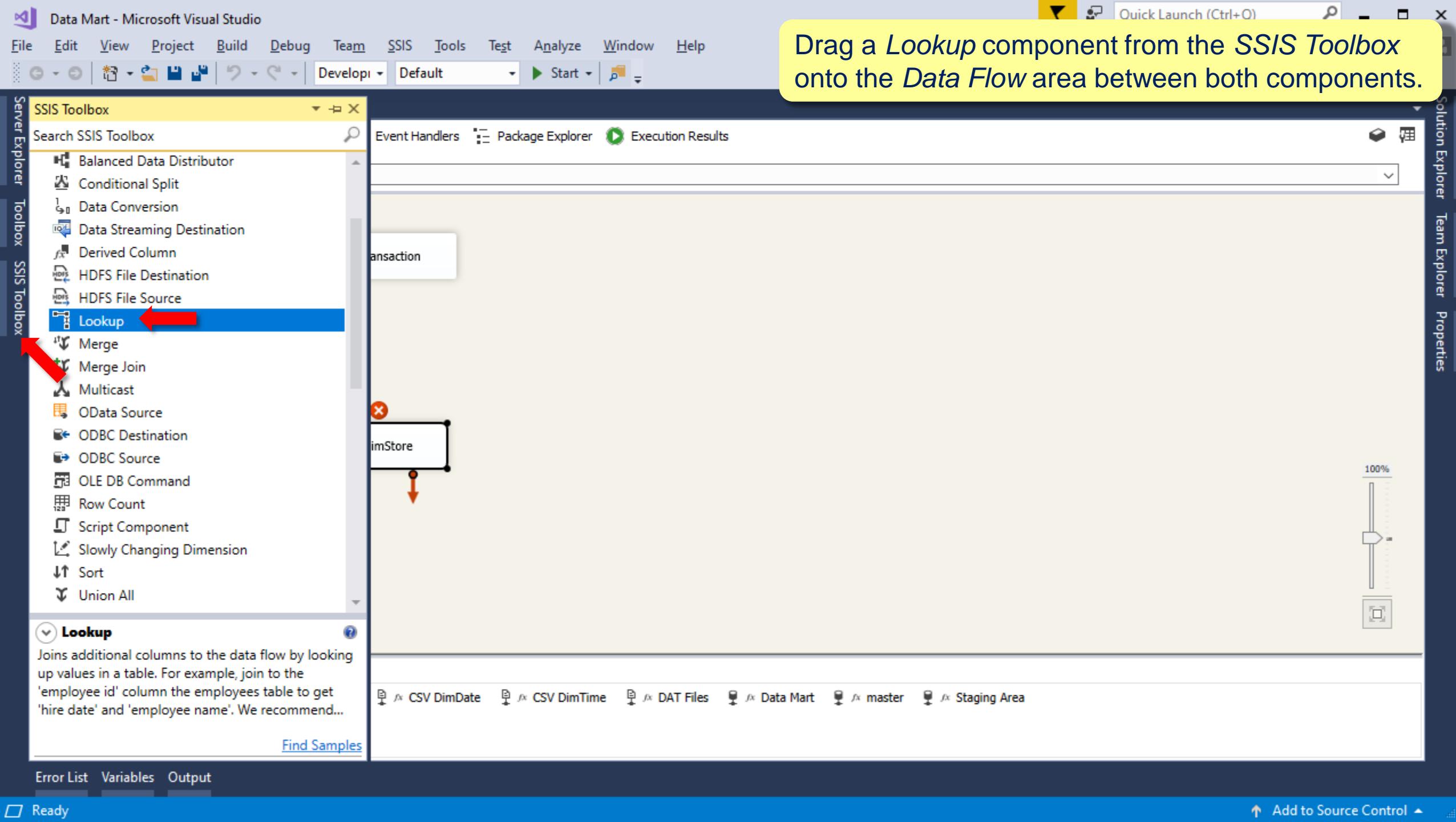
Connection Managers

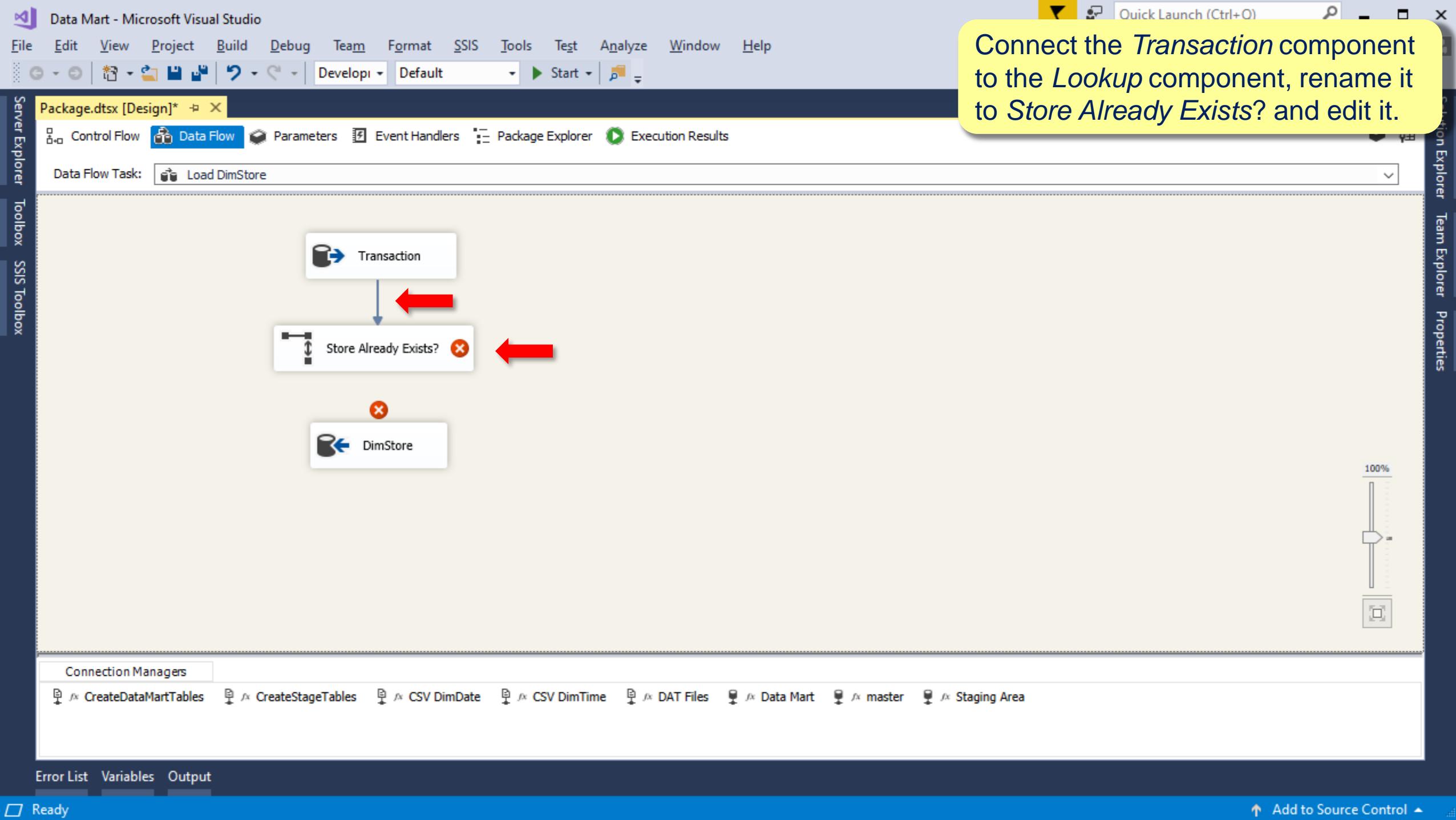
CreateDataMartTables CreateStageTables CSV DimDate CSV DimTime DAT Files Data Mart master Staging Area

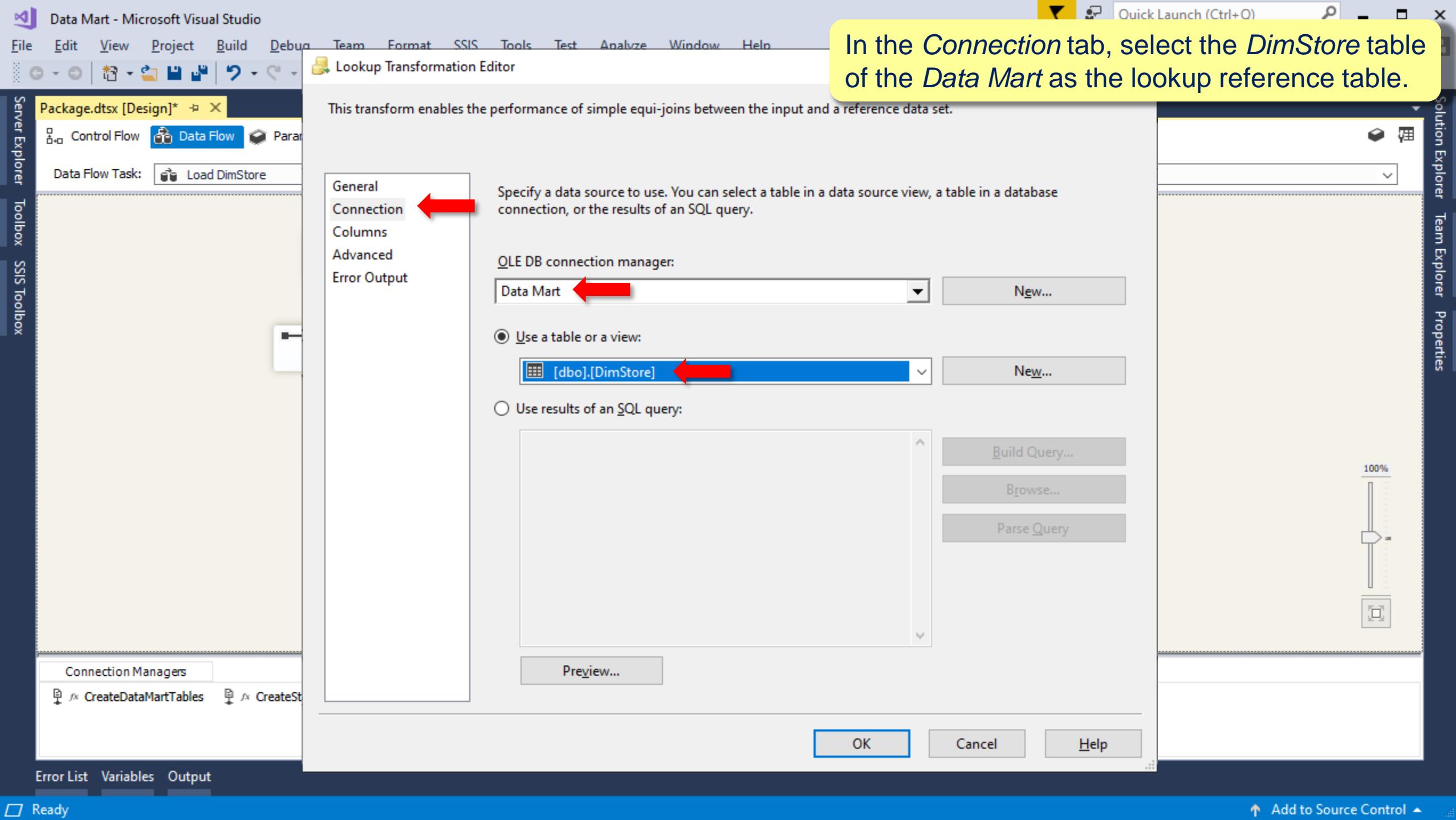
Error List Variables Output

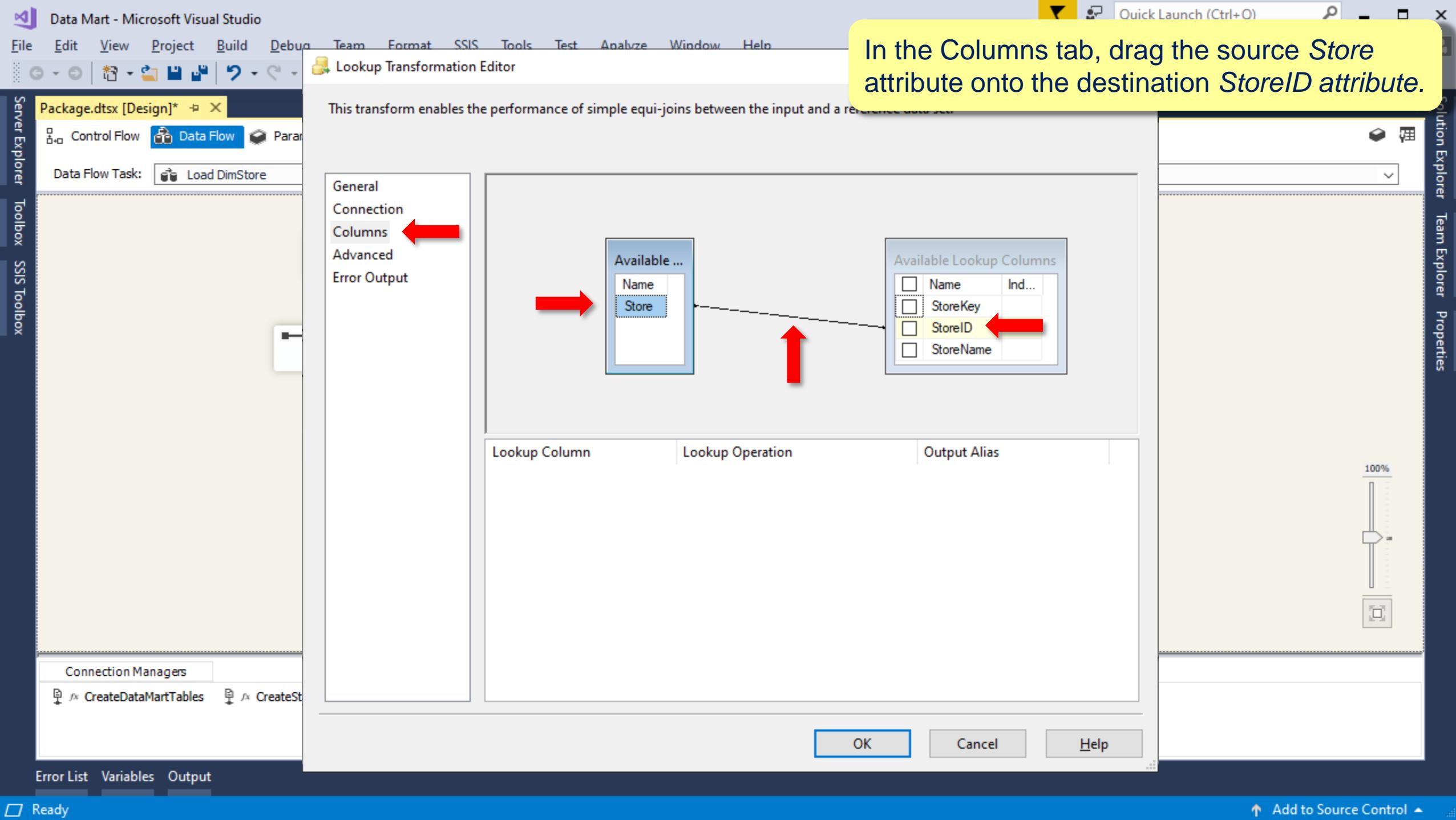
Ready Add to Source Control

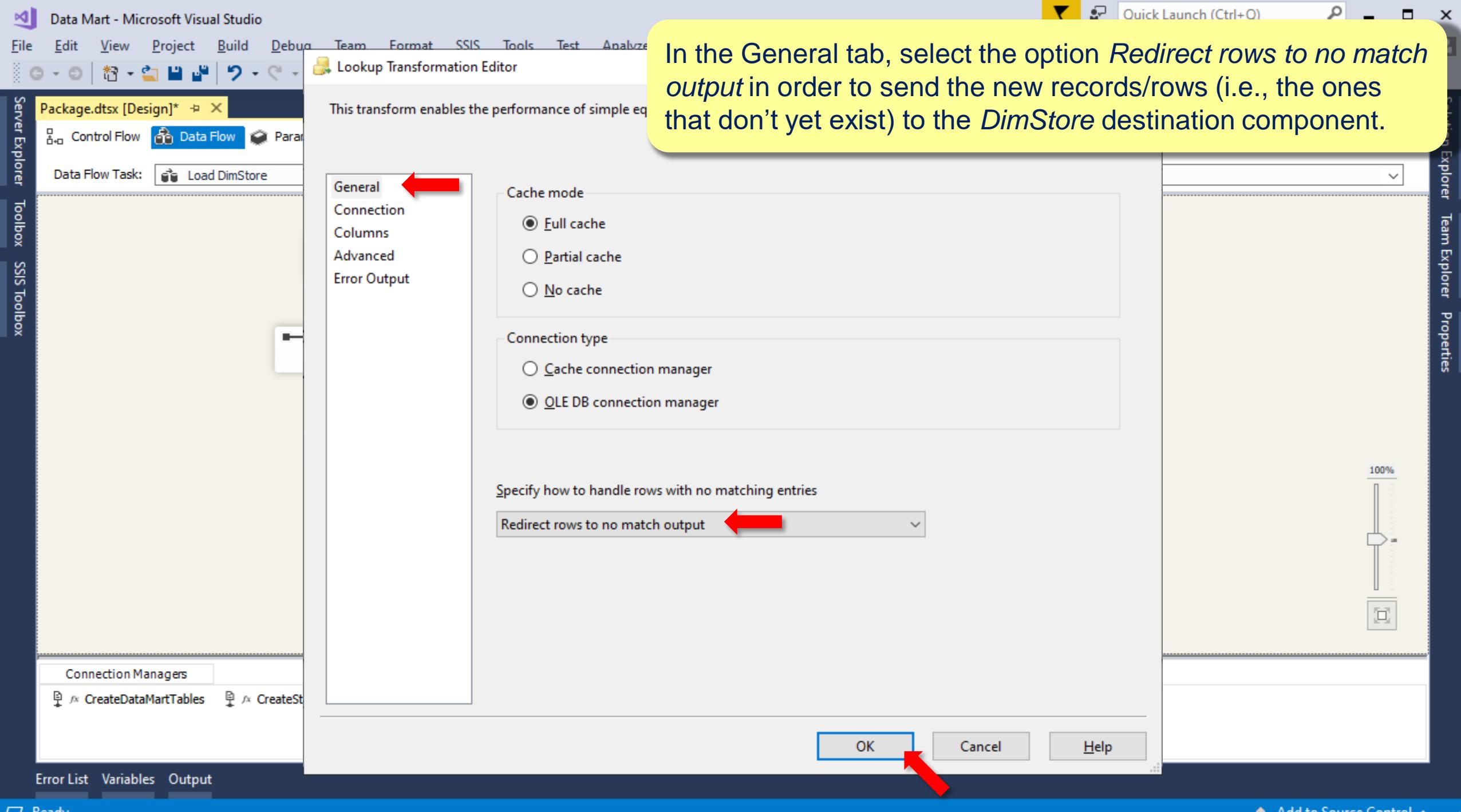
The screenshot shows the Microsoft Visual Studio SSIS Data Flow Task Designer. At the top, the menu bar includes File, Edit, View, Project, Build, Debug, Team, Format, SSIS, Tools, Test, Analyze, Window, and Help. Below the menu is a toolbar with icons for Save, Undo, Redo, Find, Replace, Copy, Paste, Cut, Delete, and other development tools. The main workspace is titled "Package.dtsx [Design]*". It contains a "Data Flow" tab which is selected, indicated by a blue border. Below the tabs, it says "Data Flow Task: Load DimStore". In the center, there is a "Transaction" component (represented by a blue cylinder icon) and a "DimStore" component (represented by a blue cylinder icon with a left-pointing arrow). A red arrow points from the "DimStore" component down towards the bottom of the workspace. On the right side of the workspace, there is a vertical zoom control with a slider set at 100%. Along the bottom edge of the workspace, there are three tabs: Connection Managers, Error List, Variables, and Output. The "Connection Managers" tab is currently active. At the very bottom of the screen, there is a dark blue footer bar with the word "Ready" on the left and "Add to Source Control" with a small upward arrow icon on the right.











Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Quick Launch (Ctrl+O)

Package.dtsx [Design]*

Control Flow Data Flow Parameters Event Handlers Package Explorer Execution Results

Data Flow Task: Load DimStore

Transaction

Store Already Exists?

DimStore

Connection Managers

CreateDataMartTables CreateStageTables CSV DimDate CSV DimTime DAT Files Data Mart master Staging Area

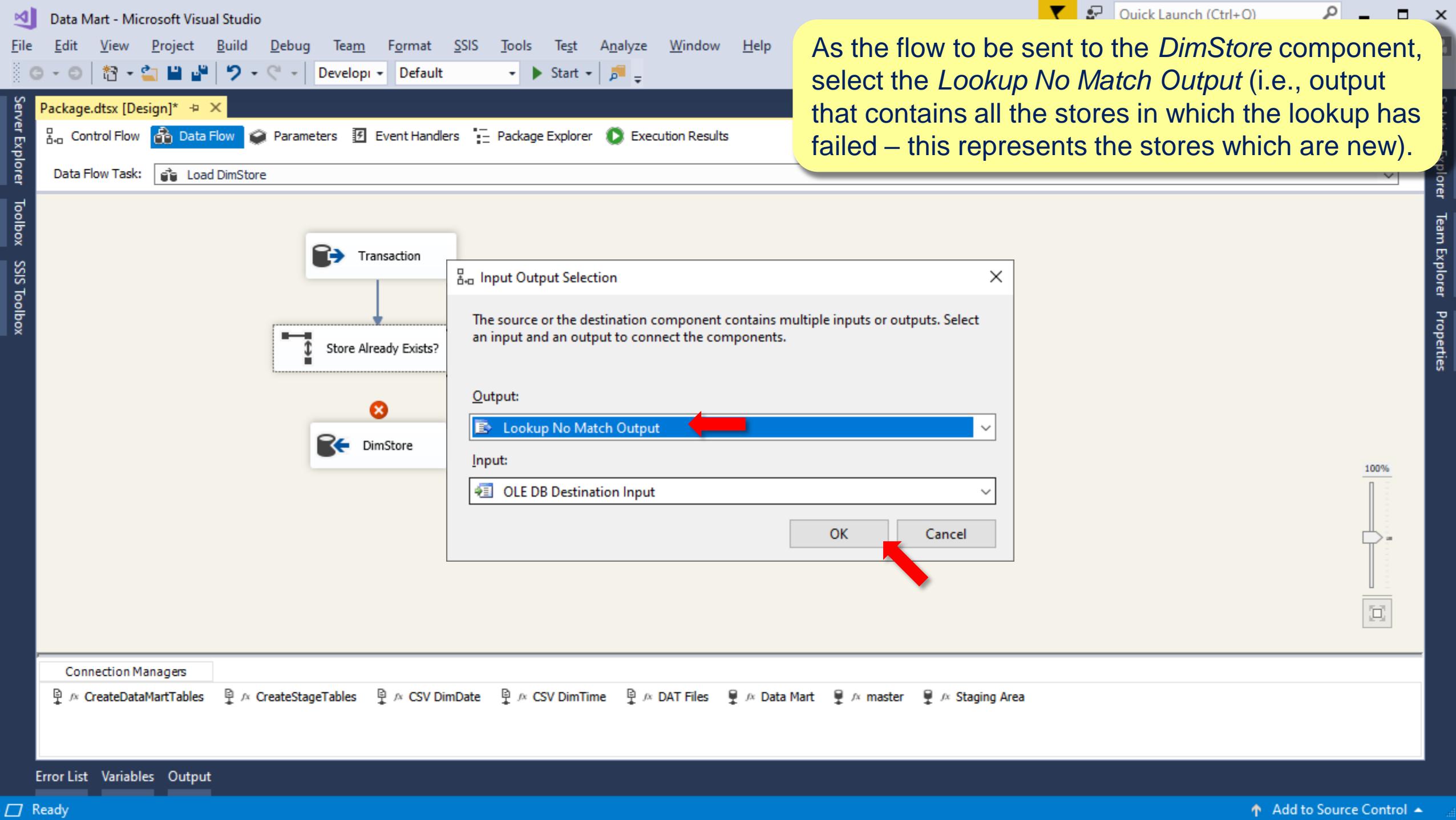
Error List Variables Output

Ready Add to Source Control

Server Explorer Solution Explorer Team Explorer Properties

Connect the Lookup component (*Store Already Exists?*) to the *DimStore* destination component.

```
graph TD; Transaction[Transaction] --> SAES[Store Already Exists?]; SAES --> DimStore[DimStore]
```



Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Quick Launch (Ctrl+Q)

Sign in

Server Explorer Toolbox SSIS Toolbox Solution Explorer Team Explorer Properties

Package.dtsx [Design]*

Control Flow Data Flow Parameters Event Handlers Package Explorer Execution Results

Data Flow Task: Load DimStore

Transaction

Store Already Exists?

DimStore

Lookup No Match Output

100%

Connection Managers

CreateDataMartTables CreateStageTables CSV DimDate CSV DimTime DAT Files Data Mart master Staging Area

Error List Variables Output

Add to Source Control

```
graph TD; Transaction[Transaction] --> Decision{Store Already Exists?}; Decision --> DimStore[DimStore]; Decision --> NoMatch[Lookup No Match Output]
```

SQLQuery3.sql - localhost.ARMDDataMart (AzureAD\PauloOliveira (69))* - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

New Query MDX DMX XMLA DAX Execute

ARMDD_DataMart

Object Explorer

Connect

localhost (SQL Server 16.0.1050.5 - A)

Databases (ARMDD_DataMart) (ARMDD_StagingArea)

System Databases Database Snapshots AdventureWorksDW2022

ARMDD_DataMart (selected)

Tables

System Tables FileTables External Tables Graph Tables

dbo.Brand dbo.Card dbo.CardDetail dbo.Category dbo.Item dbo.MaritalStatus dbo.SubCategory dbo.Transaction dbo.TransactionDetail Dropped Links

Views External Resources Synonyms Programmability Query Store Configuration

New Database... New Query (selected)

Script Database Tasks Policies Facets Start PowerShell Azure Data Studio Azure SQL Managed Instance link Reports Rename Delete Refresh Properties

Query executed successfully.

In SQL Server Management Studio, create a New Query window in the ARMDD_DataMart database.

ItemDescription	CategDescription	SubCategDescrip	BrandDescription	UpmarketFlag	EffectiveDate	ExpiredDate	IsCurrent
BXT - Listen2This1	Accessoires	Mini Speakers	BXT	F	2023-11-06 11:41:18.000	2023-11-06 11:52:11.000	No
BXT - Listen2This1	Accessoires	Mini Speakers	BXT	T	2023-11-06 11:52:11.000	2023-11-06 12:01:30.000	No
BXT - Listen2This1	Accessoires	Mini Speakers	BXT	F	2023-11-06 12:01:30.000	NULL	Yes

localhost (16.0 RTM) | AzureAD\PauloOliveira ... | ARMDD_DataMart | 00:00:00 | 3 rows

SQLQuery4.sql - localhost.ARMDDataMart (AzureAD\PauloOliveira (56))* - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

New Query MDX DMX XMLA DAX Execute

ARMDD_DataMart Object Explorer Connect

localhost (SQL Server 16.0.1050.5 - /) Databases System Databases Database Snapshots AdventureWorksDW2022 ARMDD_DataMart ARMDD_StagingArea Database Diagrams Tables System Tables FileTables External Tables Graph Tables dbo.Brand dbo.Card dbo.CardDQP dbo.Category dbo.Item dbo.MaritalStatusDes dbo.SubCategory dbo.Transaction dbo.Transaction_Item Dropped Ledger Table Views External Resources Synonyms Programmability Query Store Session Results

SQLQuery4.sql - loc...\\PauloOliveira (56)* X SQLQuery3.sql - loc...\\PauloOliveira (69)* DESKTOP-ACEDDKF...ngArea - dbo.item

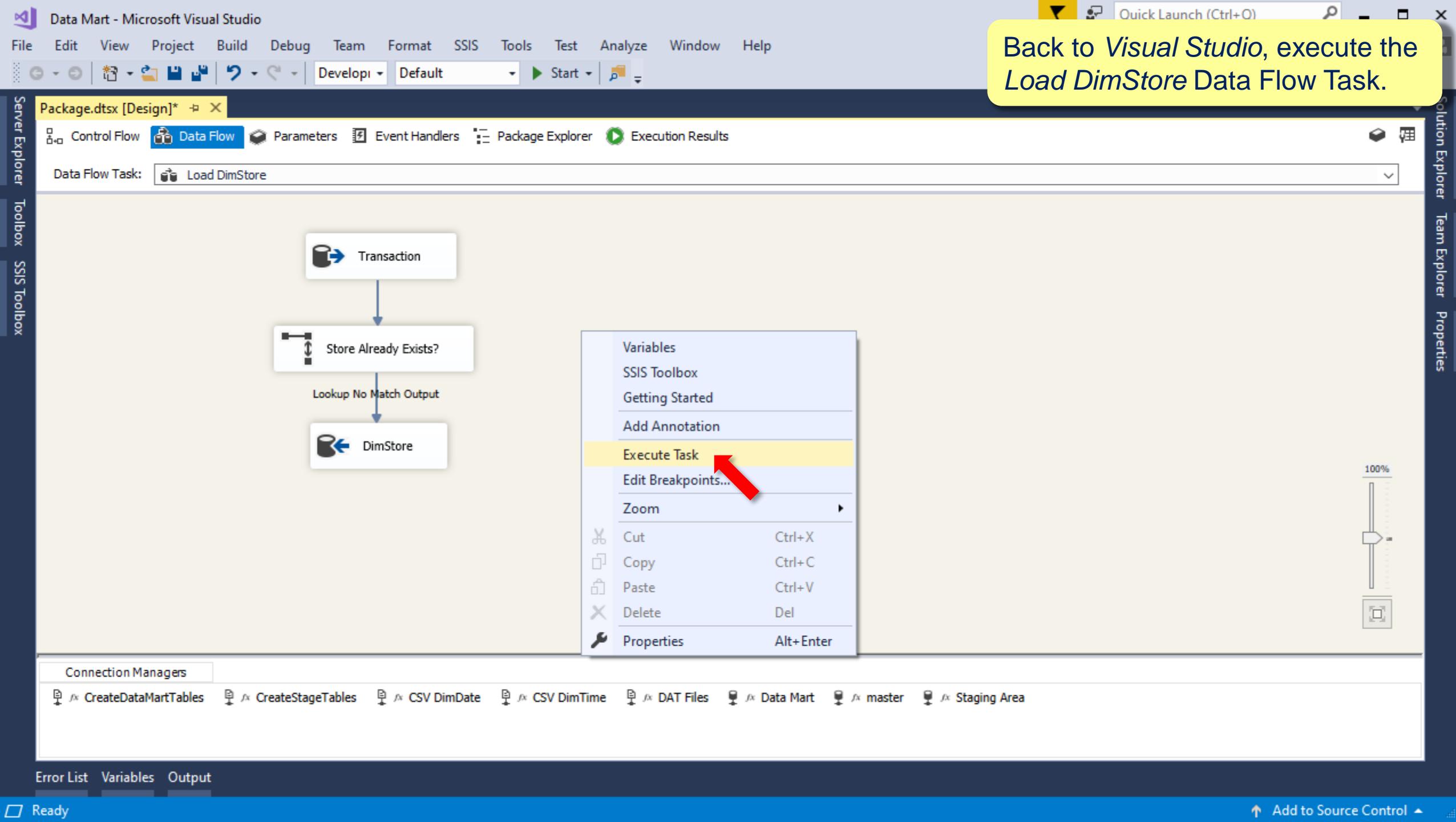
TRUNCATE TABLE DimStore

100 % Connected. (1/1) localhost (16.0 RTM) | AzureAD\\PauloOliveira ... | ARMDD_DataMart | 00:00:00 | 0 rows

Ln 1 Col 24 Ch 24 INS

Quick Launch (Ctrl+O)

Write the SQL command presented in the image to delete all the DimStore records and execute it.



Data Mart (Running) - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Quick Launch (Ctrl+O)

6 rows/records are loaded into the *DimStore* table.

Process: [9756] DtsDebugHost.exe Lifecycle Events Thread: Stack Frame:

Package.dtsx [Design]

Control Flow Data Flow Parameters Event Handlers Package Explorer Progress

Data Flow Task: Load DimStore

Transaction

6 rows

Store Already Exists?

Lookup No Match Output (6 rows)

DimStore

Connection Managers

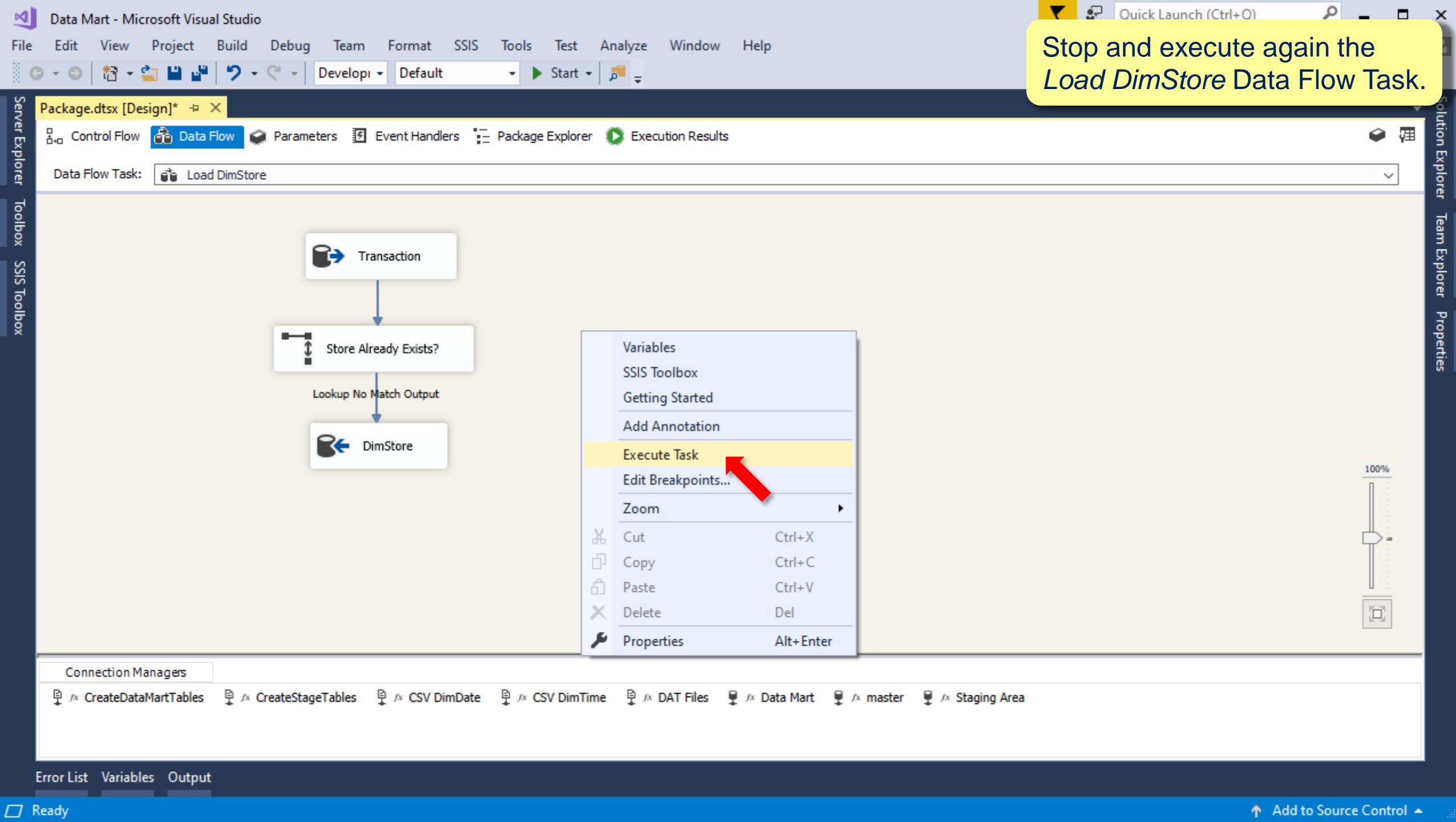
- CreateDataMartTables
- CreateStageTables
- CSV DimDate
- CSV DimTime
- DAT Files
- Data Mart
- master
- Staging Area

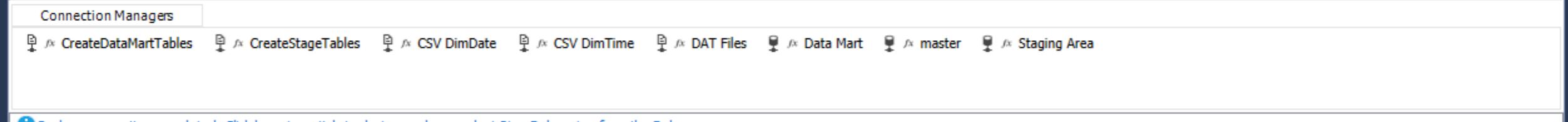
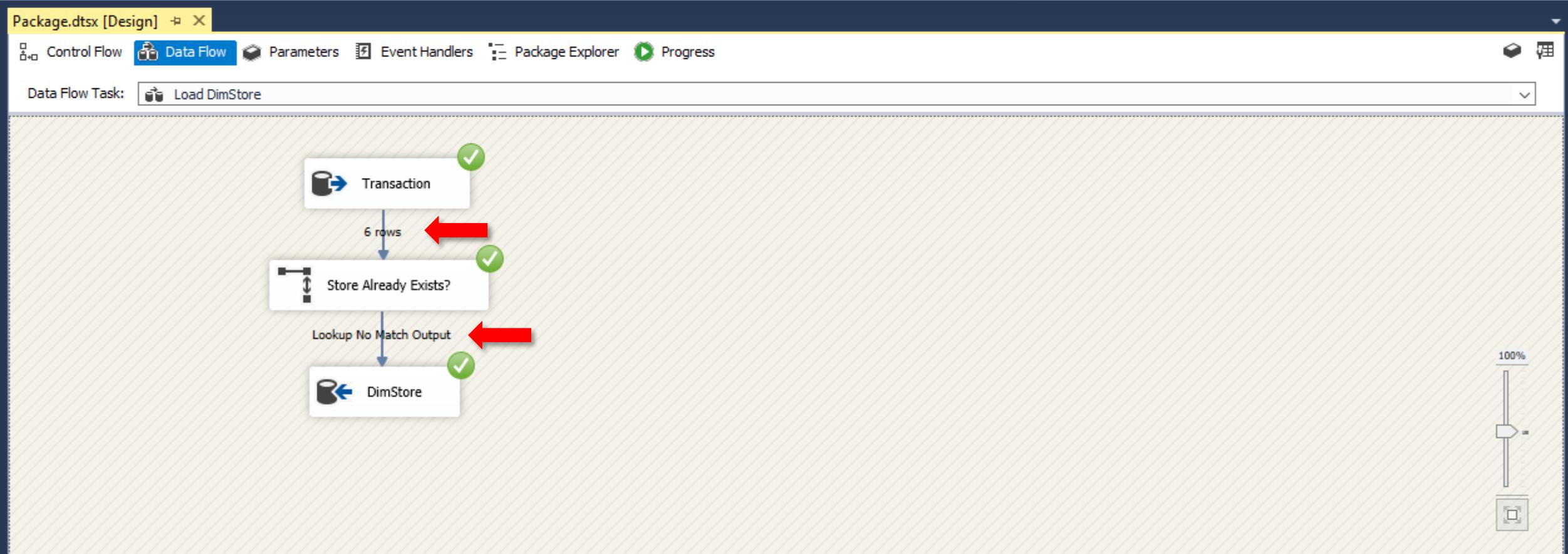
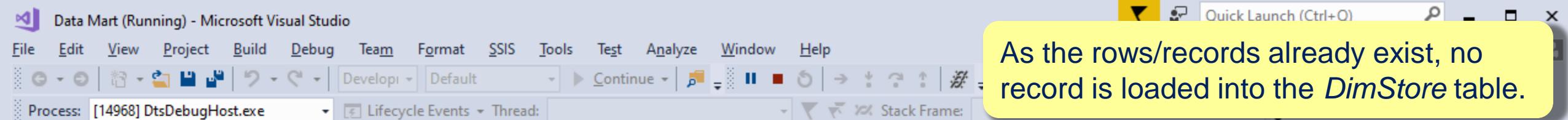
Package execution completed. Click here to switch to design mode, or select Stop Debugging from the Debug menu.

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

Ready Add to Source Control

```
graph TD; Transaction[Transaction] --> SAEE{Store Already Exists?}; SAEE --> DimStore[DimStore];
```





Package execution completed. 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

Ready

Add to Source Control ▾



Select the Top 1000 rows from the DimStore table to see the data loaded into this table.

The screenshot shows the Object Explorer on the left with the following navigation path:

- localhost (SQL Server 16.0.1050.5 - A)
- Databases
- ARMDD_DataMart (highlighted with a red arrow)
- Tables
- dbo.DimStore (highlighted with a red arrow)

In the center pane, a context menu is open over the "dbo.DimStore" table, listing the following options:

- New Table...
- Design
- Select Top 1000 Rows (highlighted with a red arrow)
- Edit Top 200 Rows
- Script Table as
- View Dependencies
- Memory Optimization Advisor
- Encrypt Columns...
- Full-Text index
- Storage
- Policies

The status bar at the bottom displays the following information:

- localhost (16.0 RTM) | AzureAD\PauloOliveira ... | ARMDD_DataMart | 00:00:00 | 0 rows

SQLQuery5.sql - localhost.ARMDDataMart (AzureAD\PauloOliveira (62)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

New Query MDX DMX XMLA DAX Execute

ARMDD_DataMart Object Explorer Connect

localhost (SQL Server 16.0.1050.5 - /) Databases System Databases Database Snapshots AdventureWorksDW2022 ARMDD_DataMart Database Diagrams Tables System Tables FileTables External Tables Graph Tables dbo.DimCard dbo.DimDate dbo.DimItem dbo.DimPaymentMethod dbo.DimStore dbo.DimTime dbo.FactSales Dropped Ledger Table Views External Resources Synonyms Programmability Query Store Service Broker Storage Security ARMDD_DataMart

SQLQuery5.sql - loc...\\PauloOliveira (62) SQLQuery4.sql - loc...\\PauloOliveira (62)

```
SELECT TOP (1000) [StoreKey]
      ,[StoreID]
      ,[StoreName]
  FROM [ARMDD_DataMart].[dbo].[DimStore]
```

100 % Results Messages

	StoreKey	StoreID	StoreName
1	1	S0006	NULL
2	2	S0040	NULL
3	3	S0056	NULL
4	4	S0034	NULL
5	5	S0015	NULL
6	6	S0002	NULL

Query executed successfully.

localhost (16.0 RTM) | AzureAD\PauloOliveira ... | ARMDD_DataMart | 00:00:00 | 6 rows

Ln 5 Col 3 Ch 3 INS

As can be seen in the query result, the *StoreIDs* were loaded into the *DimStore* table. The *StoreName* attribute was not provided so it is *NULL*.

SQLQuery5.sql - localhost.ARMDDataMart (AzureAD\PauloOliveira (62)) - Microsoft SQL Server Management Studio

File Edit View Project Tools Window Help

New Query NDX DMX XMLA DAX Execute

ARMDD_DataMart Object Explorer

SQLQuery5.sql - loc...\\PauloOliveira (62) SQLQuery4.sql - loc...\\PauloOliveira (56)* SQLQuery3.sql - loc...\\PauloOliveira (69)*

SELECT TOP (1000) [StoreKey]
,[StoreID]
,[StoreName]
FROM [ARMDD_DataMart].[dbo].[DimStore]

localhost (SQL Server 16.0.1050.5 - A)

Databases System Databases Database Snapshots AdventureWorksDW2022 ARMDD_DataMart ARMDD_StagingArea Database Diagrams Tables Sys Filter Start PowerShell Reports Refresh dbo.Category dbo.Item dbo.MaritalStatusDes dbo.SubCategory dbo.Transaction dbo.Transaction_Item Dropped Ledger Tabl Views External Resources Synonyms Programmability Query Store Service Broker

Quick Launch (Ctrl+O)

Create a new Staging Area table to store the (imaginary) names of the stores.

Red arrows point to the 'Tables' node in the Object Explorer and the 'New' option in the context menu.

Table...

- Memory Optimized Table...
- Temporal Table...
- Ledger Table...
- Graph Table...
- External Table...
- File Table...

1	2	S0040	NULL
2	2	S0040	NULL
3	3	S0056	NULL
4	4	S0034	NULL
5	5	S0015	NULL
6	6	S0002	NULL

Query executed successfully.

localhost (16.0 RTM) | AzureAD\PauloOliveira ... | ARMDD_DataMart | 00:00:00 | 6 rows

Ready

DESKTOP-ACEDDKF.ARMD_D_StagingArea - dbo.Table_1* - Microsoft SQL Server Management Studio

File Edit View Project Table Designer Tools Window Help

New Query MDX DAX XMLA DAX Execute

ARMDD_DataMart

Object Explorer

localhost (SQL Server 16.0.1050.5 - /) Databases System Databases Database Snapshots AdventureWorksDW2022 ARMDD_DataMart ARMDD_StagingArea Database Diagrams Tables System Tables FileTables External Tables Graph Tables dbo.Brand dbo.Card dbo.CardDQP dbo.Category dbo.Item dbo.MaritalStatusDes dbo.SubCategory dbo.Transaction dbo.Transaction_Item Dropped Ledger Table Views External Resources Synonyms Programmability Query Store Service Broker

DESKTOP-ACEDDKF.A...rea - dbo.Table_1* SQLQuery5.sql - loc...\\PauloOliveira (62) SQLQuery4.sql - loc...\\PauloOliveira (56)*

Column Name	Data Type	Allow Nulls
StoreID	char(5)	<input type="checkbox"/>
StoreName	nvarchar(20)	<input checked="" type="checkbox"/>
		<input type="checkbox"/>

Column Properties

General	StoreName
Allow Nulls	No
Data Type	nvarchar
Default Value or Binding	
Length	20

(General)

Ready

Create the table with the attributes and data types presented in the image.

DESKTOP-ACEDDKF.ARMD_StagingArea - dbo.Table_1* - Microsoft SQL Server Management Studio

File Edit View Project Table Designer Tools Window Help

Quick Launch (Ctrl+O)

ARMDD_DataMart Execute

Object Explorer

localhost (SQL Server 16.0.1050.5 - A)

Databases

- System Databases
- Database Snapshots
- AdventureWorksDW2022
- ARMDD_DataMart
- ARMDD_StagingArea
 - Tables
 - System Tables
 - FileTables
 - External Tables
 - Graph Tables
 - dbo.Brand
 - dbo.Card
 - dbo.CardDQP
 - dbo.Category
 - dbo.Item
 - dbo.MaritalStatusDes
 - dbo.SubCategory
 - dbo.Transaction
 - dbo.Transaction_Item
 - Dropped Ledger Tabl
 - Views
 - External Resources
 - Synonyms
 - Programmability
 - Query Store
 - Custom Re...

Column Name Data Type Allow Nulls

Column Name	Data Type	Allow Nulls
StoreID	char(5)	<input type="checkbox"/>
StoreName		

Set Primary Key

- Insert Column
- Delete Column
- Relationships...
- Indexes/Keys...
- Fulltext Index...
- XML Indexes...
- Check Constraints...
- Spatial Indexes...
- Generate Change Script...
- Properties

Column Properties

Name	Type
StoreID	char
Allow Nulls	No
Data Type	char
Default Value or Binding	
Length	5

(General)

Right click the *StoreID* attribute and set it as the table primary key.

DESKTOP-ACEDDKF.ARMD_StagingArea - dbo.Table_1* - Microsoft SQL Server Management Studio

File Edit View Project Table Designer Tools Window Help

Quick Launch (Ctrl+O)

An icon key should appear next to the *StoreID* attribute. Save the table.

Object Explorer

Connect localhost (SQL Server 16.0.1050) ARMDD_DataMart ARMDD_StagingArea Tables StoreID StoreName

Column Name Data Type Allow Nulls

StoreID char(5) No

StoreName nvarchar(20) No

Column Properties

(General)

Name: StoreID
Allow Nulls: No
Data Type: char
Default Value or Binding:
Length: 5

Ready

DESKTOP-ACEDDKF.ARMD_D_StagingArea - dbo.Table_1* - Microsoft SQL Server Management Studio

File Edit View Project Table Designer Tools Window Help

Quick Launch (Ctrl+O)

Name the table as *StoreName_Lookup*.

Object Explorer

Connect ▾

localhost (SQL Server 16.0.1050.5 - 1) ▾

- Databases
 - System Databases
 - Database Snapshots
 - AdventureWorksDW2022
 - ARMDD_DataMart
 - ARMDD_StagingArea
 - Database Diagrams
- Tables
 - System Tables
 - FileTables
 - External Tables
 - Graph Tables
 - dbo.Brand
 - dbo.Card
 - dbo.CardDQP
 - dbo.Category
 - dbo.Item
 - dbo.MaritalStatusDes
 - dbo.SubCategory
 - dbo.Transaction
 - dbo.Transaction_Item
 - Dropped Ledger Table
- Views
- External Resources
- Synonyms
- Programmability
- Query Store
- Security

ARMDD_DataMart Execute

DESKTOP-ACEDDKF.A...rea - dbo.Table_1* SQLQuery5.sql - loc...\\PauloOliveira (62) SQLQuery4.sql - loc...\\PauloOliveira (56)*

Column Name	Data Type	Allow Nulls
StoreID	char(5)	<input type="checkbox"/>
StoreName	nvarchar(20)	<input type="checkbox"/>

Choose Name

Enter a name for the table:

StoreName_Lookup

OK Cancel

Column Properties

(General)

(Name)	StoreID
Allow Nulls	No
Data Type	char
Default Value or Binding	
Length	5

Ready

Refresh the tables of the ARMDD_StagingArea database so that the new table appears.

The screenshot shows the Microsoft SQL Server Management Studio (SSMS) interface. In the Object Explorer on the left, a red arrow points to the 'ARMDD_StagingArea' database node under 'localhost (SQL Server 16.0.2050.5 - A)'. Another red arrow points to the 'Tables' node under 'ARMDD_StagingArea'. In the center pane, a table named 'StoreName_Lookup' is displayed with two columns: 'StoreID' (char(5)) and 'StoreName' (nvarchar(20)). Below the table, the 'Column Properties' window is open for the 'StoreID' column, showing its properties: Name (StoreID), Allow Nulls (No), Data Type (char), Default Value or Binding, and Length (5). The status bar at the bottom indicates 'Item(s) Saved'.

Column Name	Data Type	Allow Nulls
StoreID	char(5)	<input type="checkbox"/>
StoreName	nvarchar(20)	<input type="checkbox"/>
		<input type="checkbox"/>

Column Properties

Property	Value
(Name)	StoreID
Allow Nulls	No
Data Type	char
Default Value or Binding	
Length	5

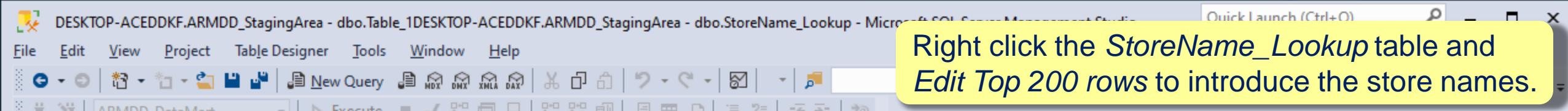
The table just created should now be visible.

The screenshot shows the Microsoft SQL Server Management Studio interface. In the Object Explorer on the left, under the database 'ARMDD_StagingArea', the 'Tables' folder is expanded, and the table 'dbo.StoreName_Lookup' is selected. Three red arrows point from the text instructions to the 'ARMDD_StagingArea' node, the 'Tables' folder node, and the 'dbo.StoreName_Lookup' table node respectively. The main central pane displays the table structure:

Column Name	Data Type	Allow Nulls
StoreID	char(5)	<input type="checkbox"/>
StoreName	nvarchar(20)	<input type="checkbox"/>
		<input type="checkbox"/>

The 'Column Properties' window is open at the bottom, showing the properties for the 'StoreID' column:

(General)	
(Name)	StoreID
Allow Nulls	No
Data Type	char
Default Value or Binding	
Length	5
(General)	



Object Explorer

Connect ▾

localhost (SQL Server 16.0.1050.5 - Azure) ▾

- Databases
 - System Databases
 - Database Snapshots
 - AdventureWorksDW2022
 - ARMDD_DataMart
 - ARMDD_StagingArea
 - Database Diagrams
 - Tables
 - System Tables
 - FileTables
 - External Tables
 - Graph Tables
 - dbo.Brand
 - dbo.Card
 - dbo.CardDQP
 - dbo.Category
 - dbo.Item
 - dbo.MaritalStatusDescriptor
 - dbo.StoreName_Lookup**
 - dbo.SubCategory
 - dbo.Transaction
 - dbo.Transaction_Item
 - Dropped Ledger Tables
 - Views
 - External Resources
 - Synonyms
 - Programmability
 - Other Objects

Item(s) Saved

DESKTOP-ACEDDKF...StoreName_Lookup

SQLQuery5.sql - loc...\\PauloOliveira (62)

SQLQuery4.sql - loc...\\PauloOliveira (56)*

Column Name	Data Type	Allow Nulls
StoreID	char(5)	<input type="checkbox"/>
StoreName	nvarchar(20)	<input type="checkbox"/>

Column Properties

(General)

 - New Table...
 - Design
 - Select Top 1000 Rows
 - Edit Top 200 Rows**
 - Script Table as
 - View Dependencies
 - Memory Optimization Advisor
 - Encrypt Columns...
 - Full-Text index

StoreID
No
char
5

DESKTOP-ACEDDKF.ARMD_D_StagingArea - dbo.StoreName_Lookup - Microsoft SQL Server Management Studio

File Edit View Project Query Designer Tools Window Help

New Query MDX DMX XMLA DAX

ARMDD_DataMart Execute

Object Explorer

localhost (SQL Server 16.0.1050.5 - Azure) Databases System Databases Database Snapshots AdventureWorksDW2022 ARMDD_DataMart ARMDD_StagingArea Database Diagrams Tables System Tables FileTables External Tables Graph Tables dbo.Brand dbo.Card dbo.CardDQP dbo.Category dbo.Item dbo.MaritalStatusDescriptor dbo.StoreName_Lookup dbo.SubCategory dbo.Transaction dbo.Transaction_Item Dropped Ledger Tables Views External Resources Synonyms Programmability Other Objects

DESKTOP-ACEDDKF...toreName_Lookup DESKTOP-ACEDDKF...toreName_Lookup SQLQuery5.sql - loc...\\PauloOliveira (62)

StoreID StoreName

S0015	Princeton
S0040	Foxton
S0056	Ravensville
S0006	Catburg
S0002	Kingsville
S0034	Queensbury
NULL	NULL

Introduce the following data in the *StoreName_Lookup* table, i.e., a store name for each *StoreID*.

DESKTOP-ACEDDKF.ARMDDB_StagingArea - dbo.StoreName_Lookup - Microsoft SQL Server Management Studio

File Edit View Project Query Designer Tools Window Help

New Query NDX DMX XMLA DAX

ARMDD_DataMart Execute

SQLQuery5.sql - loc...\\PauloOliveira (62)

Right click ARMDD_StagingArea to generate a script for the StoreName_Lookup table and its data.

Object Explorer

localhost (SQL Server 16.0.1050.5 - Azure) Databases

ARMDD_StagingArea (selected)

Tables

System Tables

FileTables

External Tables

Graph Tables

dbo.Brand

dbo.Card

dbo.CardDQP

dbo.Category

dbo.Item

dbo.MaritalSt

dbo.StoreName_Lookup

dbo.SubCateg

dbo.Transacti

dbo.Transacti

Dropped Ledge

Views

External Resource

Synonyms

Programmability

Quotas

StoreID StoreName

S0015 Princeton

S0040 Foxton

S0056 Ravensville

S0006 Catburg

S0002 Kingsville

S0034 Queensbury

New Database... New Query Script Database as Tasks (selected)

Policies Facets Start PowerShell Azure Data Studio Azure SQL Managed Instance link Reports Rename Delete Refresh Properties Detach... Take Offline Bring Online Encrypt Columns... Data Discovery and Classification Shrink Back Up... Restore Mirror... Launch Database Mirroring Monitor... Ship Transaction Logs... Generate Scripts... (selected) Generate In-Memory TP Migration Checklists Extract Data-tier Application...

Ready

DESKTOP-ACEDDKF.ARMDDB_StagingArea - dbo.StoreName_Lookup - Microsoft SQL Server Management Studio

File Edit View Project Query Designer

Generate Scripts

Introduction

Introduction

Choose Objects

Set Scripting Options

Summary

Save Scripts

Help

Generate scripts for database objects.

This wizard generates a script of selected database objects. The scripts can be saved for later use in creating databases in an instance of the Database Engine.

There are four steps to complete this wizard:

1. Select database objects.
2. Specify scripting options.
3. Review your selections.
4. Generate scripts, then save them.

To begin the script generation process, click Next.

Do not show this page again.

< Previous Next > Finish Cancel

ARMDD_DataMart (62)

Object Explorer

localhost (SQL Server 16.0.1050.5 - Azure) Databases

- System Databases
- Database Snapshots
- AdventureWorksDW2022
- ARMDD_DataMart
- ARMDD_StagingArea
- Database Diagrams
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 - System Tables
 - FileTables
 - External Tables
 - Graph Tables
 - dbo.Brand
 - dbo.Card
 - dbo.CardDQP
 - dbo.Category
 - dbo.Item
 - dbo.MaritalStatusDescriptor
 - dbo.StoreName_Lookup
 - dbo.SubCategory
 - dbo.Transaction
 - dbo.Transaction_Item
 - Dropped Ledger Tables
- Views
- External Resources
- Synonyms
- Programmability
- Custom St...>

Ready

DESKTOP-ACEDDKF.ARMDDB_StagingArea - dbo.StoreName_Lookup - Microsoft SQL Server Management Studio

File Edit View Project Query Designer

Generate Scripts

Choose Objects

Introduction

Help

Object Explorer

Connect

localhost (SQL Server 16.0.1050.5 - Azure) Databases

- System Databases
- Database Snapshots
- AdventureWorksDW2022
- ARMDD_DataMart
- ARMDD_StagingArea
- Database Diagrams
- Tables
 - System Tables
 - FileTables
 - External Tables
 - Graph Tables
 - dbo.Brand
 - dbo.Card
 - dbo.CardDQP
 - dbo.Category
 - dbo.Item
 - dbo.MaritalStatusDescription_Lookup
 - dbo.StoreName_Lookup
 - dbo.SubCategory
 - dbo.Transaction
 - dbo.Transaction_Item
 - Dropped Ledger Tables
- Views
- External Resources
- Synonyms
- Programmability
- Custom St...>

Select the *StoreName_Lookup* table.

Choose Objects

Select the database objects to script.

Script entire database and all database objects

Select specific database objects

Tables

- dbo.Brand
- dbo.Card
- dbo.Category
- dbo.Item
- dbo.MaritalStatusDescription_Lookup
- dbo.StoreName_Lookup
- dbo.SubCategory
- dbo.Transaction
- dbo.Transaction_Item

Save Scripts

Next > Finish Cancel

(62))

Ready

The screenshot shows the 'Choose Objects' dialog in Microsoft SQL Server Management Studio. The 'Select specific database objects' radio button is selected, and the 'dbo.StoreName_Lookup' table is checked in the 'Tables' list. A yellow callout box at the top right says 'Select the StoreName_Lookup table.' A red arrow points to the 'Select specific database objects' radio button, another red arrow points to the checked checkbox for 'dbo.StoreName_Lookup', and a third red arrow points to the 'Next >' button at the bottom right of the dialog.

DESKTOP-ACEDDKF.ARMDDB_StagingArea - dbo.StoreName_Lookup - Microsoft SQL Server Management Studio

File Edit View Project Query Designer

Generate Scripts

Set Scripting Options

Introduction Choose Objects Set Scripting Options Summary Save Scripts

Specify how scripts should be saved.

Save as notebook Advanced

Save as script file

File name: C:\Users\Paulo\Documents\script.sql

Files to generate: Single script file
 One script file per object

Overwrite existing file

Say as: Unicode text
 ANSI text

Save to clipboard

Open in new query window

< Previous Next > Finish Cancel

(62))

There's the need of changing an Advanced property.

Ready

DESKTOP-ACEDDKF.ARMDDB_StagingArea - dbo.StoreName_Lookup - Microsoft SQL Server Management Studio

File Edit View Project Query Designer

Generate Scripts

Set Scripting Options

Introduction Choose Objects Set Scripting Options Summary Save Scripts

Advanced Scripting Options

Options

Script for Server Version: SQL Server 2019
Script for the database engine edition: Microsoft SQL Server Enterprise Edition
Script for the database engine type: Stand-alone instance
Script Logins: False
Script Object-Level Permissions: False
Script Owner: False
Script Statistics: Do not script statistics
Script USE DATABASE: True
Types of data to script: Schema and data

Table/View Options

Script Change Tracking: False
Script Check Constraints: True
Script Data Compression Options: False

Types of data to script: Generates script that contains schema only or schema and data.

OK Cancel

Select Schema and data to generate not only the table schema but also its data.

Object Explorer

localhost (SQL Server 16.0.1050.5 - Azure) Databases System Databases Database Snapshots AdventureWorksDW2022 ARMDD_DataMart ARMDD_StagingArea Database Diagrams Tables System Tables FileTables External Tables Graph Tables dbo.Brand dbo.Card dbo.CardDQP dbo.Category dbo.Item dbo.MaritalStatusDescriptor dbo.StoreName_Lookup dbo.SubCategory dbo.Transaction dbo.Transaction_Item Dropped Ledger Tables Views External Resources Synonyms Programmability Current State

(62))

DESKTOP-ACEDDKF.ARMDDB_StagingArea - dbo.StoreName_Lookup - Microsoft SQL Server Management Studio

File Edit View Project Query Designer Generate Scripts

ARMDD_DataMart New Query

Object Explorer Connect

localhost (SQL Server 16.0.1050.5 - Azure) Databases System Databases Database Snapshots AdventureWorksDW2022 ARMDD_DataMart ARMDD_StagingArea Database Diagrams Tables System Tables FileTables External Tables Graph Tables dbo.Brand dbo.Card dbo.CardDQP dbo.Category dbo.Item dbo.MaritalStatusDescriptor dbo.StoreName_Lookup dbo.SubCategory dbo.Transaction dbo.Transaction_Item Dropped Ledger Tables Views External Resources Synonyms Programmability Current State

Set Scripting Options

Introduction Choose Objects Set Scripting Options Summary Save Scripts

Specify how scripts should be saved.

Save as notebook Advanced

Save as script file

File name: C:\Users\Paulo\Documents\script.sql

Files to generate: Single script file
 One script file per object

Overwrite existing file

Say as: Unicode text
 ANSI text

Save to clipboard

Open in new query window

< Previous Next > Finish Cancel

(62))

Create the script in a new query window.

DESKTOP-ACEDDKF.ARMDDB_StagingArea - dbo.StoreName_Lookup - Microsoft SQL Server Management Studio

Quick Launch (Ctrl+Q)

File Edit View Project Query Designer

Generate Scripts

Summary

Introduction

Choose Objects

Set Scripting Options

Summary

Save Scripts

Review your selections.

Source

- Server: LYNX
- Database: ARPAD_StagingArea
- Selected Objects

Target

- Destination: Save to new query window

Options

- General
- Table/View Options

< Previous Next > Finish Cancel

Object Explorer

Connect Databases

localhost (SQL Server 16.0.1050.5 - Azure) Databases

- System Databases
- Database Snapshots
- AdventureWorksDW2022
- ARMDD_DataMart
- ARMDD_StagingArea
- Database Diagrams
- Tables
 - System Tables
 - FileTables
 - External Tables
 - Graph Tables
 - dbo.Brand
 - dbo.Card
 - dbo.CardDQP
 - dbo.Category
 - dbo.Item
 - dbo.MaritalStatusDescriptor
 - dbo.StoreName_Lookup
 - dbo.SubCategory
 - dbo.Transaction
 - dbo.Transaction_Item
 - Dropped Ledger Tables
- Views
- External Resources
- Synonyms
- Programmability
- Custom St...>

(62))

Ready

DESKTOP-ACEDDKF.ARMDDB_StagingArea - dbo.StoreName_Lookup - Microsoft SQL Server Management Studio

File Edit View Project Query Designer

Generate Scripts

Save Scripts

Introduction

Choose Objects

Set Scripting Options

Summary

Save Scripts

Help

Save Scripts

Action	Result
Getting the list of objects from 'ARPAD_StagingArea'.	Success
Preparing dbo.StoreName_Lookup	Success
Save to new query window	Success

Open Save Report

< Previous Next > Finish Cancel

(62))

Object Explorer

Connect Databases AdventureWorksDW2022 ARMDD_DataMart ARMDD_StagingArea Database Diagrams Tables System Tables FileTables External Tables Graph Tables dbo.Brand dbo.Card dbo.CardDQP dbo.Category dbo.Item dbo.MaritalStatusDescriptor dbo.StoreName_Lookup dbo.SubCategory dbo.Transaction dbo.Transaction_Item Dropped Ledger Tables Views External Resources Synonyms Programmability Current State

Ready

SQLQuery6.sql - localhost.ARMDDataMart (AzureAD\PauloOliveira (63)) - Microsoft SQL Server Management Studio

The script for creating the `StoreName_Lookup` table and inserting its data automatically appears.

```
USE [ARMDD_StagingArea]
GO
/******** Object: Table [dbo].[StoreName_Lookup] Script Date: 06/11/2023 12:56:25 *****/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [dbo].[StoreName_Lookup](
    [StoreID] [char](5) NOT NULL,
    [StoreName] [nvarchar](20) NOT NULL,
    CONSTRAINT [PK_StoreName_Lookup] PRIMARY KEY CLUSTERED
(
    [StoreID] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF, ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF)
) ON [PRIMARY]
GO
INSERT [dbo].[StoreName_Lookup] ([StoreID], [StoreName]) VALUES (N'S0002', N'Kingsville')
GO
INSERT [dbo].[StoreName_Lookup] ([StoreID], [StoreName]) VALUES (N'S0006', N'Catburg')
GO
INSERT [dbo].[StoreName_Lookup] ([StoreID], [StoreName]) VALUES (N'S0015', N'Princeton')
GO
INSERT [dbo].[StoreName_Lookup] ([StoreID], [StoreName]) VALUES (N'S0034', N'Queensbury')
GO
INSERT [dbo].[StoreName_Lookup] ([StoreID], [StoreName]) VALUES (N'S0040', N'Foxton')
GO
INSERT [dbo].[StoreName_Lookup] ([StoreID], [StoreName]) VALUES (N'S0056', N'Ravensville')
GO
```

SQLQuery6.sql - localhost.ARMDDataMart (AzureAD\PauloOliveira (63))* - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

New Query MDX DMX XMLA DAX

ARMDD_DataMart Execute

Object Explorer

localhost (SQL Server 16.0.1050.5 - Azure) Databases System Databases Database Snapshots AdventureWorksDW2022 ARMDD_DataMart ARMDD_StagingArea Database Diagrams Tables System Tables FileTables External Tables Graph Tables dbo.Brand dbo.Card dbo.CardDQP dbo.Category dbo.Item dbo.MaritalStatusDescriptor dbo.StoreName_Lookup dbo.SubCategory dbo.Transaction dbo.Transaction_Item Dropped Ledger Tables Views External Resources Synonyms Programmability

SQLQuery6.sql - loc...\\PauloOliveira (63)* DESKTOP-ACEDDKF...toreName_Lookup DESKTOP-ACEDDKF...toreName_Lookup

```
CREATE TABLE [dbo].[StoreName_Lookup] (
    [StoreID] [char](5) NOT NULL,
    [StoreName] [nvarchar](20) NOT NULL,
    CONSTRAINT [PK_StoreName_Lookup] PRIMARY KEY CLUSTERED
    (
        [StoreID] ASC
    ) WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF, ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF)
) ON [PRIMARY]

INSERT [dbo].[StoreName_Lookup] ([StoreID], [StoreName]) VALUES (N'S0002', N'Kingsville')
INSERT [dbo].[StoreName_Lookup] ([StoreID], [StoreName]) VALUES (N'S0006', N'Catburg')
INSERT [dbo].[StoreName_Lookup] ([StoreID], [StoreName]) VALUES (N'S0015', N'Princeton')
INSERT [dbo].[StoreName_Lookup] ([StoreID], [StoreName]) VALUES (N'S0034', N'Queensbury')
INSERT [dbo].[StoreName_Lookup] ([StoreID], [StoreName]) VALUES (N'S0040', N'Foxton')
INSERT [dbo].[StoreName_Lookup] ([StoreID], [StoreName]) VALUES (N'S0056', N'Ravensville')
```

Connected. (1/1)

localhost (16.0 RTM) | AzureAD\PauloOliveira ... | ARMDD_DataMart | 00:00:00 | 0 rows

Ln 10 Col 1 Ch 1 INS

Quick Launch (Ctrl+O)

Delete all the unnecessary automatically generated code.

SQLQuery6.sql - localhost.ARMDDataMart (AzureAD\PauloOliveira (63))* - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

New Query MDX DMX XMLA DAX Execute

ARMDD_DataMart DESKTOP-ACEDDKF...toreName_Lookup DESKTOP-ACEDDKF...toreName_Lookup

Object Explorer

localhost (SQL Server 16.0.1050.5 - Azure) Databases System Databases Database Snapshots AdventureWorksDW2022 ARMDD_DataMart ARMDD_StagingArea Database Diagrams Tables System Tables FileTables External Tables Graph Tables dbo.Brand dbo.Card dbo.CardDQP dbo.Category dbo.Item dbo.MaritalStatusDescriptor dbo.StoreName_Lookup dbo.SubCategory dbo.Transaction dbo.Transaction_Item Dropped Ledger Tables Views External Resources Synonyms Programmability

SQLQuery6.sql - loc_ \PauloOliveira (63)* DESKTOP-ACEDDKF...toreName_Lookup DESKTOP-ACEDDKF...toreName_Lookup

```
IF NOT EXISTS (SELECT name FROM sys.tables WHERE name = 'StoreName_Lookup')
BEGIN
    CREATE TABLE [dbo].[StoreName_Lookup]
    (
        [StoreID] [char](5) NOT NULL,
        [StoreName] [nvarchar](20) NOT NULL,
        CONSTRAINT [PK_StoreName_Lookup] PRIMARY KEY CLUSTERED
        (
            [StoreID] ASC
        )WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF, ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF)
        ) ON [PRIMARY]

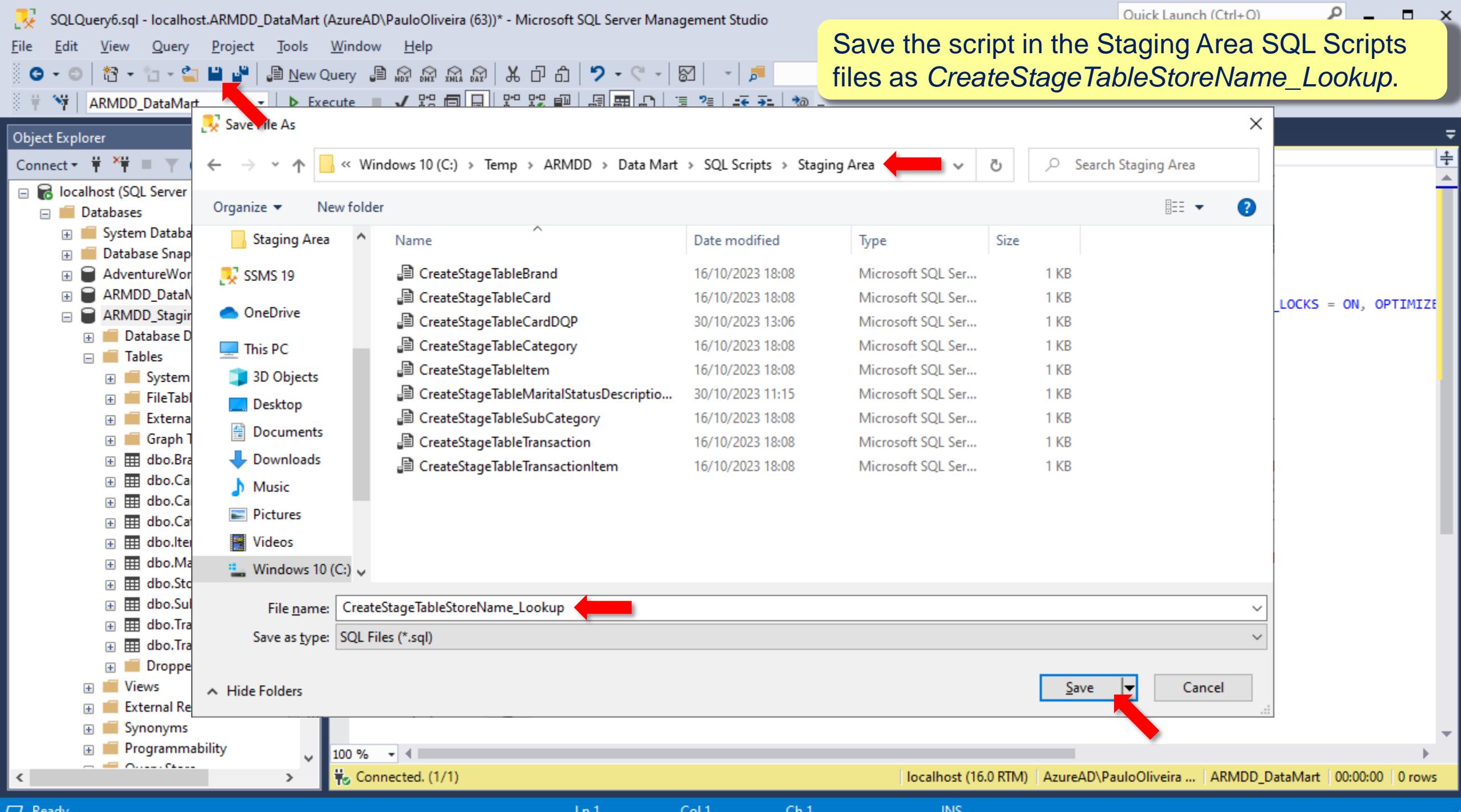
    INSERT [dbo].[StoreName_Lookup] ([StoreID], [StoreName]) VALUES (N'S0002', N'Kingsville')
    INSERT [dbo].[StoreName_Lookup] ([StoreID], [StoreName]) VALUES (N'S0006', N'Catburg')
    INSERT [dbo].[StoreName_Lookup] ([StoreID], [StoreName]) VALUES (N'S0015', N'Princeton')
    INSERT [dbo].[StoreName_Lookup] ([StoreID], [StoreName]) VALUES (N'S0034', N'Queensbury')
    INSERT [dbo].[StoreName_Lookup] ([StoreID], [StoreName]) VALUES (N'S0040', N'Foxton')
    INSERT [dbo].[StoreName_Lookup] ([StoreID], [StoreName]) VALUES (N'S0056', N'Ravensville')
END
```

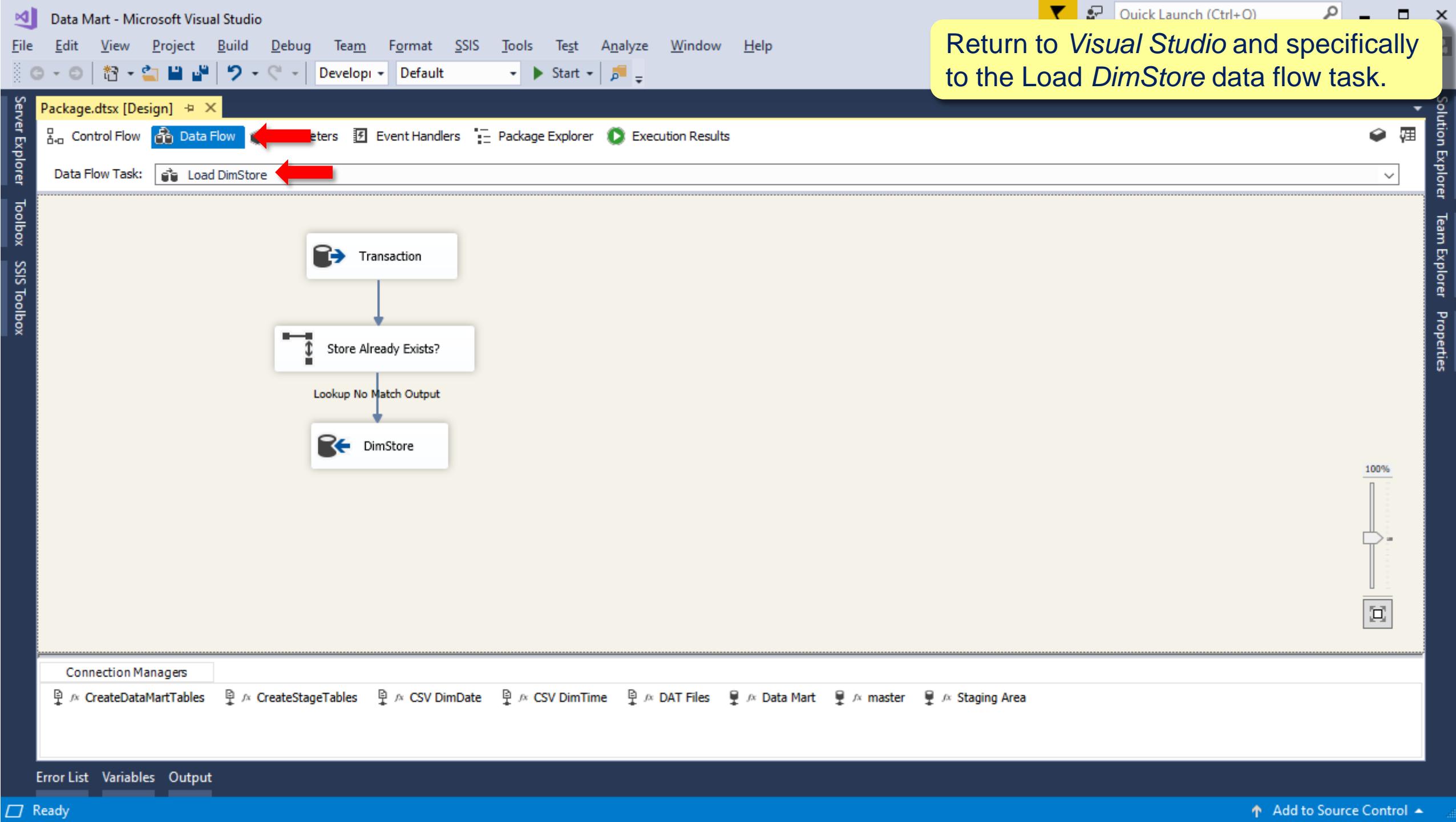
Connected. (1/1) | localhost (16.0 RTM) | AzureAD\PauloOliveira ... | ARMDD_DataMart | 00:00:00 | 0 rows

Ln 1 Col 1 Ch 1 INS

Ready

Complete the script with the SQL statements highlighted in the figure.





Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Quick Launch (Ctrl+O)

Package.dtsx [Design]*

Control Flow Data Flow Parameters Event Handlers Package Explorer Execution Results

Data Flow Task: Load DimStore

Transaction

Store Already Exists?

DimStore

Connection Managers

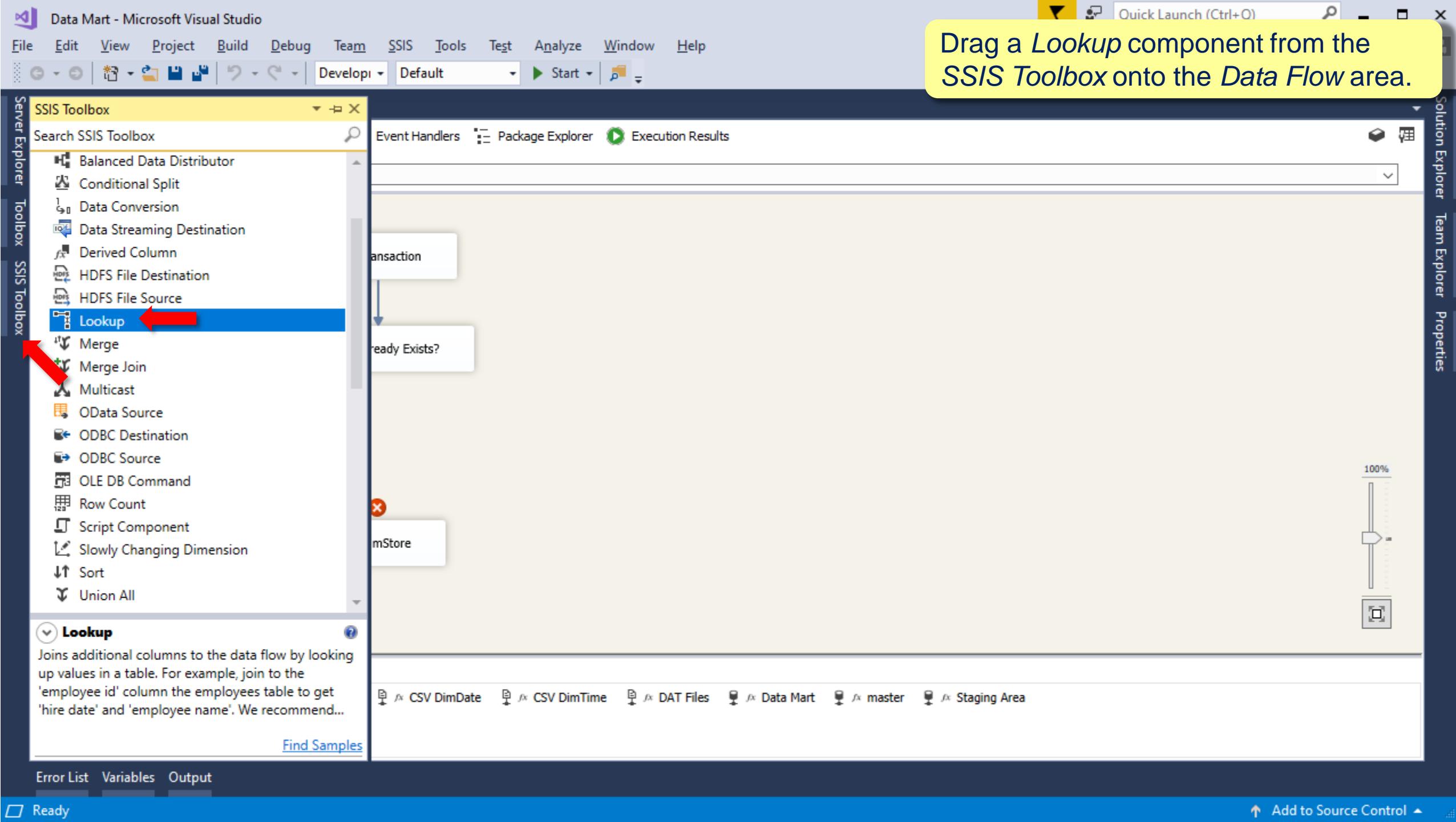
CreateDataMartTables CreateStageTables CSV DimDate CSV DimTime DAT Files Data Mart master Staging Area

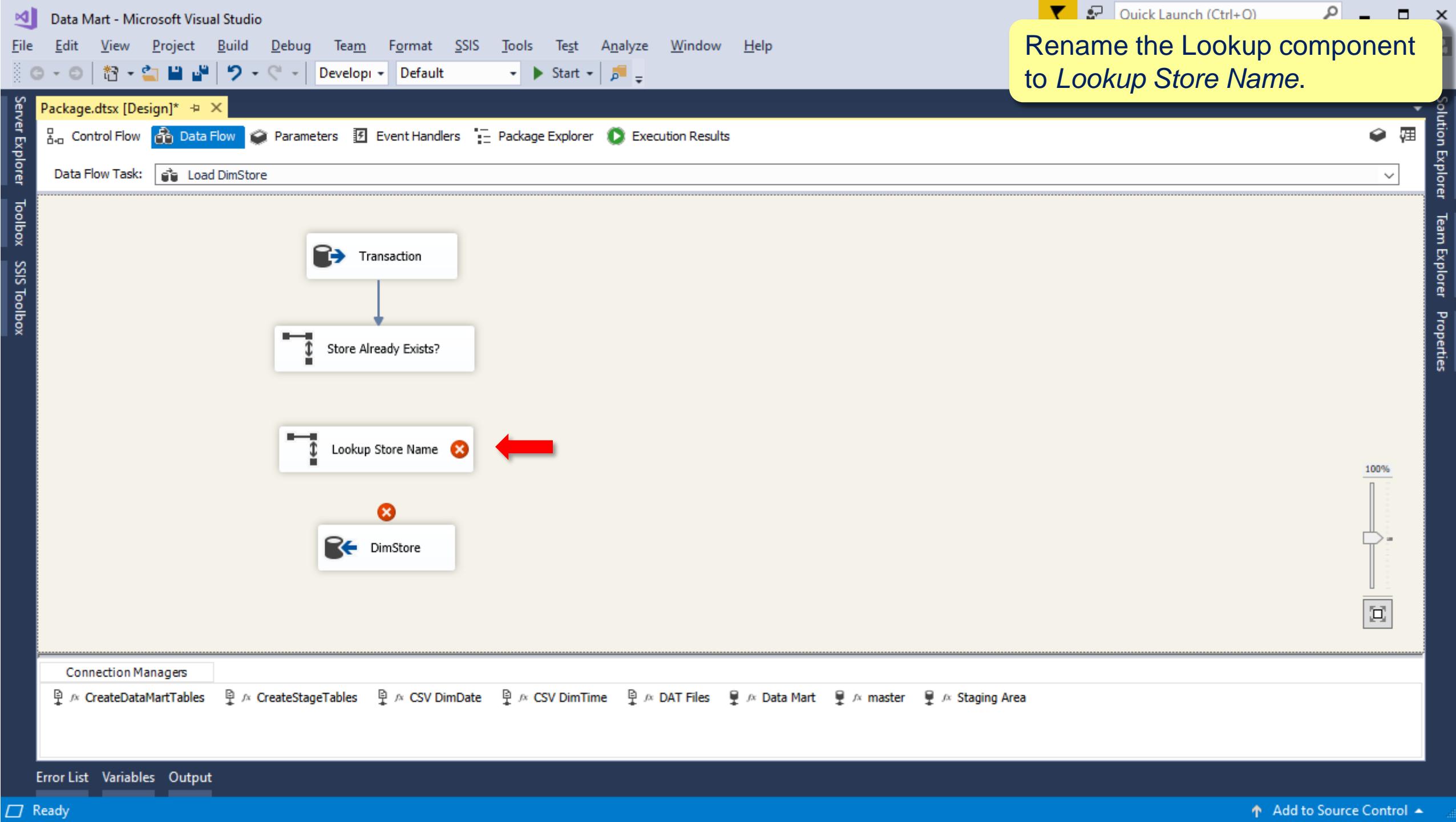
Error List Variables Output

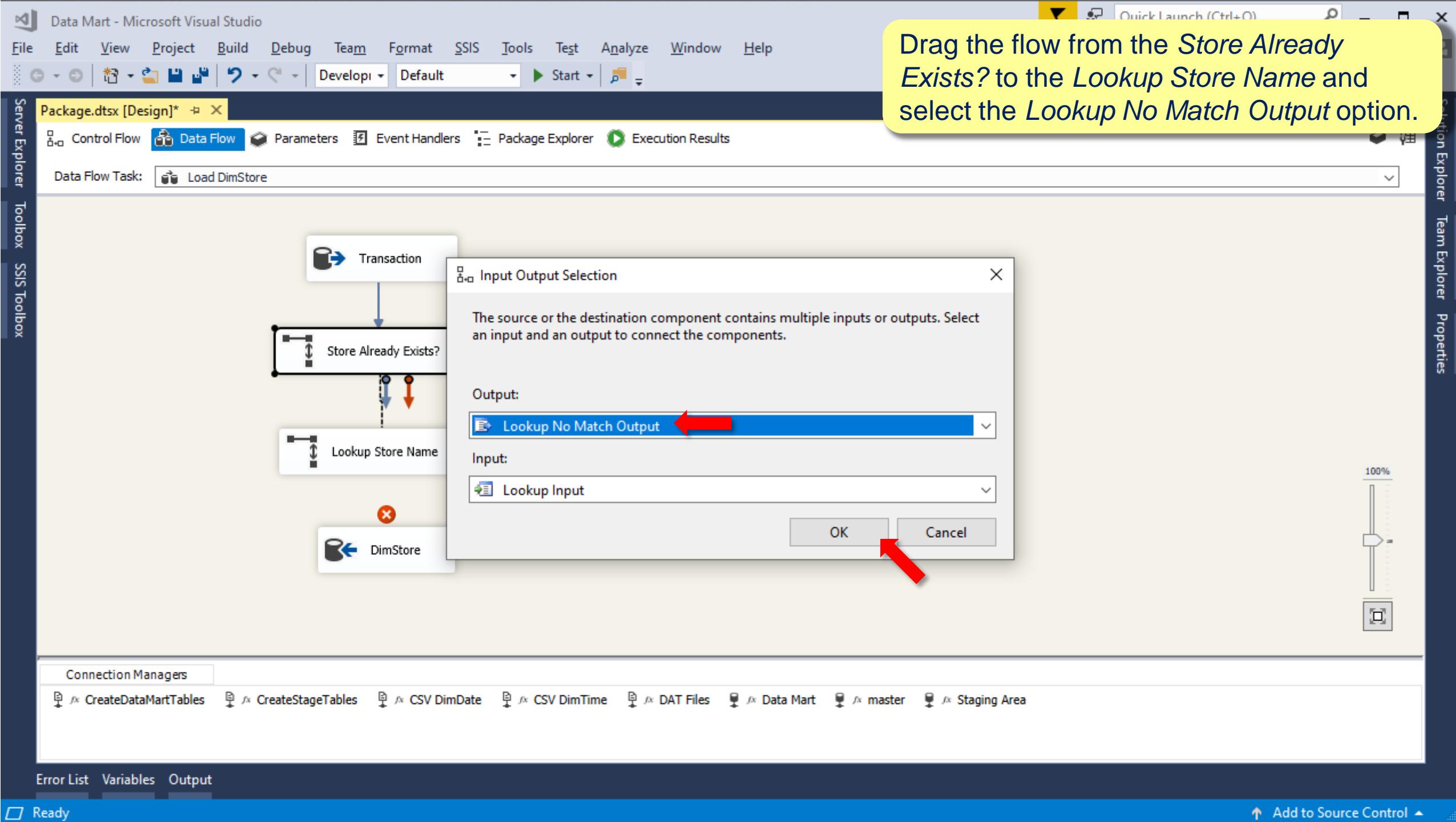
Ready Add to Source Control

Delete the flow between the components *Store Already Exists?* and *DimStore* and drag the *DimStore* component to below.

```
graph TD; Transaction[Transaction] --> SAES[Store Already Exists?]; SAES --> DimStore[DimStore]
```







Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Quick Launch (Ctrl+Q)

Sign in

Server Explorer Solution Explorer

Toolbox Team Explorer

SSIS Toolbox Properties

Package.dtsx [Design]*

Control Flow Data Flow Parameters Event Handlers Package Explorer Execution Results

Data Flow Task: Load DimStore

Transaction

Store Already Exists?

Lookup No Match Output

Lookup Store Name

DimStore

100%

Connection Managers

CreateDataMartTables CreateStageTables CSV DimDate CSV DimTime DAT Files Data Mart master Staging Area

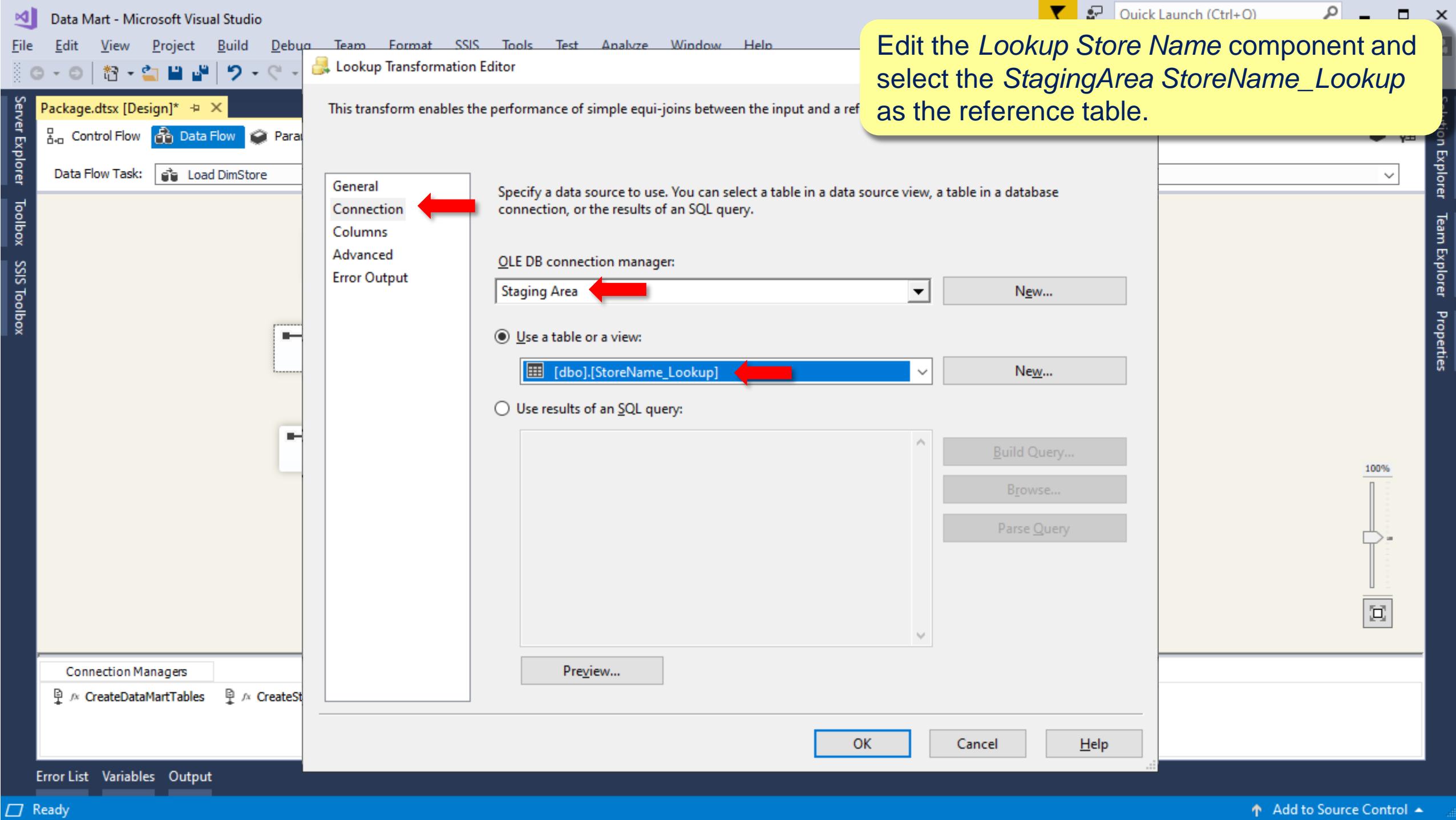
Error List Variables Output

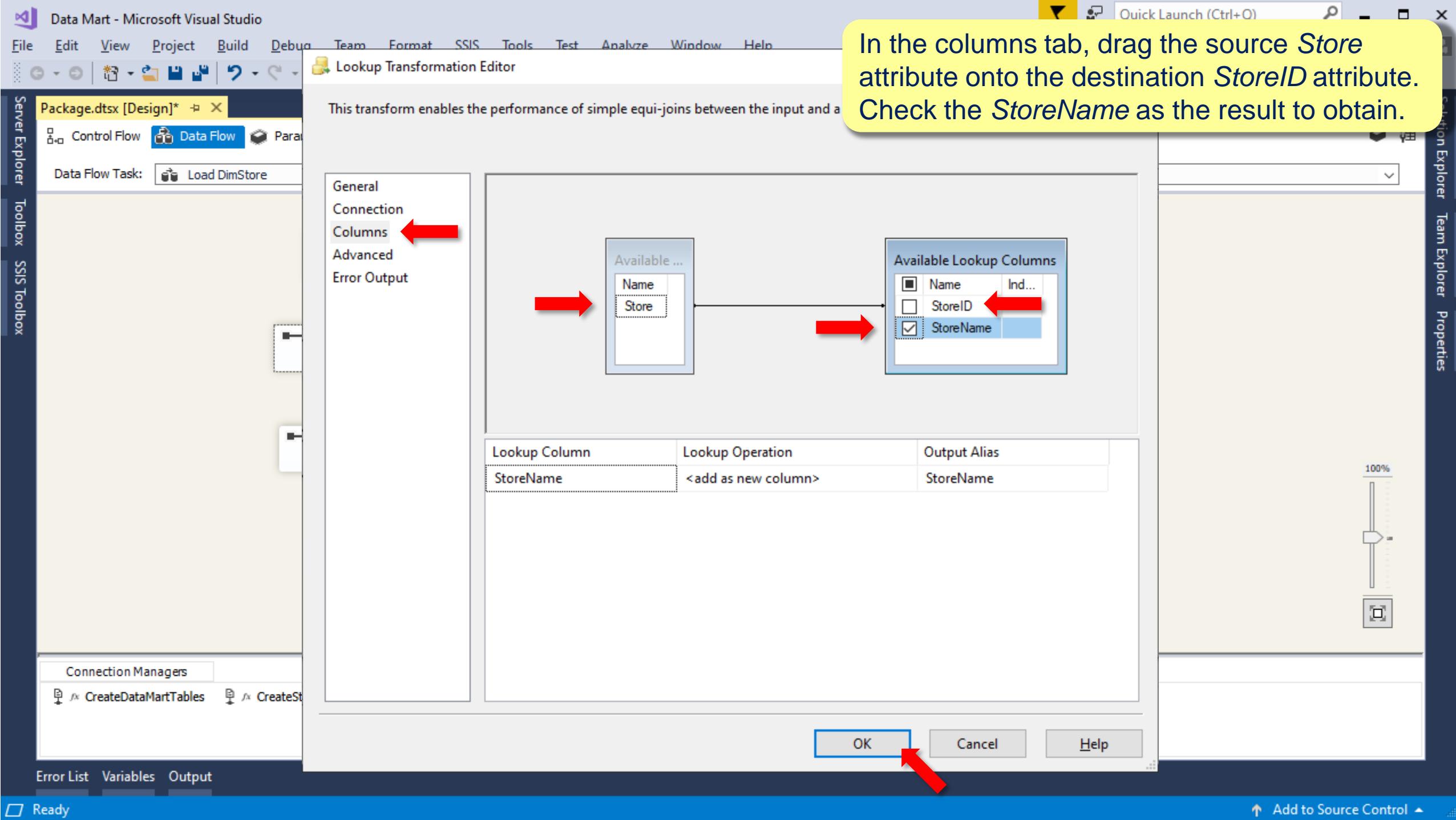
Ready Add to Source Control

The screenshot shows the Microsoft Visual Studio interface for an SSIS package named 'Package.dtsx'. The main area displays the 'Data Flow' tab, specifically the 'Load DimStore' task. The data flow consists of the following components:

- A 'Transaction' source component.
- A decision component labeled 'Store Already Exists?' with two outputs: 'No' and 'Match'.
- An arrow labeled 'Lookup No Match Output' points from the 'No' output of the decision to a 'Lookup Store Name' component.
- The 'Lookup Store Name' component has a red 'X' icon indicating it is disabled or failed.
- An arrow points from the 'Match' output of the decision to a 'DimStore' destination component.
- The 'DimStore' component also has a red 'X' icon.

A red arrow highlights the 'Lookup No Match Output' arrow. The bottom left corner shows the 'Connection Managers' pane with several entries, and the bottom right corner shows a zoom control at 100%.





Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Win

Quick Launch (Ctrl+O)

Server Explorer Toolbox SSIS Toolbox

Package.dtsx [Design]*

Control Flow Data Flow Parameters Event Handlers Package Explorer Execution R

Data Flow Task: Load DimStore

Transaction

Store Already Exists?

Lookup No Match Output

Lookup Store Name

DimStore

The source or the destination component contains multiple inputs or outputs. Select an input and an output to connect the components.

Output:

Lookup Match Output

Input:

OLE DB Destination Input

OK Cancel

Connection Managers

CreateDataMartTables CreateStageTables CSV DimDate CSV DimTime DAT Files Data Mart master Staging Area

Error List Variables Output

Add to Source Control

Connect the flow from the *Lookup Store Name* component to the *DimStore* component and select the *Lookup Match Output* option. In this case, just the rows/records in which there was a match in the lookup component matter.

```
graph TD; Transaction --> SAES[Store Already Exists?]; SAES --> LNOM[Lookup No Match Output]; LNOM --> LSN[Lookup Store Name]; LSN --> DimStore[DimStore];
```

Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Quick Launch (Ctrl+Q)

Sign in

Package.dtsx [Design] * X

Control Flow Data Flow Parameters Event Handlers Package Explorer Execution Results

Data Flow Task: Load DimStore

Server Explorer Solution Explorer Team Explorer Properties

Transaction

Store Already Exists?

Lookup No Match Output

Lookup Store Name

Lookup Match Output

DimStore

100%

Connection Managers

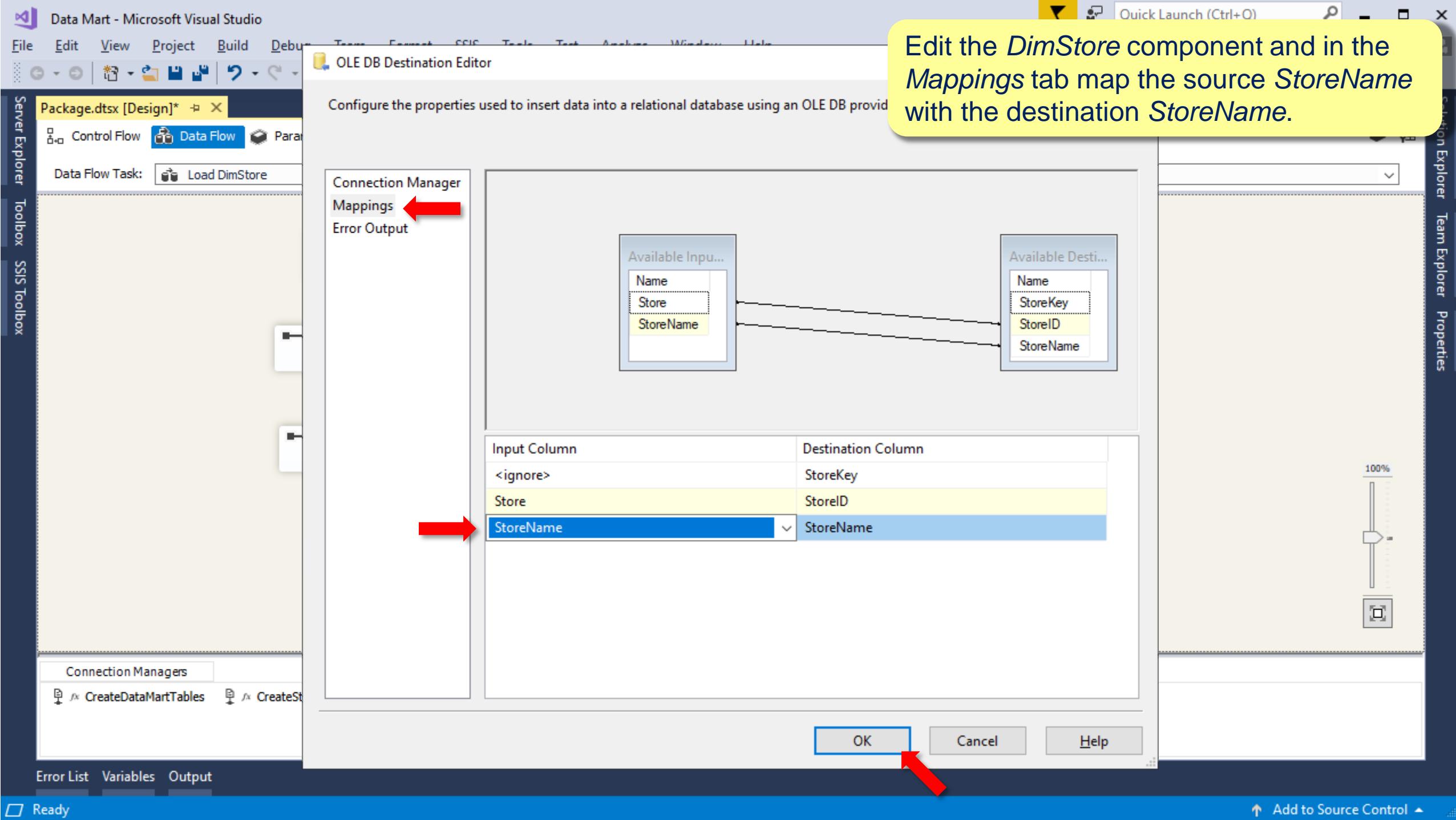
CreateDataMartTables CreateStageTables CSV DimDate CSV DimTime DAT Files Data Mart master Staging Area

Error List Variables Output

Ready Add to Source Control

The diagram shows a sequence of data flow tasks:

- A Transaction source feeds into a Decision component labeled "Store Already Exists?".
- If the condition is false (No Match), the flow goes to a "Lookup Store Name" component.
- The "Lookup Store Name" component has two outputs:
 - "Lookup No Match Output" which connects back to the "Store Already Exists?" decision.
 - "Lookup Match Output" which connects to the "DimStore" destination.
- The "DimStore" destination is shown with a red double-headed arrow pointing to it from the "Lookup Match Output" line.



SQLQuery4.sql - localhost.ARMDDataMart (AzureAD\PauloOliveira (56))* - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

New Query MDX DAX XMLA DAX

ARMDD_DataMart Execute

Object Explorer Connect

localhost (SQL Server 16.0.1050.5 - Azure) Databases System Databases Database Snapshots AdventureWorksDW2022 ARMDD_DataMart ARMDD_StagingArea Database Diagrams Tables System Tables FileTables External Tables Graph Tables dbo.Brand dbo.Card dbo.CardDQP dbo.Category dbo.Item dbo.MaritalStatusDescriptor dbo.StoreName_Lookup dbo.SubCategory dbo.Transaction dbo.Transaction_Item Dropped Ledger Tables Views External Resources Synonyms Programmability

SQLQuery2.sql - loc...\\PauloOliveira (52) SQLQuery3.sql - loc...\\PauloOliveira (69)* TRUNCATE TABLE DimStore

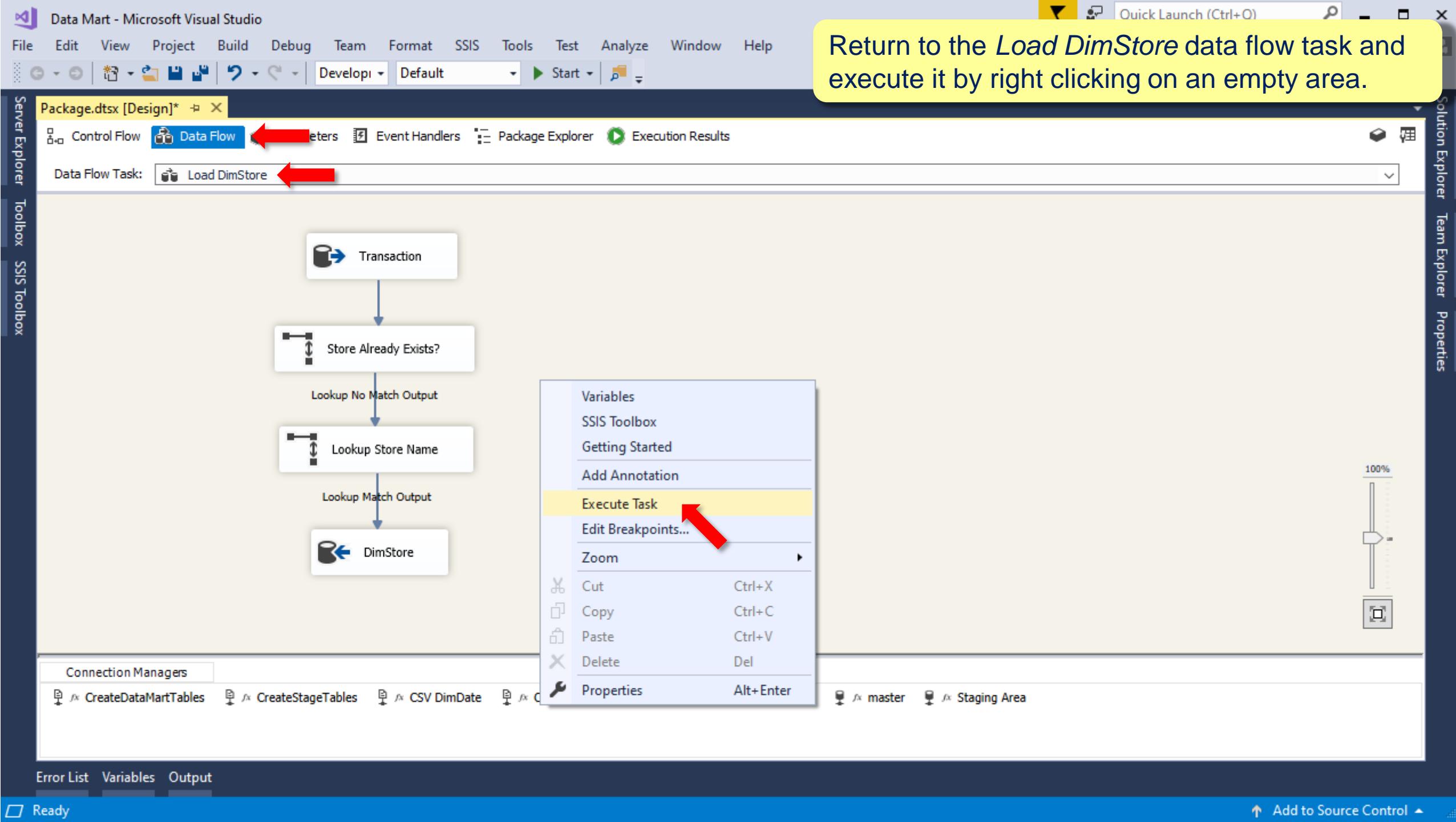
100 % Messages Commands completed successfully. Completion time: 2023-11-06T12:16:50.3902621+00:00

100 % Query executed successfully.

localhost (16.0 RTM) | AzureAD\\PauloOliveira ... | ARMDD_DataMart | 00:00:00 | 0 rows

Ln 1 Col 24 Ch 24 INS

In SQL Server Management Studio, execute again this SQL statement to delete all the data from the *DimStore* table.



Data Mart (Running) - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Quick Launch (Ctrl+O)

6 rows/records are loaded into the *DimStore* table.

Process: [556] DtsDebugHost.exe Lifecycle Events Thread: Stack Frame:

Package.dtsx [Design]

Control Flow Data Flow Parameters Event Handlers Package Explorer Progress

Data Flow Task: Load DimStore

Transaction

6 rows

Store Already Exists?

Lookup No Match Output (6 rows)

Lookup Store Name

Lookup Match Output (6 rows)

DimStore

Connection Managers

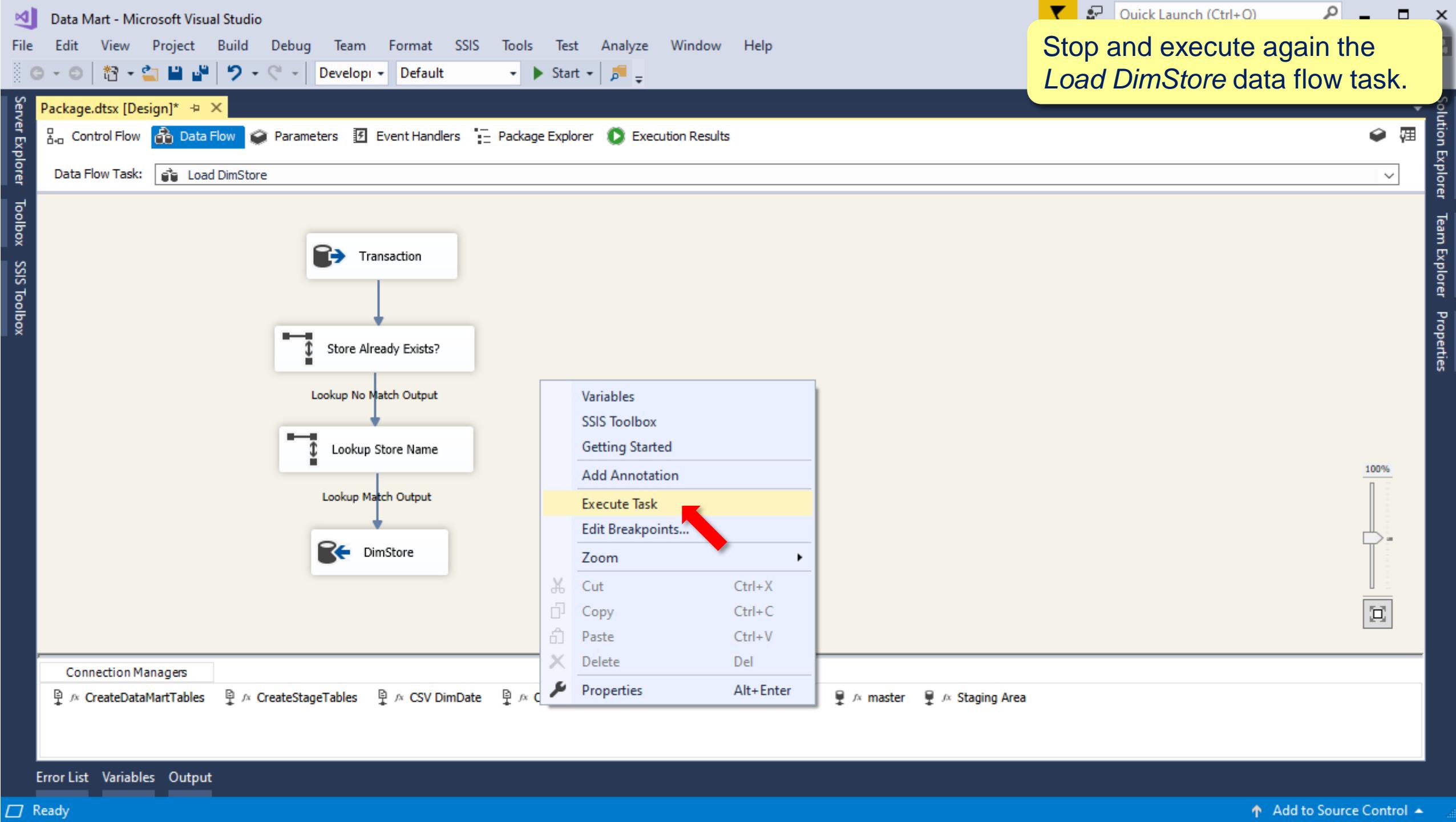
- CreateDataMartTables
- CreateStageTables
- CSV DimDate
- CSV DimTime
- DAT Files
- Data Mart
- master
- Staging Area

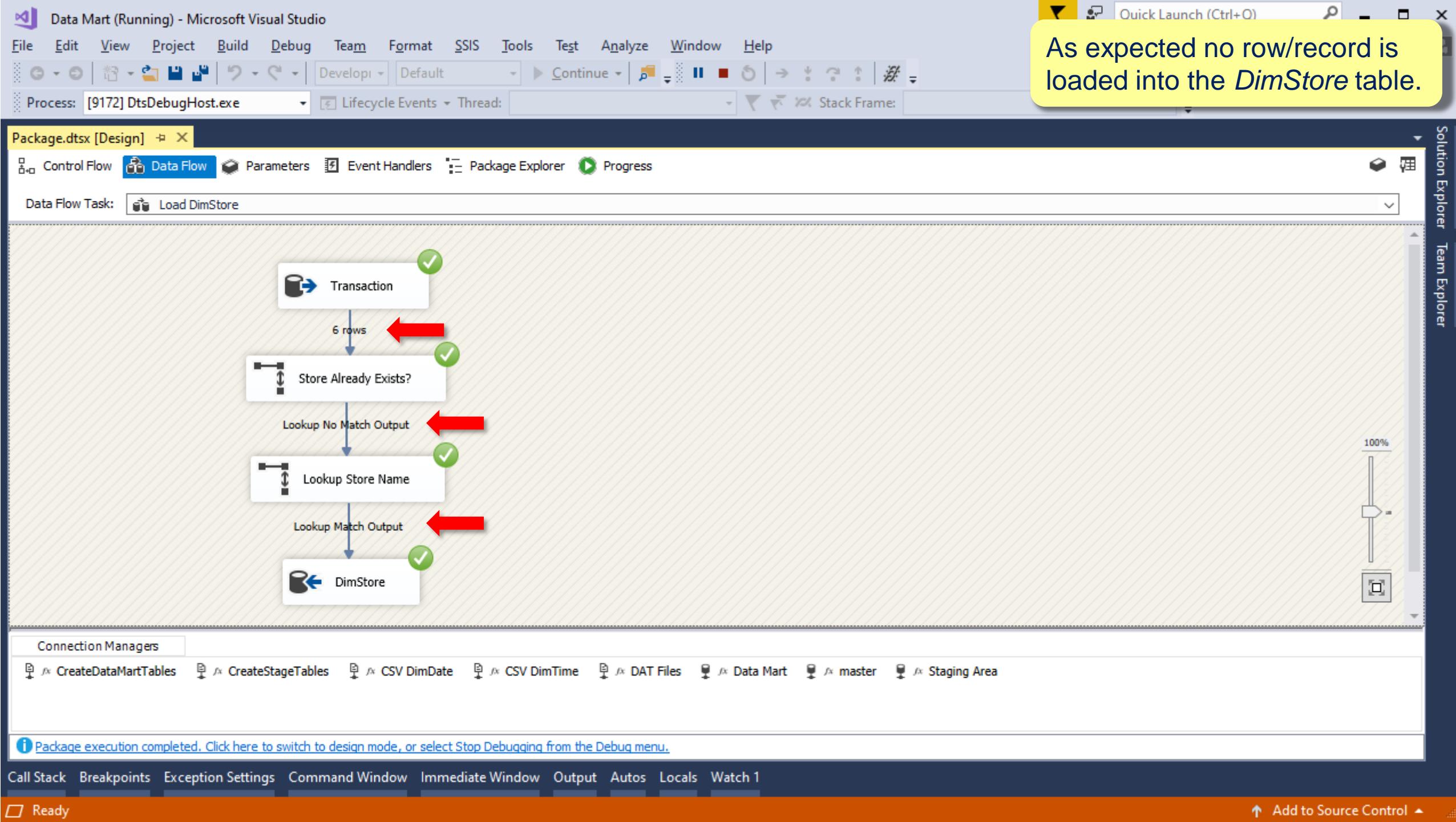
Package execution completed. Click here to switch to design mode, or select Stop Debugging from the Debug menu.

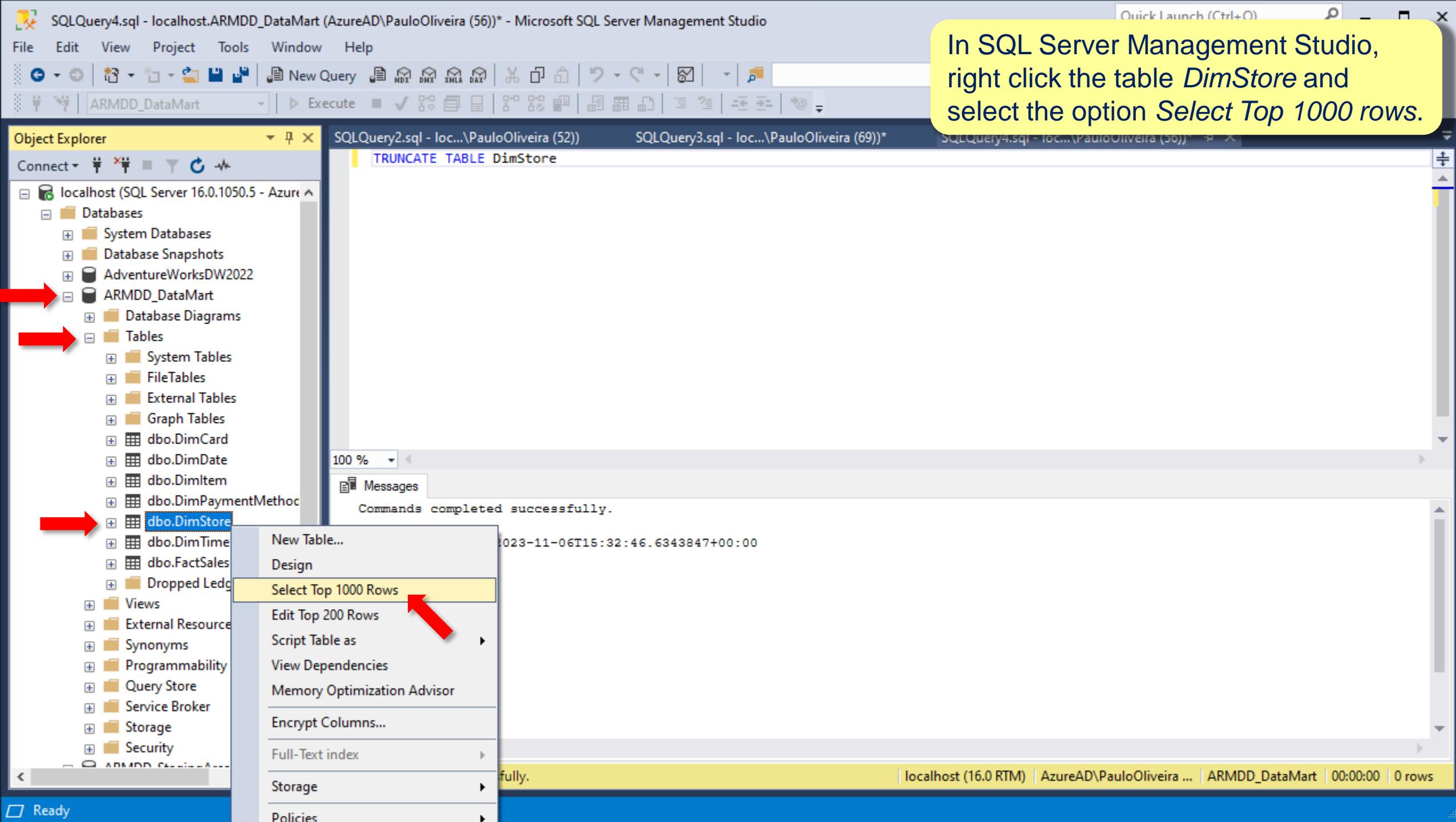
Call Stack Breakpoints Exception Settings Command Window Immediate Window Output Autos Locals Watch 1

Ready Add to Source Control

```
graph TD; Transaction[Transaction] --> SAES[Store Already Exists?]; SAES --> LSN[Lookup Store Name]; LSN --> DS[DimStore]; SAES --> LNOM[Lookup No Match Output<br/>(6 rows)]; LNOM --> LMOM[Lookup Match Output<br/>(6 rows)]; LMOM --> DS;
```







SQLQuery7.sql - localhost.ARMDDataMart (AzureAD\PauloOliveira (57)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

New Query MDX DMX XMLA DAX Execute

ARMDD_DataMart SQLQuery7.sql - loc...\\PauloOliveira (57) SQLQuery2.sql - loc...\\PauloOliveira (52) SQLQuery3.sql - loc...\\PauloOliveira (69)*

Object Explorer Connect

localhost (SQL Server 16.0.1050.5 - Azure) Databases System Databases Database Snapshots AdventureWorksDW2022 ARMDD_DataMart Database Diagrams Tables System Tables FileTables External Tables Graph Tables dbo.DimCard dbo.DimDate dbo.DimItem dbo.DimPaymentMethod dbo.DimStore dbo.DimTime dbo.FactSales Dropped Ledger Tables Views External Resources Synonyms Programmability Query Store Service Broker Storage Security ARMDD_DataMart

SELECT TOP (1000) [StoreKey], [StoreID], [StoreName] FROM [ARMDD_DataMart].[dbo].[DimStore]

Results Messages

	StoreKey	StoreID	StoreName
1	1	S0006	Catburg
2	2	S0040	Foxton
3	3	S0056	Ravensville
4	4	S0034	Queensbury
5	5	S0015	Princeton
6	6	S0002	Kingsville

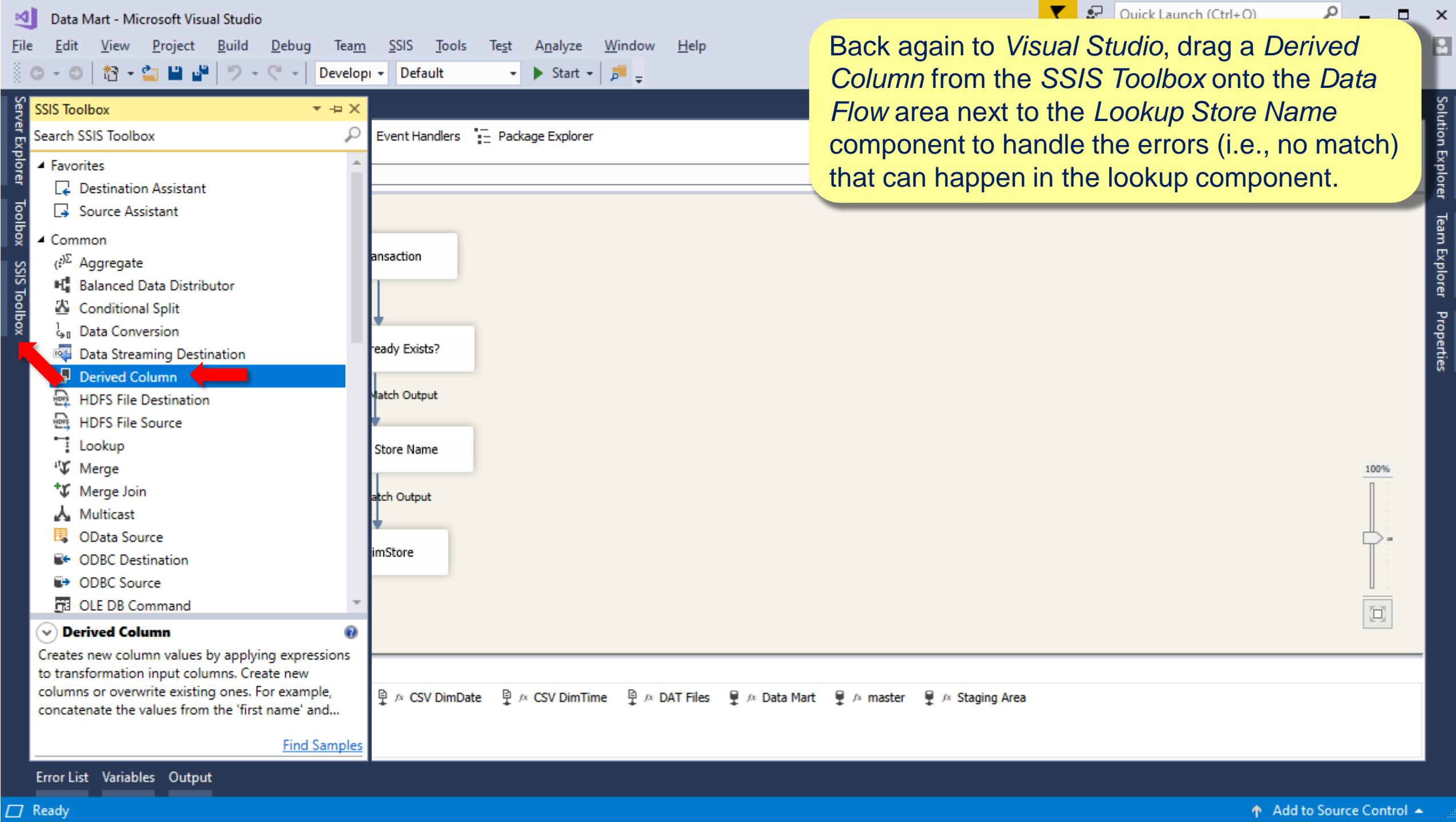
Query executed successfully.

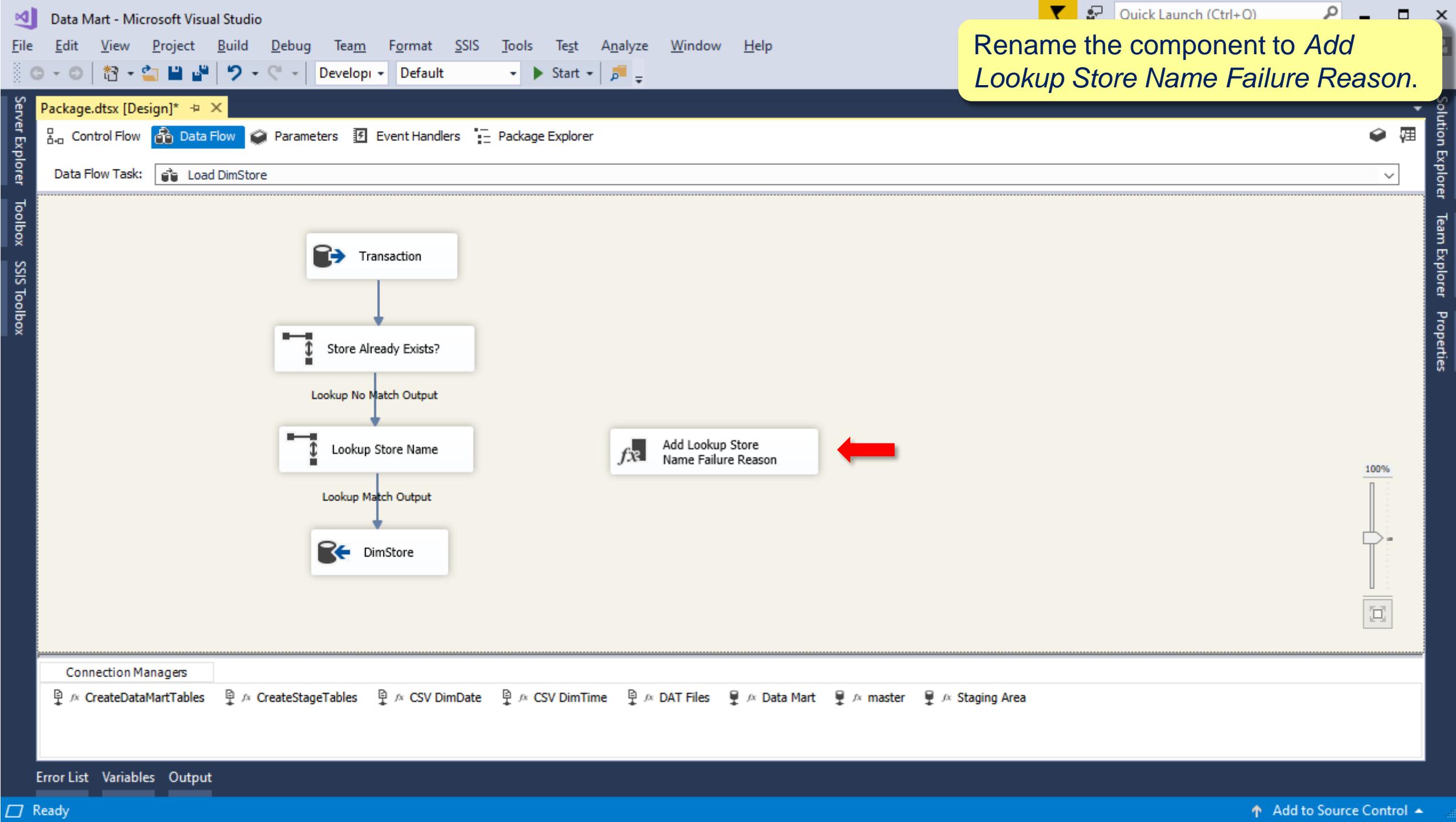
localhost (16.0 RTM) | AzureAD\PauloOliveira ... | ARMDD_DataMart | 00:00:00 | 6 rows

Ready

Ln 1 Col 1 Ch 1 INS

The *StoreIDs* as well as the *StoreNames* (from the *StoreNames_Lookup* table) were loaded into the *DimStore* table.





Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Package.dtsx [Design] * X

Control Flow Data Flow Parameters Event Handlers Package Explorer

Data Flow Task: Load DimStore

Transaction

Store Already Exists?

Lookup No Match Output

Lookup Store Name

DimStore

Lookup Match Output

Configure Error Output

Specify how row-level errors are columns. Errors can fail the component.

Input or Output	Column	Error	Truncation	Description
Lookup Match...	StoreName	Redirect row		Lookup
				Fail component
				Copy Column

Set this value to selected cells: Fail component

OK Cancel

Quick Launch (Ctrl+O)

Drag the red flow from the *Lookup Store Name* component to the *Derived Column* component and change the *Error* column to *Redirect row* in the *Configure Error Output* window.

```
graph TD; Transaction --> Decision{Store Already Exists?}; Decision --> Lookup[Lookup Store Name]; Lookup --> DimStore[DimStore]; Lookup --> NoMatch[Lookup No Match Output];
```

Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Quick Launch (Ctrl+Q)

Sign in

Server Explorer Solution Explorer

Toolbox Team Explorer

SSIS Toolbox Properties

Package.dtsx [Design]*

Control Flow Data Flow Parameters Event Handlers Package Explorer

Data Flow Task: Load DimStore

Transaction

Store Already Exists?

Lookup No Match Output

Lookup Store Name

Lookup Error Output

DimStore

Add Lookup Store Name Failure Reason

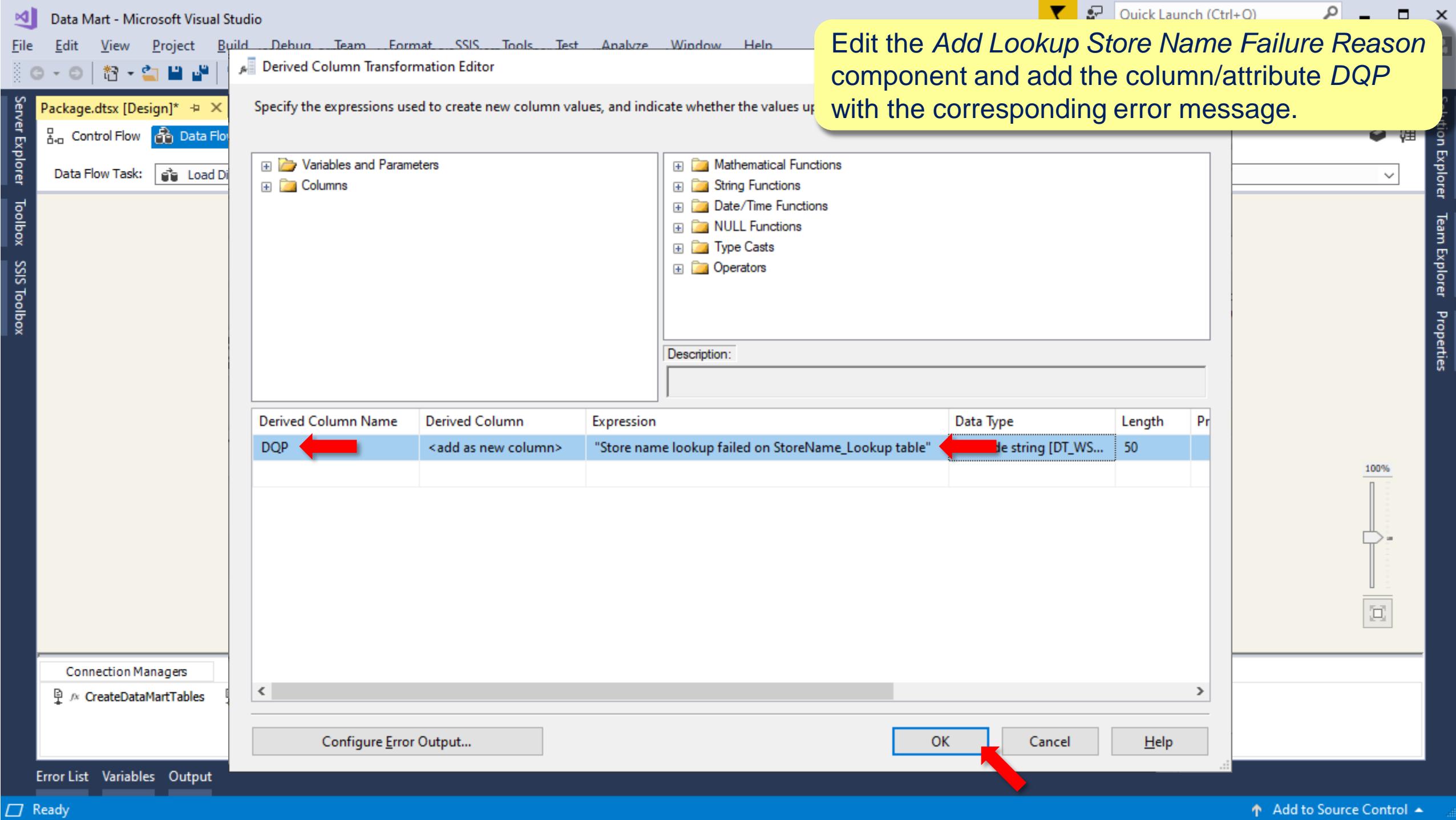
Connection Managers

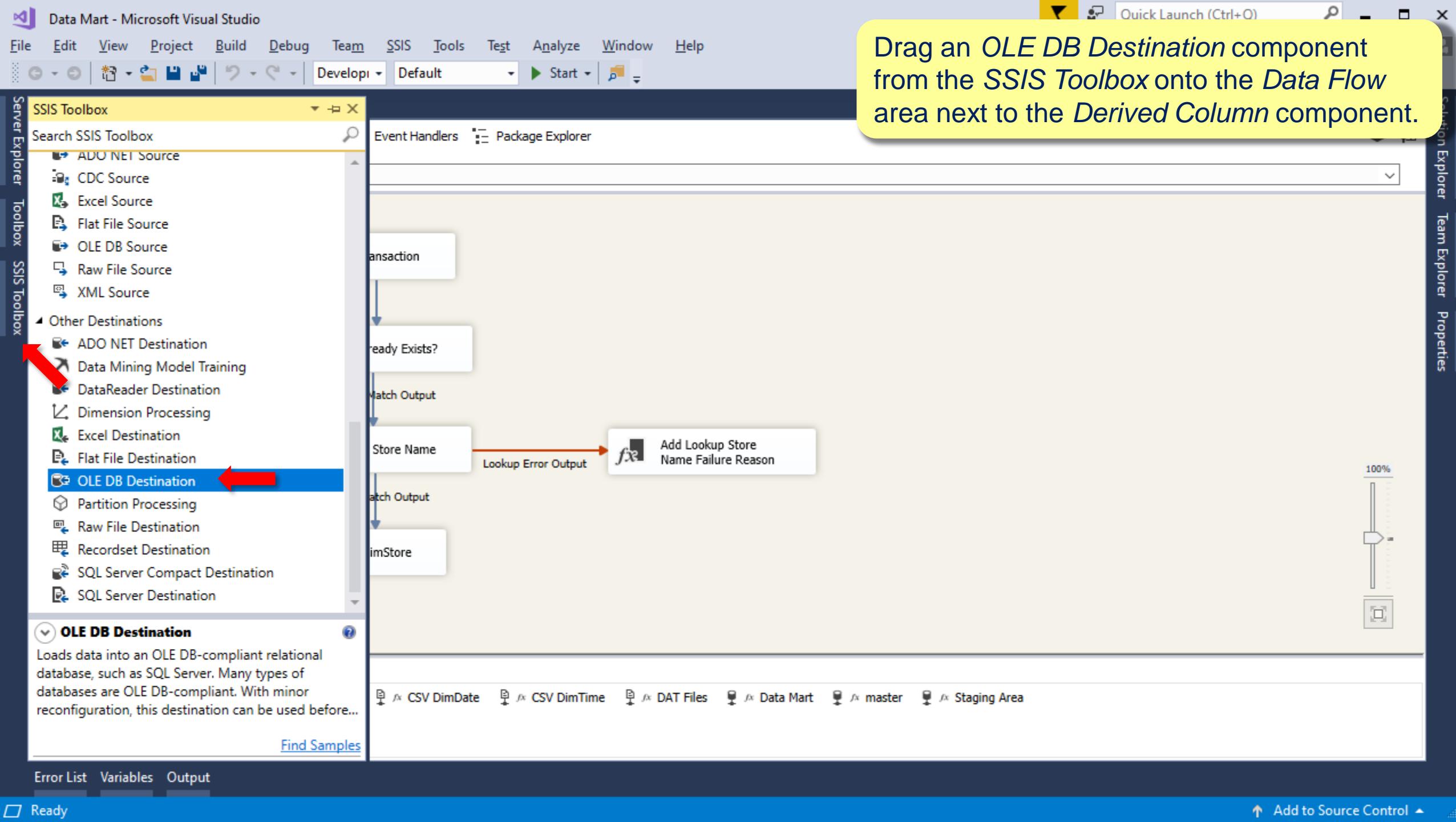
CreateDataMartTables CreateStageTables CSV DimDate CSV DimTime DAT Files Data Mart master Staging Area

Error List Variables Output

Ready Add to Source Control

```
graph TD; Transaction[Transaction] --> SAES[Store Already Exists?]; SAES --> LSN[Lookup Store Name]; LSN --> DimStore[dimstore]; LSN -- "Lookup No Match Output" --> ALNSFR[Add Lookup Store Name Failure Reason]; LSN -- "Lookup Match Output" --> DimStore; ALNSFR -- "Lookup Error Output" --> LSN;
```





Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Quick Launch (Ctrl+O)

Package.dtsx [Design]*

Control Flow Data Flow Parameters Event Handlers Package Explorer

Data Flow Task: Load DimStore

Transaction

Store Already Exists?

Lookup No Match Output

Lookup Store Name

Lookup Error Output

Add Lookup Store Name Failure Reason

DimStore

TransactionDQP

100%

Connection Managers

CreateDataMartTables CreateStageTables CSV DimDate CSV DimTime DAT Files Data Mart master Staging Area

Error List Variables Output

Ready Add to Source Control

Rename the *OLE DB Destination* to *TransactionDQP* and connect the flow of the previous component with it.

```
graph TD; Transaction[Transaction] --> SAES{Store Already Exists?}; SAES -- No --> LSN[Lookup Store Name]; LSN --> DimStore[DimStore]; SAES -- Yes --> DimStore; LSN --> ALSNFR[Add Lookup Store Name Failure Reason]; ALSNFR --> TransactionDQP[TransactionDQP];
```

← → ↑ This PC > Windows 10 (C:) > Temp > ARMDD > Data Mart > SQL Scripts > Staging Area

In the Staging Area SQL Scripts folder duplicate the *CreateStageTableTransaction.sql* script file.

Quick access

- Desktop
- Downloads
- Documents
- Pictures
- Data Mart
- Files
- PL
- Staging Area

OneDrive

This PC

3D Objects

Desktop

Documents

Downloads

Music

Pictures

Videos

Windows 10 (C:)

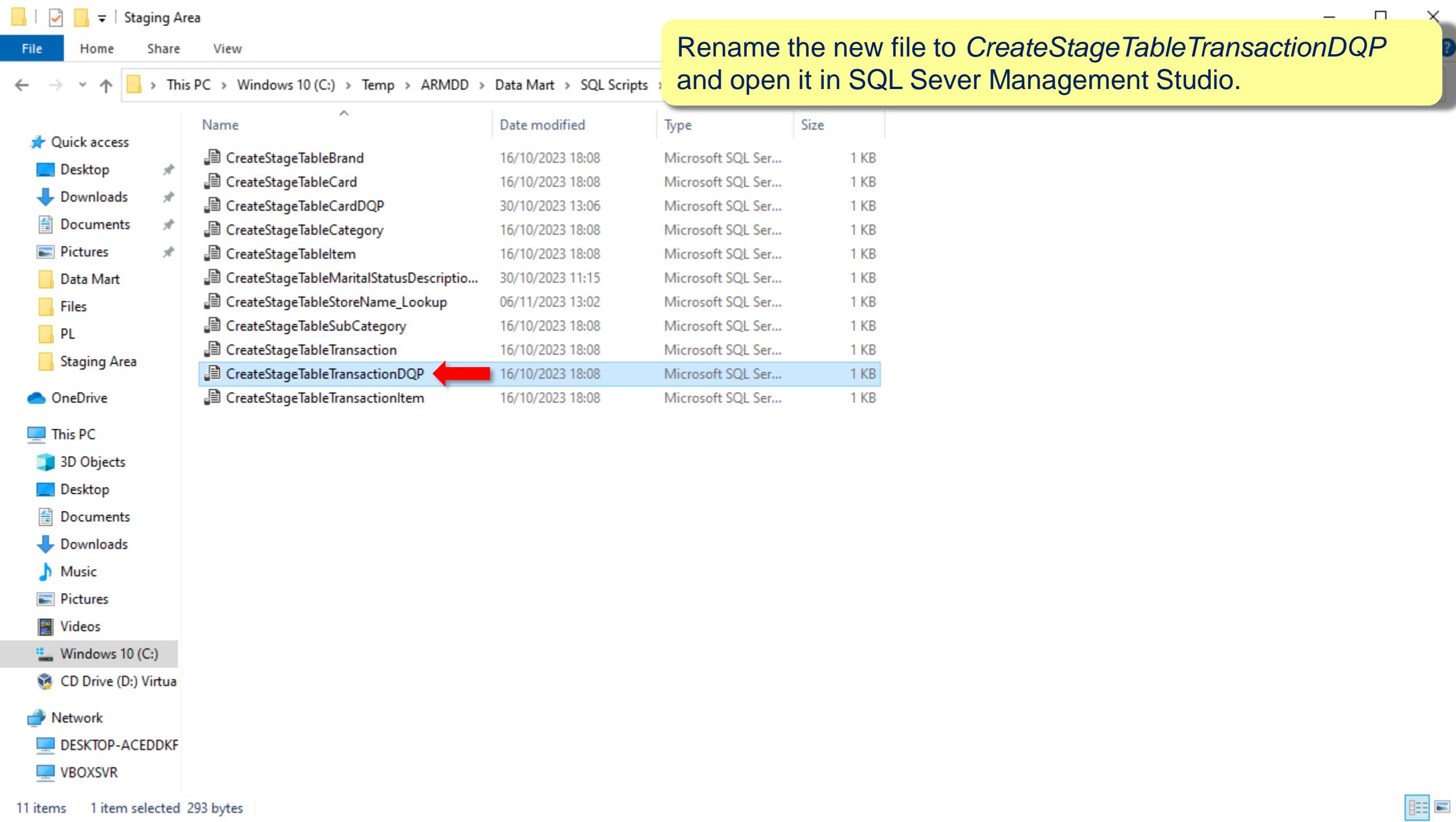
CD Drive (D:) Virtua

Network

DESKTOP-ACEDDKF

VBOXSVR





Rename the new file to *CreateStageTableTransactionDQP* and open it in SQL Sever Management Studio.

CreateStageTableTransactionDQP.sql - localhost.ARMDDataMart (AzureAD\PauloOliveira (58)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

ARMDD_DataMart

Object Explorer

localhost (SQL Server 16.0.1050.5 - Azure) Databases System Databases Database Snapshots AdventureWorksDW2022 ARMDD_DataMart Database Diagrams Tables System Tables FileTables External Tables Graph Tables dbo.DimCard dbo.DimDate dbo.DimItem dbo.DimPaymentMethod dbo.DimStore dbo.DimTime dbo.FactSales Dropped Ledger Tables Views External Resources Synonyms Programmability Query Store Service Broker Storage Security

ARMDD_DataMart

CreateStageTableTra...PauloOliveira (58) SQLQuery7.sql - loc...\\PauloOliveira (57) SQLQuery2.sql - loc...\\PauloOliveira (52)

```
IF NOT EXISTS(SELECT name FROM sys.tables WHERE name = 'TransactionDQP')
CREATE TABLE [dbo].[TransactionDQP]
(
    [Store] [char](5),
    [PaymentMethod] [char](2),
    DQP nvarchar(100)
)
ELSE
TRUNCATE TABLE [TransactionDQP]
```

Connected. (1/1) | localhost (16.0 RTM) | AzureAD\PauloOliveira ... | ARMDD_DataMart | 00:00:00 | 0 rows

Ln 9 Col 35 Ch 32 INS

Quick Launch (Ctrl+Q)

Add the *DQP* attribute to the table, perform the necessary changes and save the script. The *PaymentMethod* attribute will be used when loading the *DimPaymentMethod*.

CreateStageTableTransactionDQP.sql - localhost.ARMDDB_StagingArea (AzureAD\PauloOliveira (58)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

Quick Launch (Ctrl+O)

ARMDD_StagingArea Execute

Object Explorer

localhost (SQL Server 16.0.1050.5 - Azure) Databases System Databases Database Snapshots AdventureWorksDW2022 ARMDD_DataMart Database Diagrams Tables System Tables FileTables External Tables Graph Tables dbo.DimCard dbo.DimDate dbo.DimItem dbo.DimPaymentMethod dbo.DimStore dbo.DimTime dbo.FactSales Dropped Ledger Tables Views External Resources Synonyms Programmability Query Store Service Broker Storage Security ARMDD_StagingArea

CreateStageTableTra...PauloOliveira (58) SQLQuery7.sql - loc...\\PauloOliveira (57) SQLQuery2.sql - loc...\\PauloOliveira (52)

```
IF NOT EXISTS(SELECT name FROM sys.tables WHERE name = 'TransactionDQP')
CREATE TABLE [dbo].[TransactionDQP]
(
    [Store] [char](5),
    [PaymentMethod] [char](2),
    DQP nvarchar(100)
)
ELSE
TRUNCATE TABLE [TransactionDQP]
```

Results

Commands completed successfully.

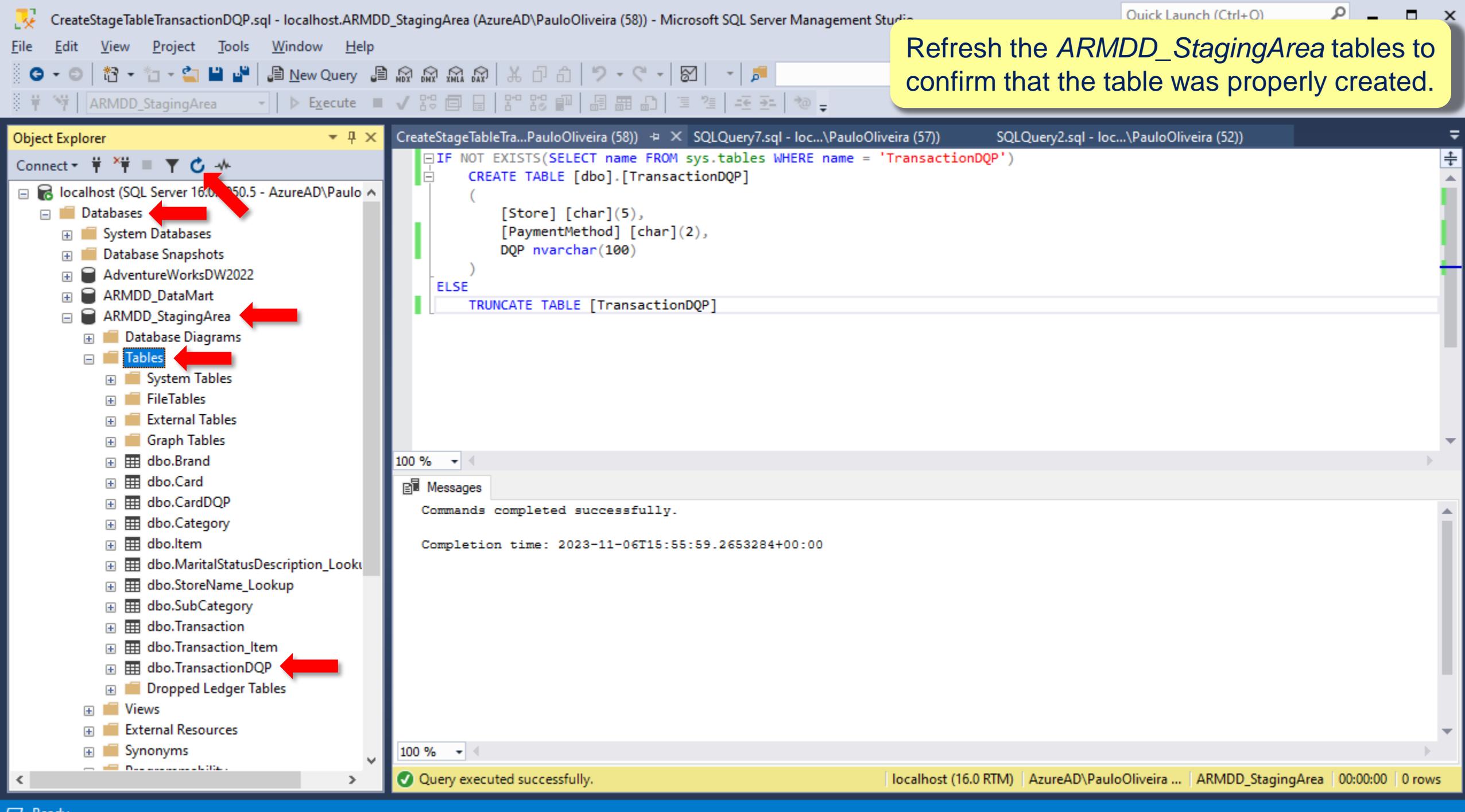
Completion time: 2023-11-06T15:54:01.7801940+00:00

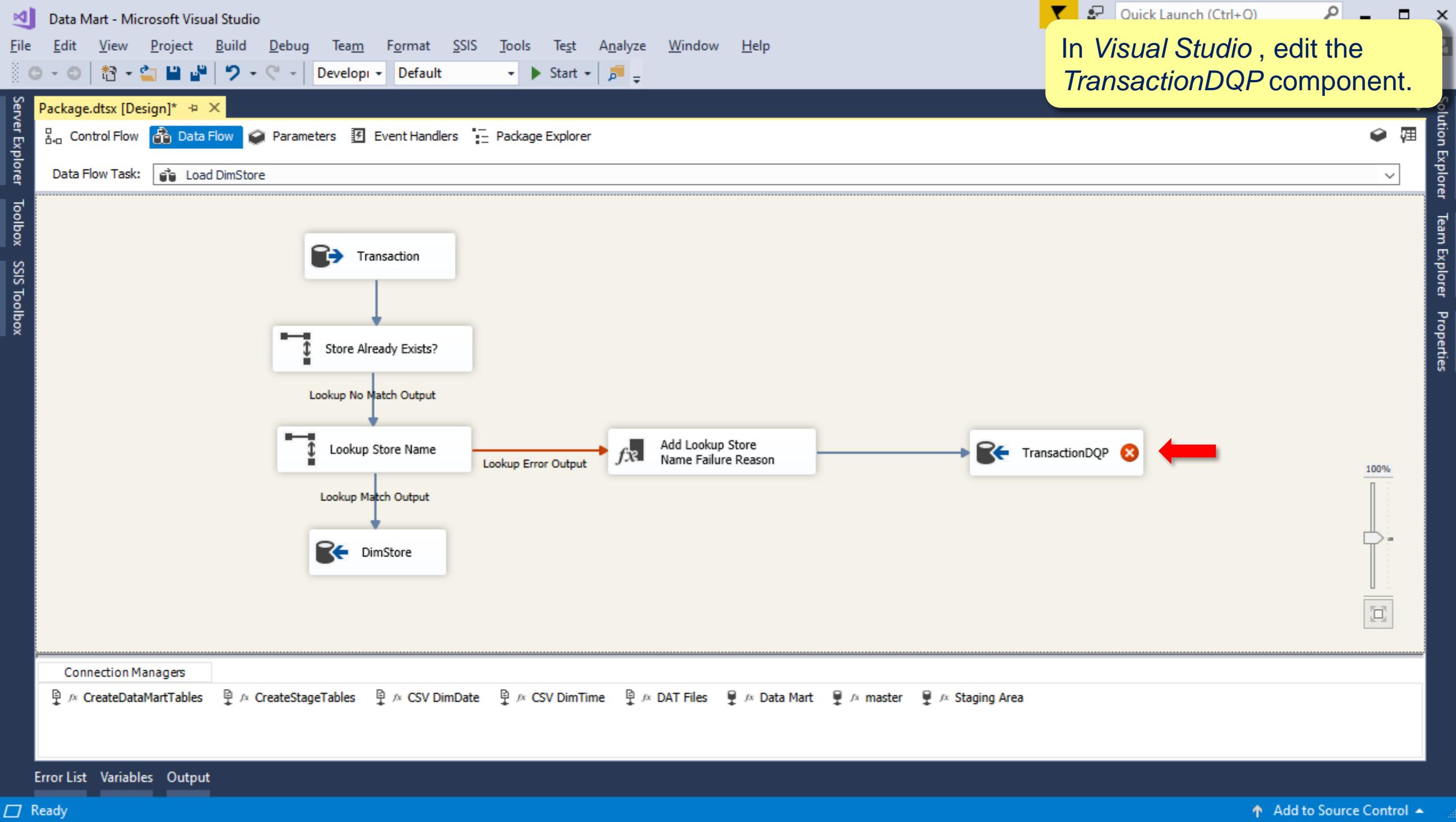
Query executed successfully.

localhost (16.0 RTM) | AzureAD\PauloOliveira ... | ARMDD_StagingArea | 00:00:00 | 0 rows

Ln 9 Col 35 Ch 32 INS

Execute the script in the *ARMDD_StagingArea* database to create the *TransactionDQP* table.





Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug

Server Explorer Solution Explorer Team Explorer Properties

OLE DB Destination Editor

Configure the properties used to insert data into a relational database using an OLE

Connection Manager **Staging Area**

Mappings

Error Output

Specify an OLE DB connection manager, a data source, or a data source view, and select the data access mode. If using the SQL command access mode, specify the SQL command either by typing the query or by using Query Builder. For fast-load data access, set the table update options.

OLE DB connection manager: **Staging Area**

Data access mode: Table or view - fast load

Name of the table or the view: **[dbo].[TransactionDQP]**

Keep identity Table lock

Keep nulls Check constraints

Rows per batch:

Maximum insert commit size: 2147483647

View Existing

Map the columns on the Mappings page.

OK Cancel Help

As destination table, select the *TransactionDQP* table just created in the *Staging Area*.

Add to Source Control

Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window Help

Quick Launch (Ctrl+O)

Server Explorer Solution Explorer Team Explorer Properties

OLE DB Destination Editor

Configure the properties used to insert data into a relational database using an OLE DB destination.

Package.dtsx [Design]* Data Flow Load DimStore

Control Flow Data Flow Parameters

Connection Manager Mappings Error Output

Available Input ... Available Destination...

Name
Store
ErrorCode
ErrorColumn
DQP

Name
Store
PaymentMethod
DQP

Input Column Destination Column

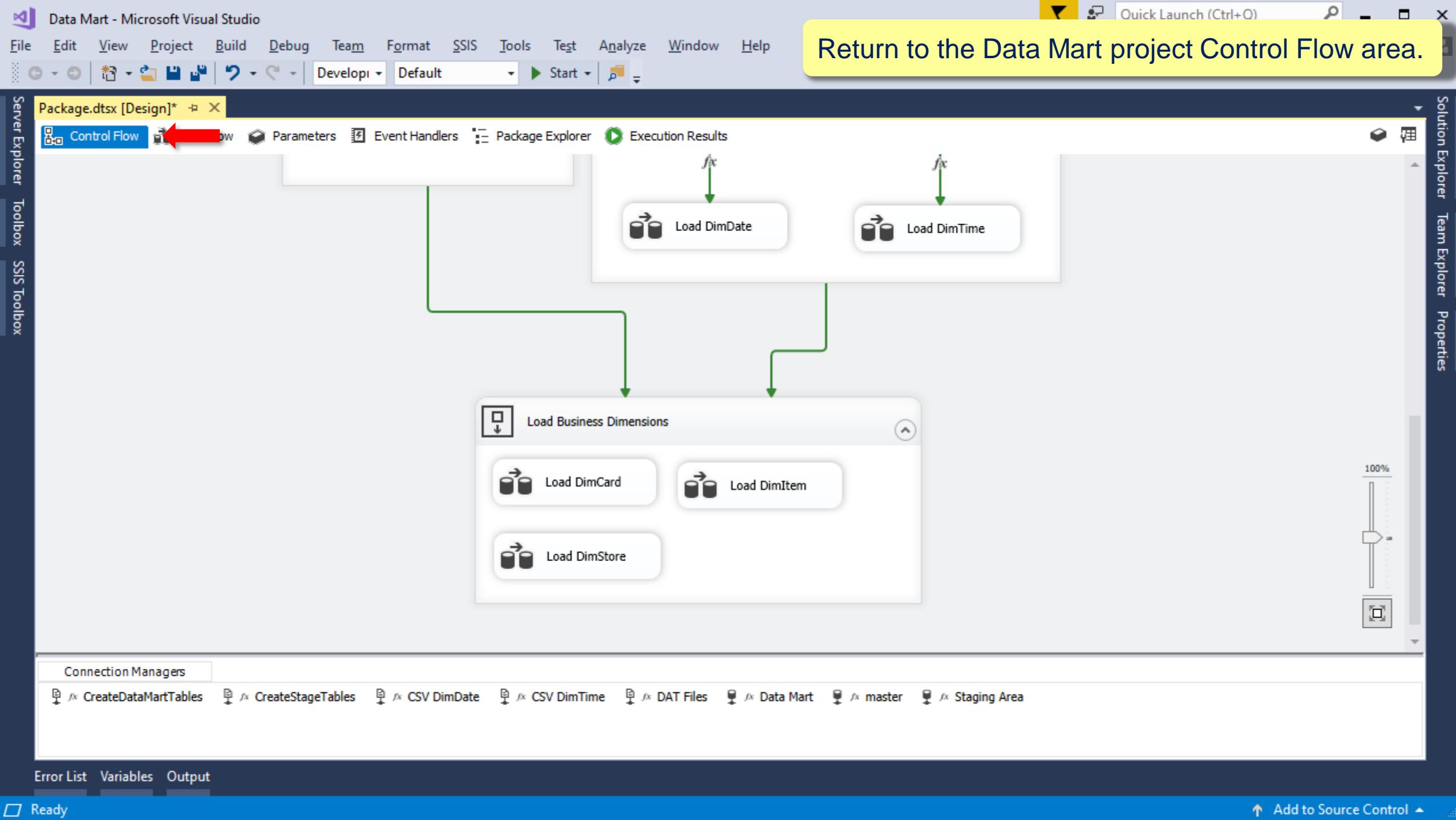
Input Column	Destination Column
Store	Store
<ignore>	PaymentMethod
DQP	DQP

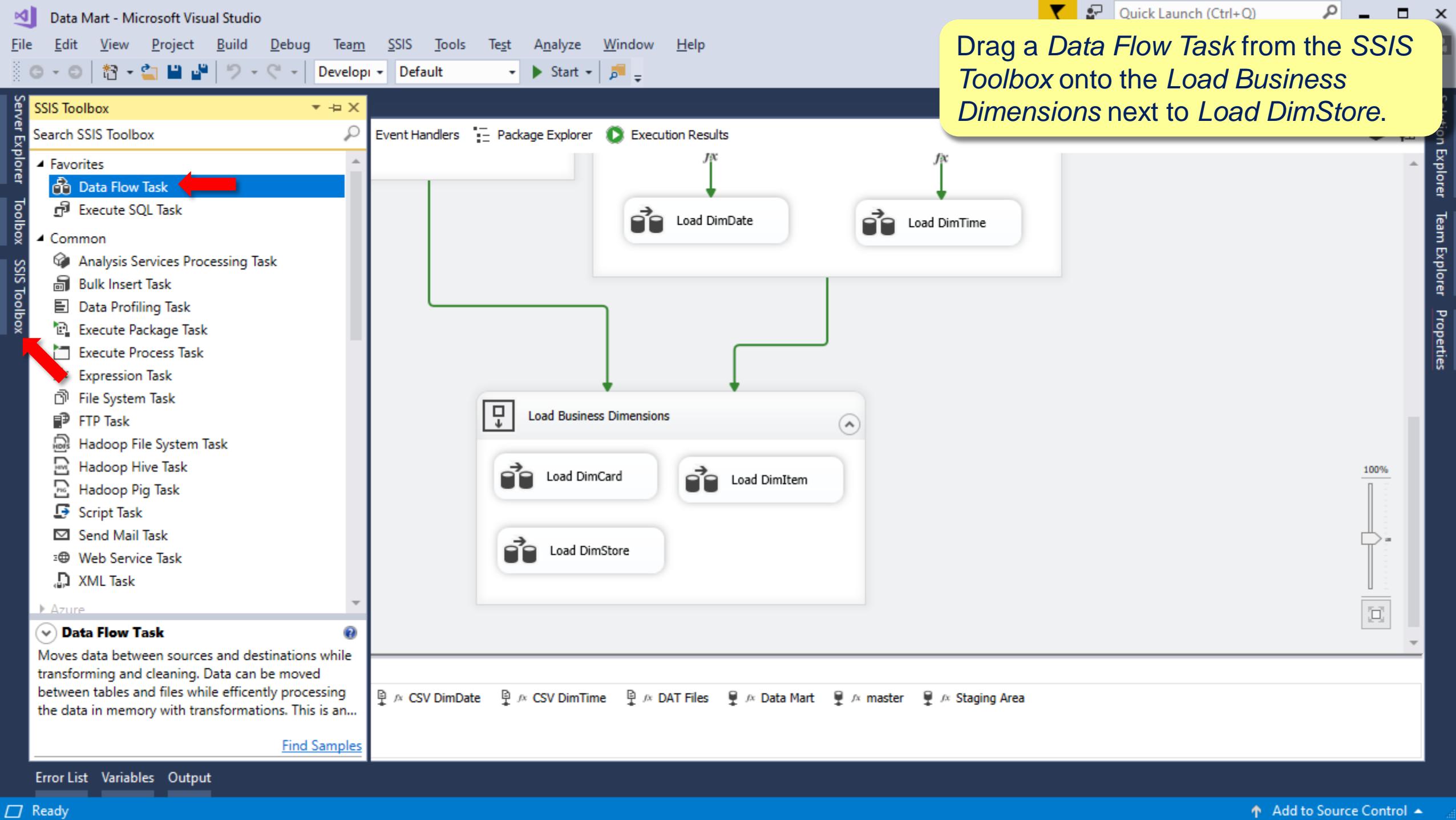
OK Cancel Help

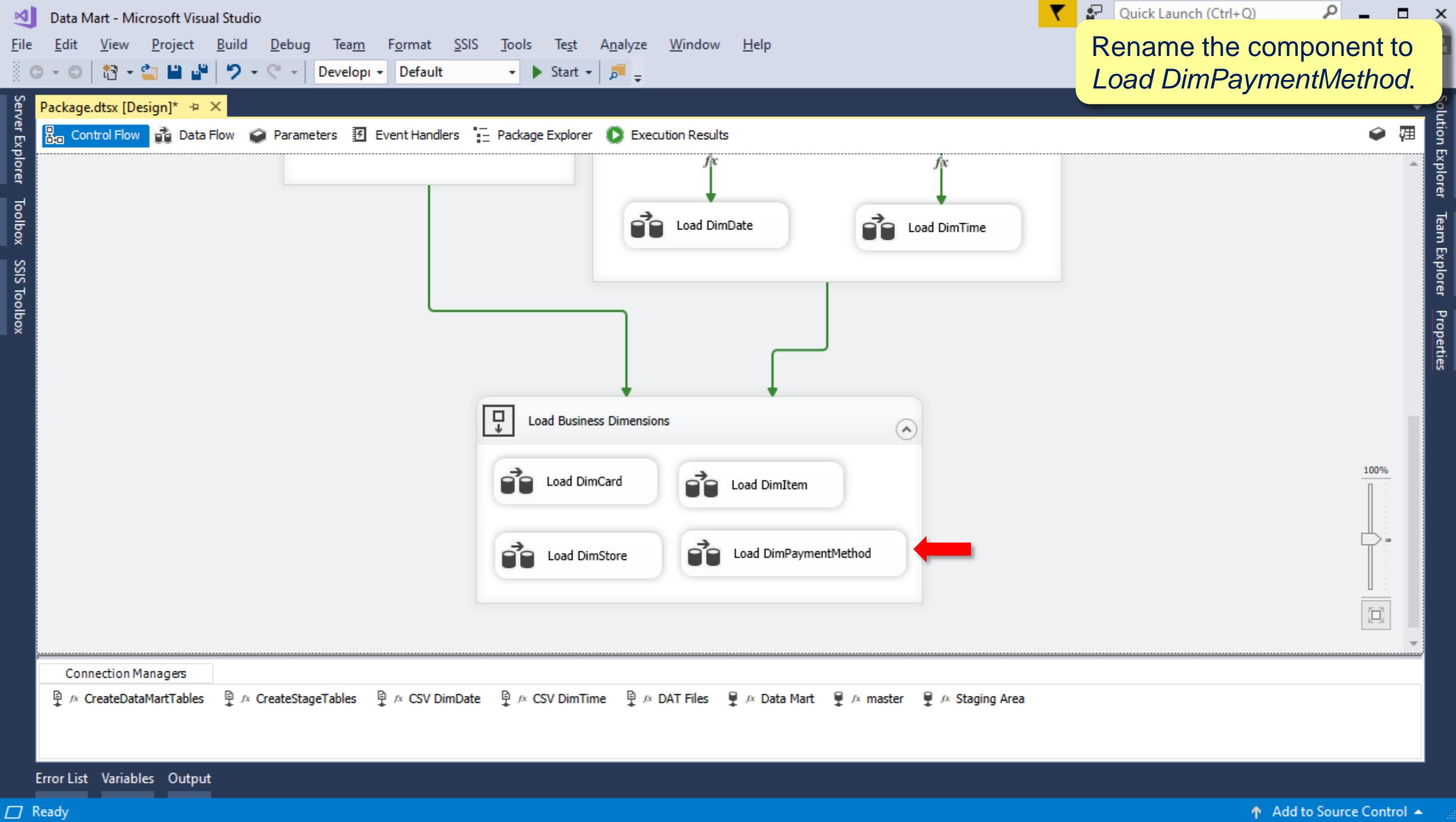
In the Mappings tab, map the source attributes **Store** and **DQP** to the corresponding destination attributes (if necessary).

100%

Ready Add to Source Control







Data Mart - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Test Analyze Window

Package.dtsx [Design]*

Control Flow Data Flow Parameters Event Handlers Package Explorer

Data Flow Task: Load DimPaymentMethod

In the Data Flow area of this component, perform the loading of the *DimPaymentMethod* dimension which is very similar to the loading of the *DimStore* dimension. Consider that: CA = Cash Advance; CC = Credit Card; DC = Debit Card; and CH = Check.

The diagram shows a Data Flow Task named "Load DimPaymentMethod". It consists of the following steps:

- A "Transaction" source feeds into a decision component, "PaymentMethod Exists?".
- If "PaymentMethod Exists?" fails (Lookup No Match Output), it leads to a "Lookup PaymentMethodDescription" component.
- The "Lookup PaymentMethodDescription" component has two outputs:
 - "Lookup Error Output" feeds into an "Add PaymentMethodDescription" component.
 - "Lookup Match Output" feeds into a "DimPaymentMethod" destination.
- The "Add PaymentMethodDescription" component has an output that feeds into a "TransactionDQP" component.

A red box highlights the entire flow from the initial decision point through the "DimPaymentMethod" destination. Two red arrows point to the "Data Flow" tab in the ribbon and the "Load DimPaymentMethod" task in the Data Flow Task list.

Connection Managers

- CreateDataMartTables
- CreateStageTables
- CSV DimDate
- CSV DimTime
- DAT Files
- Data Mart
- master
- Staging Area

Error List Variables Output

Ready Add to Source Control

