



# **Implementación de un Data Warehouse con SSIS y SSAS (Modelo Tabular)**

**Caso: Wide World Importers**

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2025

# Introducción del Proyecto

El presente proyecto consiste en el diseño e implementación de un **Data Warehouse** para la empresa ficticia *Wide World Importers*, utilizando la base de datos transaccional proporcionada por Microsoft. El objetivo principal es **centralizar, transformar y optimizar** la información proveniente del sistema operativo para facilitar el análisis estratégico y la toma de decisiones.

Para lograrlo, se desarrolló un **proceso ETL** (Extract, Transform, Load) empleando **SQL Server Integration Services (SSIS)**, encargado de extraer datos de la base de origen, aplicar transformaciones necesarias y cargarlos en un esquema dimensional optimizado.

Posteriormente, mediante **SQL Server Analysis Services (SSAS)** se construyó un **modelo tabular**, permitiendo a los usuarios de negocio explorar la información a través de métricas, jerarquías y segmentaciones, habilitando así la creación de reportes y dashboards interactivos en herramientas como Power BI.

Este flujo completo desde la extracción de datos hasta el análisis interactivo demuestra la integración de distintas tecnologías del ecosistema de Microsoft para generar soluciones de inteligencia de negocio eficientes y escalables.

# Objetivos del Proyecto

- 1. Implementar un Data Warehouse** que consolide y organice los datos transaccionales de la base *Wide World Importers* en un esquema dimensional optimizado para análisis.
- 2. Diseñar y desarrollar procesos ETL** con SQL Server Integration Services (SSIS) para extraer, transformar y cargar la información en el Data Warehouse.
- 3. Construir un modelo tabular** en SQL Server Analysis Services (SSAS) que permita explorar la información de forma interactiva mediante métricas, jerarquías y segmentaciones.
- 4. Optimizar la accesibilidad y el rendimiento** de las consultas analíticas para soportar la toma de decisiones estratégicas.
- 5. Demostrar la integración completa del ciclo de Business Intelligence**, desde la extracción de datos mediante procesos ETL hasta la creación de un modelo tabular en Analysis Services para su consulta y análisis.

# Alcance del Proyecto

- **Fuente de datos:**

Base de datos transaccional *Wide World Importers* proporcionada por Microsoft, que contiene información de ventas, compras, inventario y logística.

- **Infraestructura:** El Data Warehouse se implementó en el mismo servidor que aloja la base de datos transaccional. Esta decisión se tomó por motivos de alcance, disponibilidad de recursos y fines académicos. En un entorno de producción, se recomienda implementar el Data Warehouse en un servidor independiente para optimizar rendimiento, escalabilidad y seguridad.

- **Modelo de datos:** Esquema en estrella (star schema), compuesto por tablas de hechos y dimensiones relacionadas mediante claves sustitutas.

- **Tecnologías utilizadas:**

- **SQL Server Integration Services (SSIS)** para la creación de procesos ETL que extraen, transforman y cargan los datos hacia el Data Warehouse.
- **SSISDB** como repositorio de despliegue y administración de paquetes ETL.
- **SQL Server Agent** para programación y automatización de la ejecución de los paquetes.
- **SQL Server Analysis Services (SSAS)** con modelo tabular para análisis y explotación de datos.
- **SQL Server Management Studio (SSMS)** para administración y consultas.

- **Entregables del proyecto:**

- Data Warehouse con modelo dimensional (tablas de hechos y dimensiones).
- Paquetes ETL en SSIS funcionales y documentados.
- Despliegue de paquetes en SSISDB y configuración de jobs en SQL Server Agent para su ejecución automatizada.
- Modelo tabular en SSAS con medidas DAX y jerarquías configuradas.
- Documento técnico con capturas paso a paso del proceso de implementación.

- **Exclusiones:**

- No se migran datos de un entorno de producción real.
- No se implementan mecanismos avanzados de seguridad, como cifrado de datos, seguridad a nivel de fila o integración con Active Directory.
- No se desarrolla un modelo OLAP multidimensional; únicamente se utiliza un modelo tabular.

**Paso 1 :**  
**Preparación del entorno y**  
**restauración de la base de datos**



Recycle Bin



Microsoft  
Edge



Docker  
Desktop



Google  
Chrome

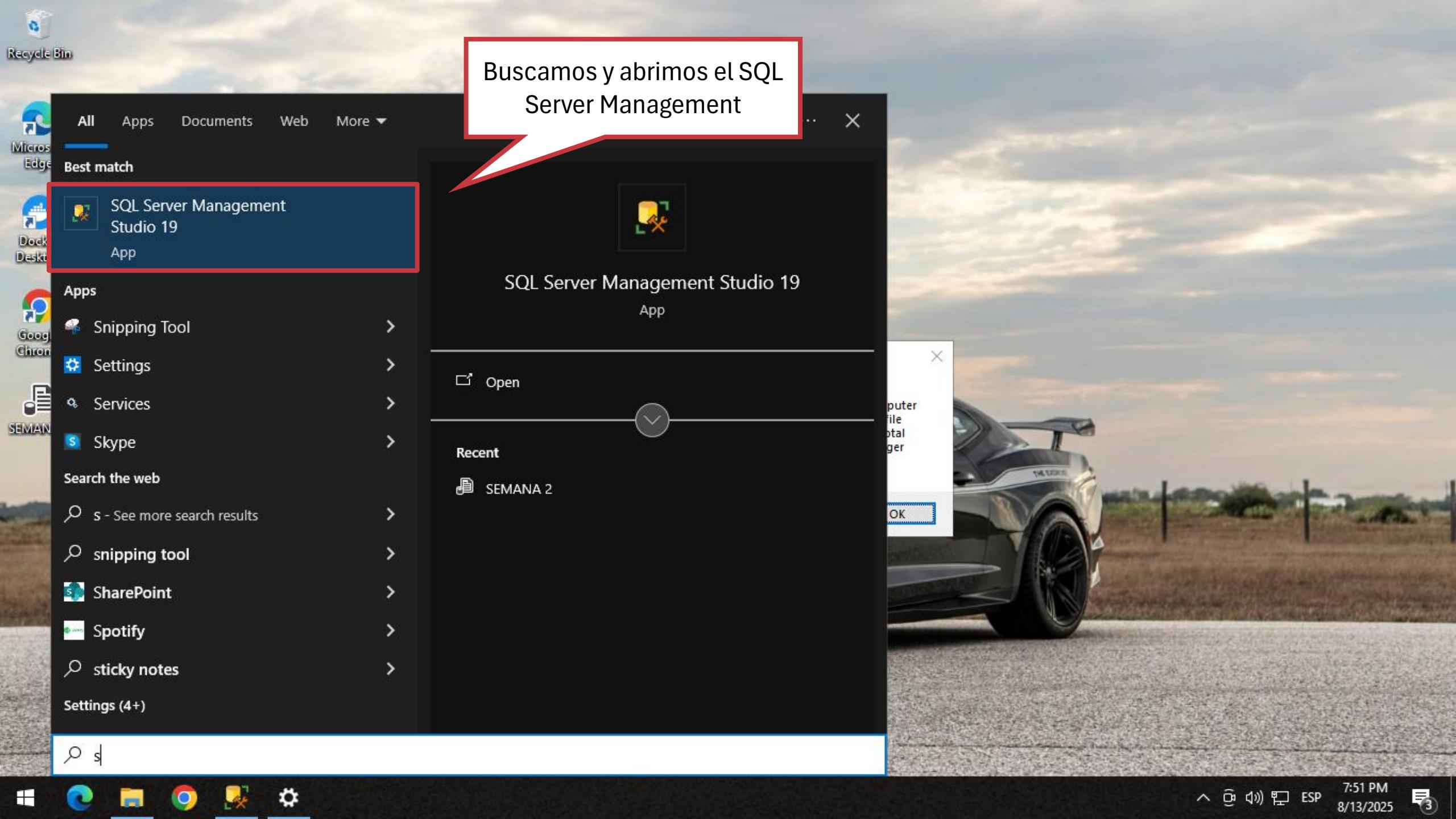


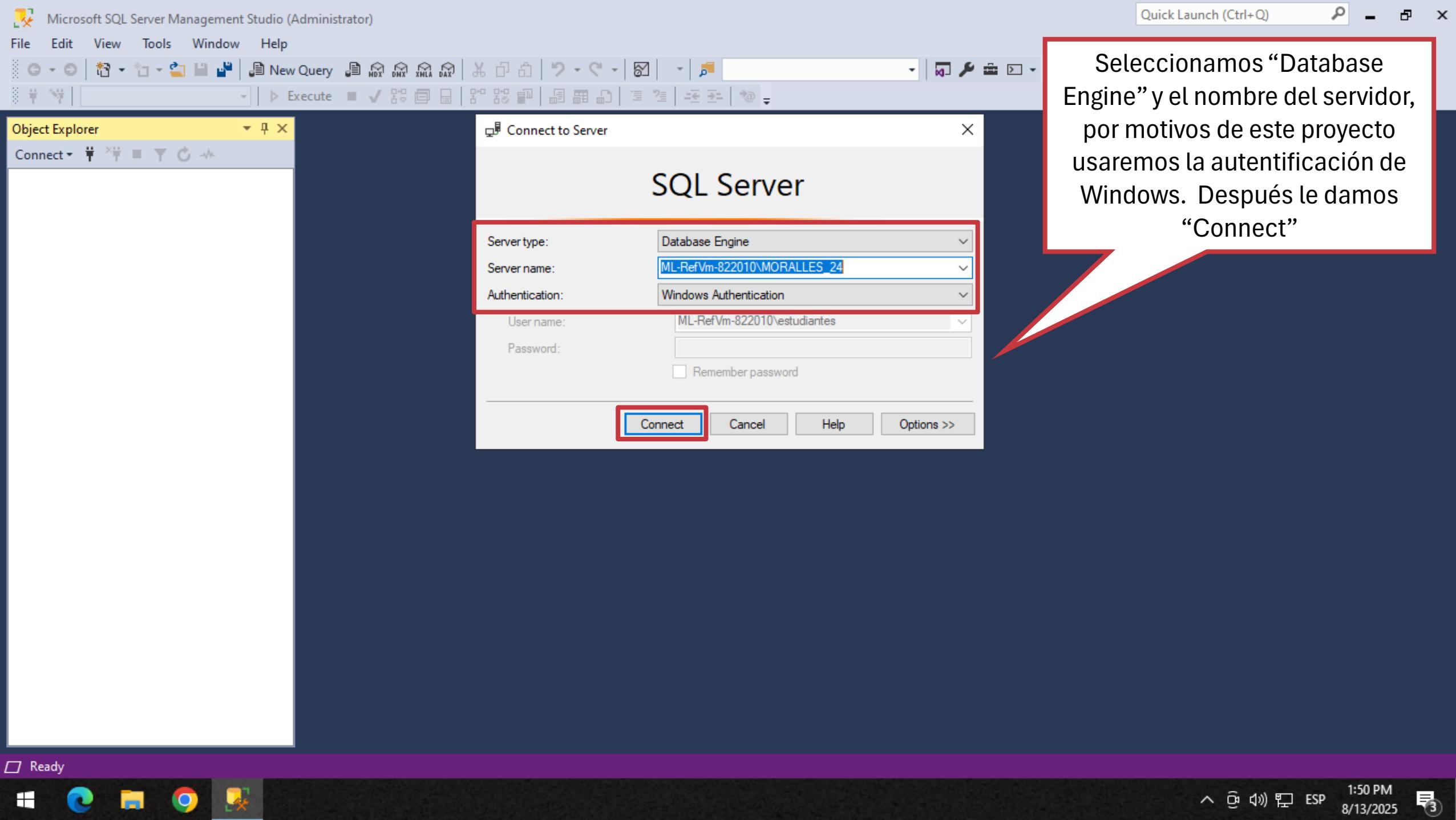
SEMANA 2

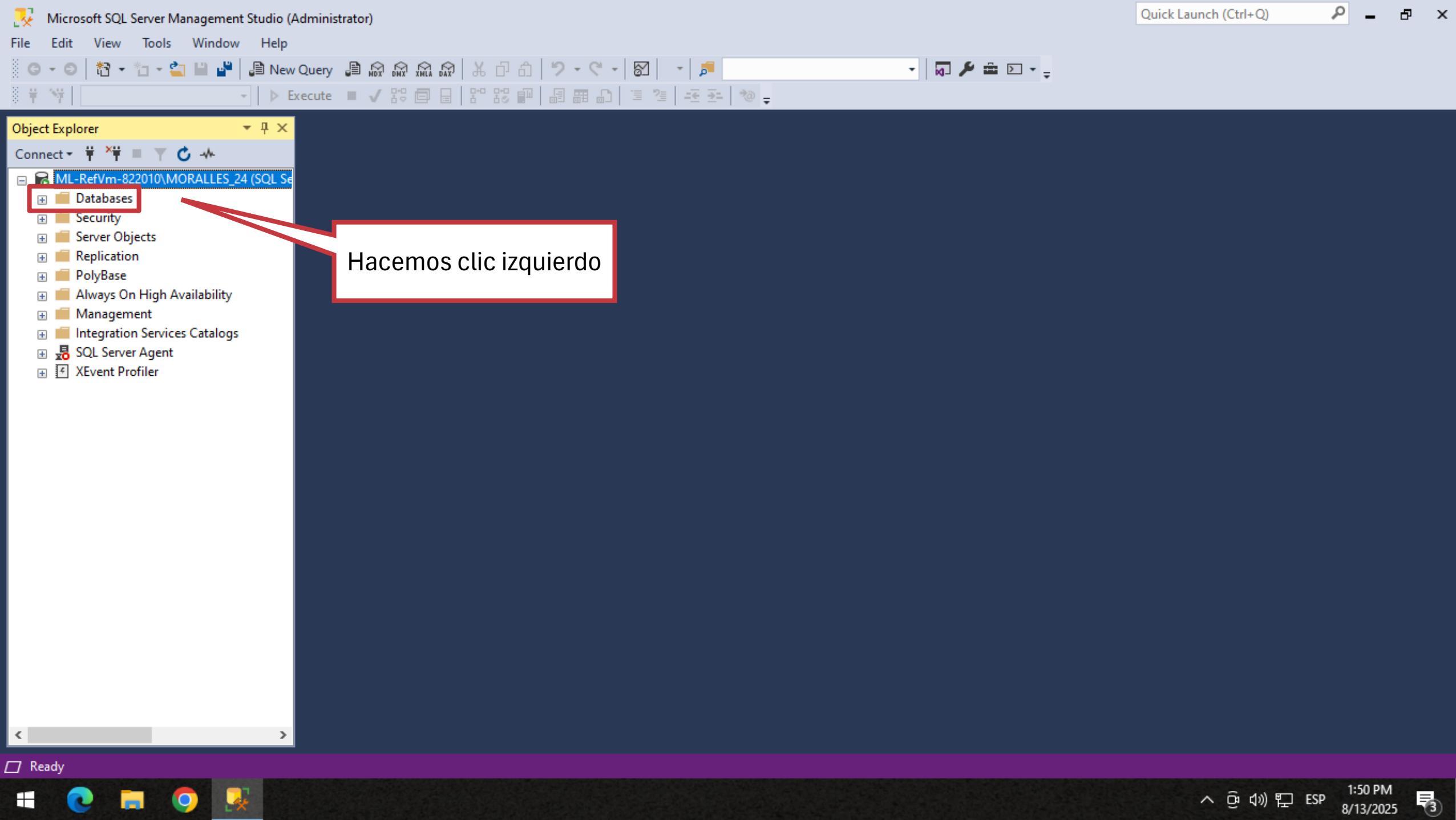


7:51 PM  
8/13/2025

3







Microsoft SQL Server Management Studio (Administrator)

File Edit View Tools Window Help

New Query NDX DMX XMLA DAX Execute

Object Explorer

ML-RefVm-822010\MORALLES\_24 (SQL Server)

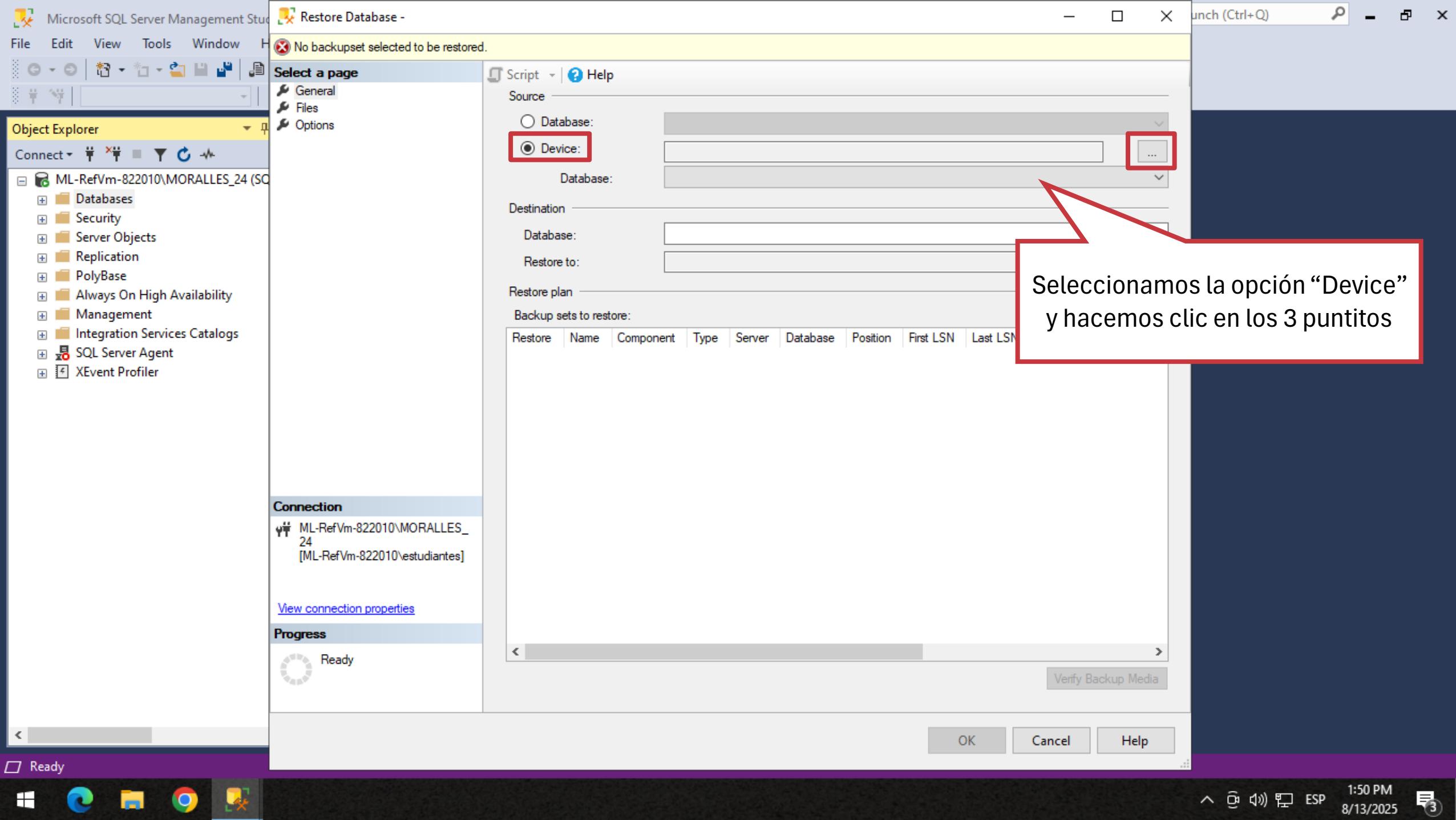
- + Data New Database...
- + Security Attach...
- + Server Restore Database... **Restore Database...**
- + Replication
- + Polybase
- + AlwaysOn
- + Maintenance
- + Integration
- + SQL Server Agent
- + XEEvent

Filter Deploy Data-tier Application... Import Data-tier Application... Start PowerShell Reports Refresh

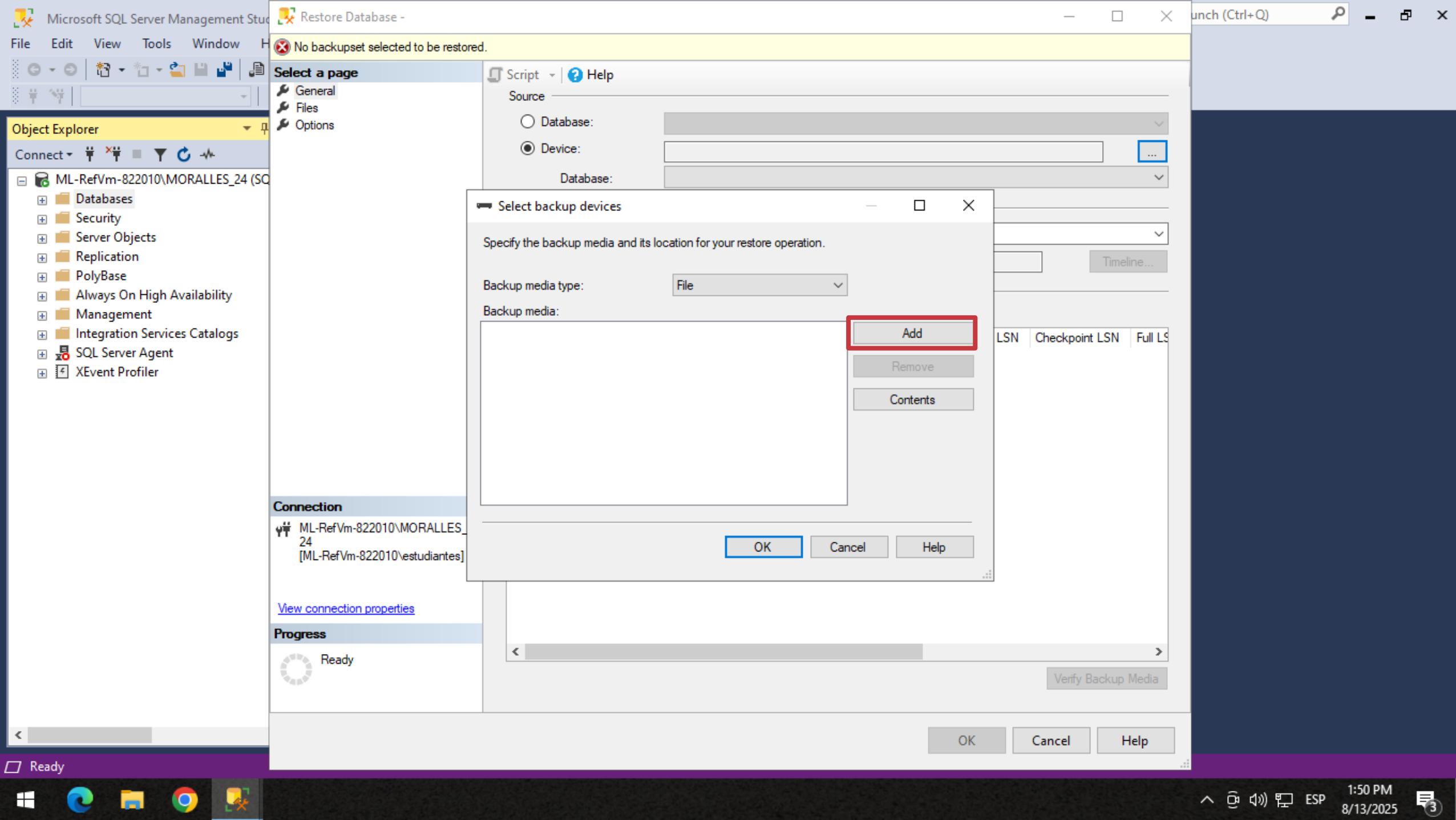
Ready

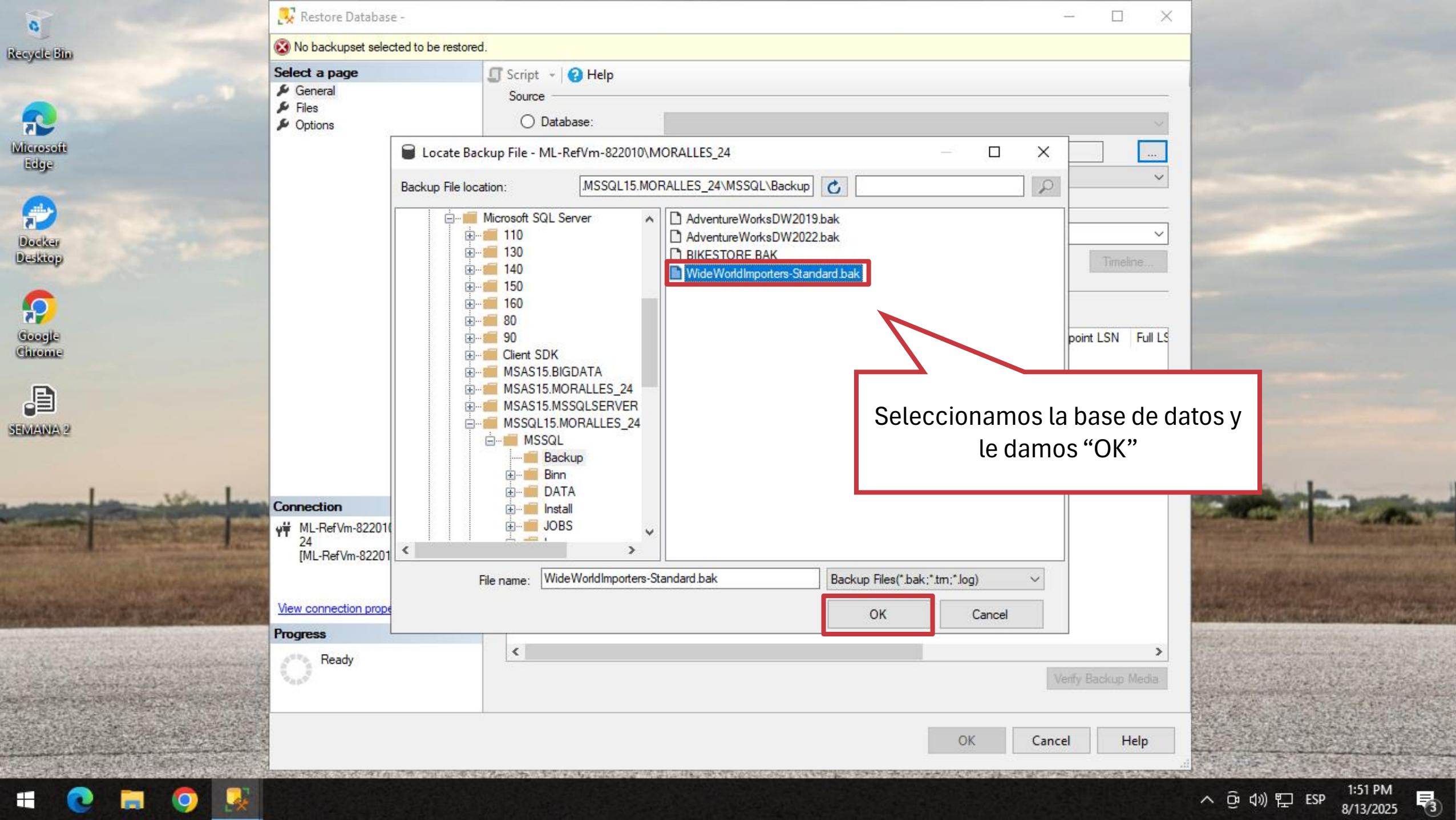
Quick Launch (Ctrl+Q)

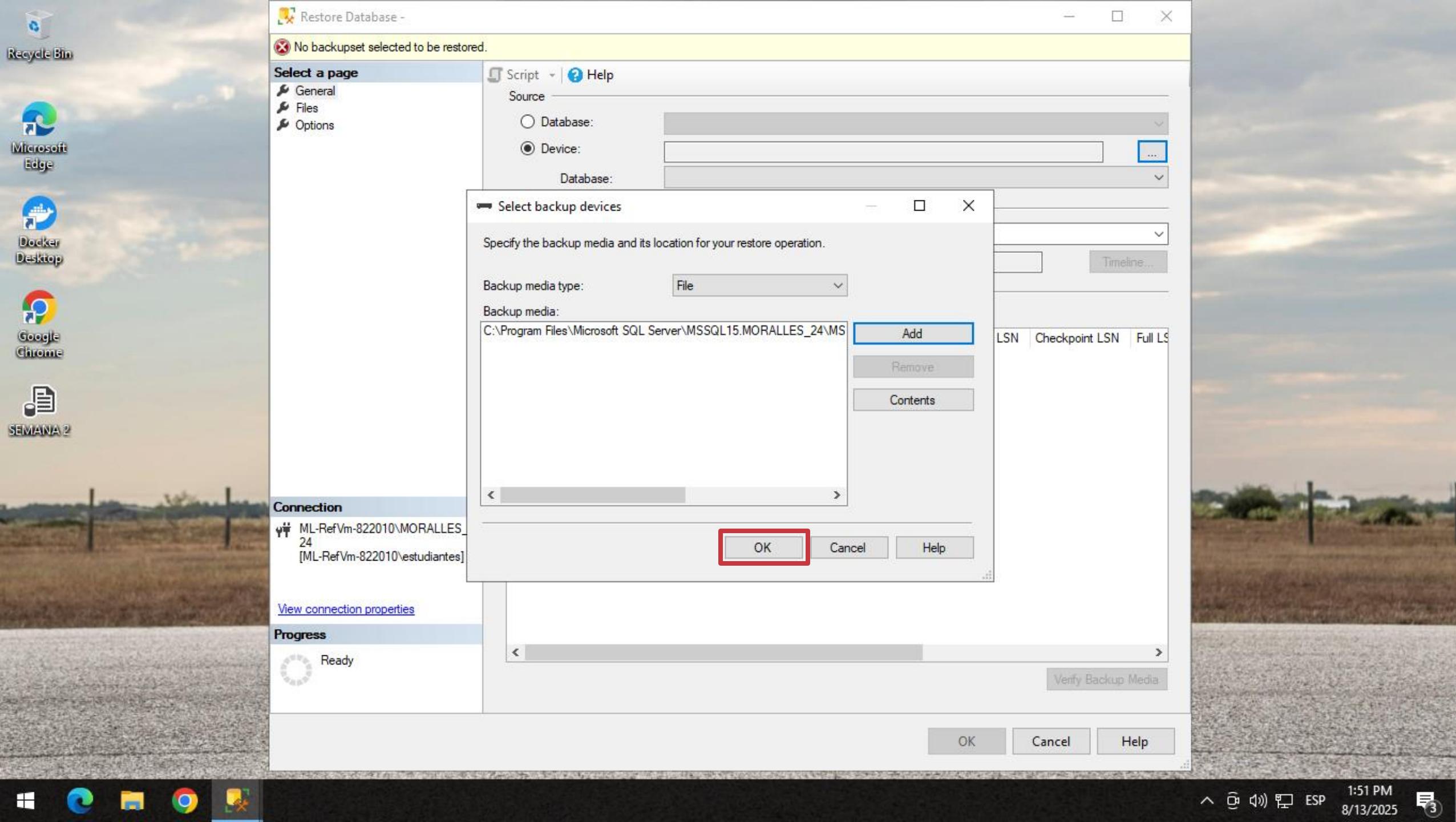
1:50 PM 8/13/2025

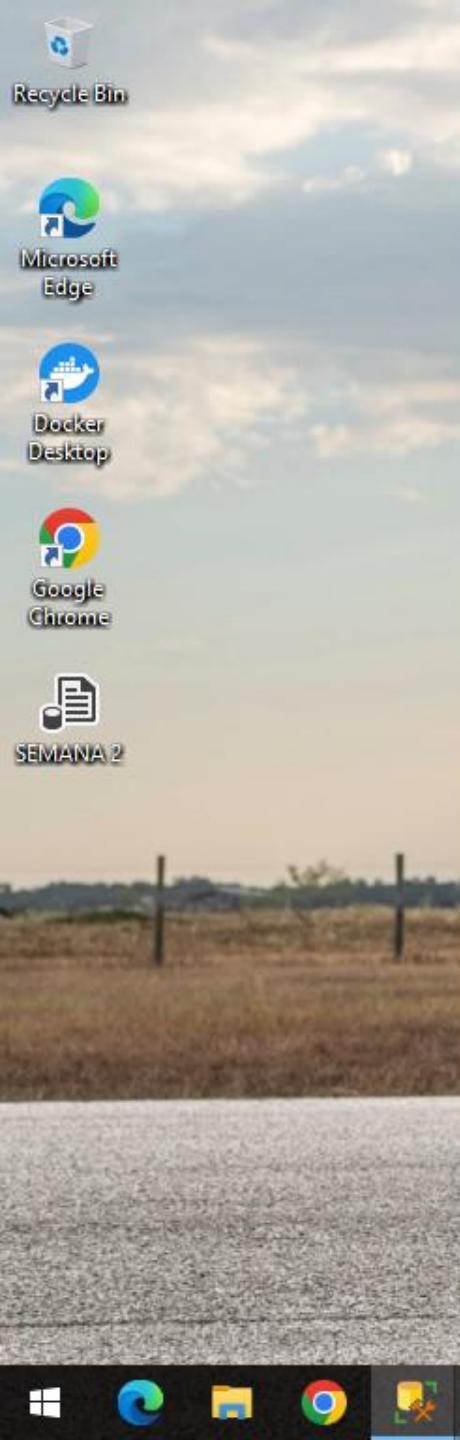
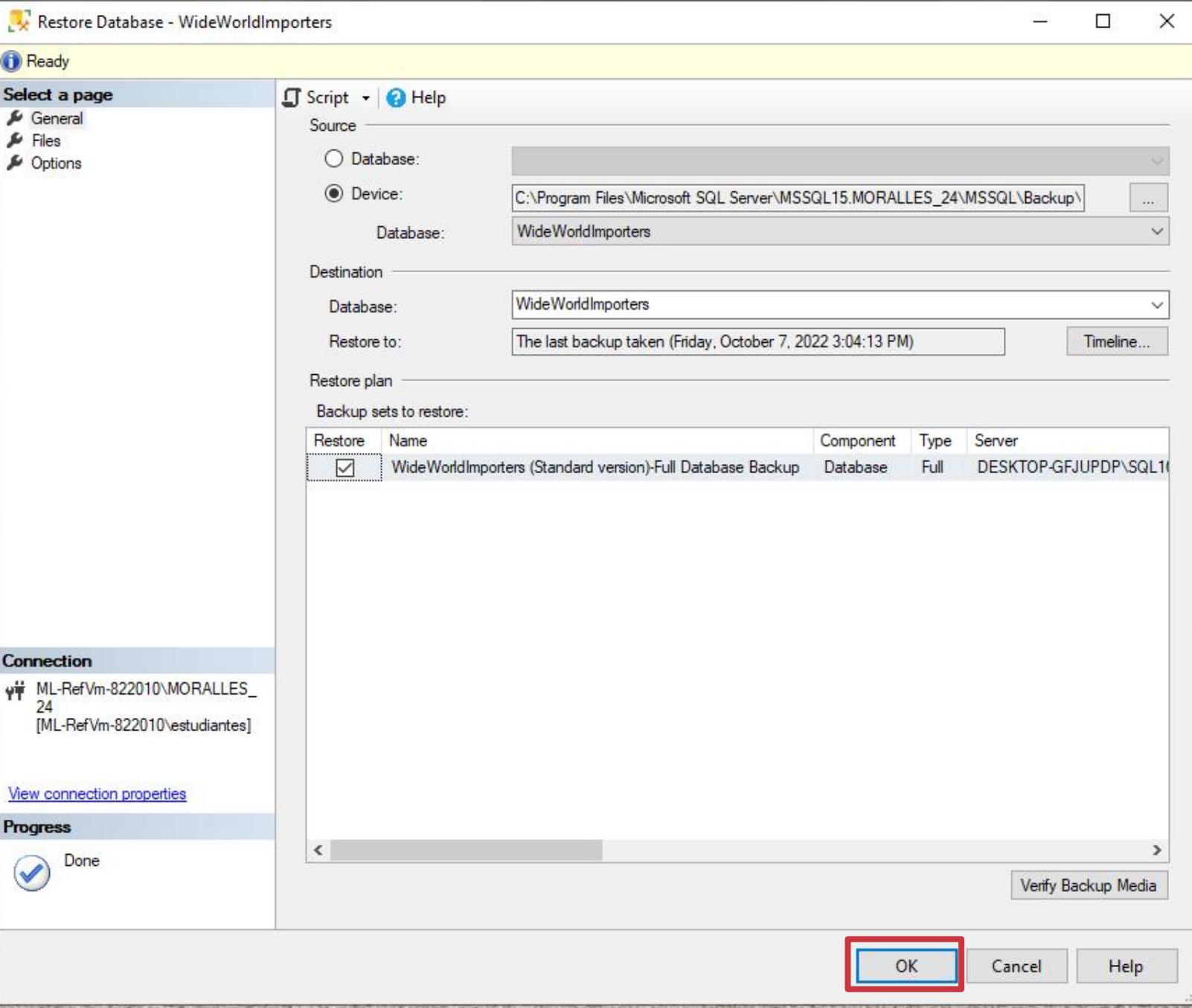


Seleccionamos la opción “Device”  
y hacemos clic en los 3 puntos









Microsoft SQL Server Management Studio (Administrator)

File Edit View Tools Window Help

New Query NDX DMX XMLA DAX Execute

Object Explorer

Connect

ML-RefVm-822010\MORALLES\_24 (SQL Server)

Databases

- System Databases
- Database Snapshots
- AdventureWorksDW2019
- BIKESTORE
- Datawarehouse\_BKST
- Northwind
- WideWorldImporters

Security

Server Objects

Replication

PolyBase

Always On High Availability

Management

Integration Services Catalogs

SQL Server Agent

XEvent Profiler

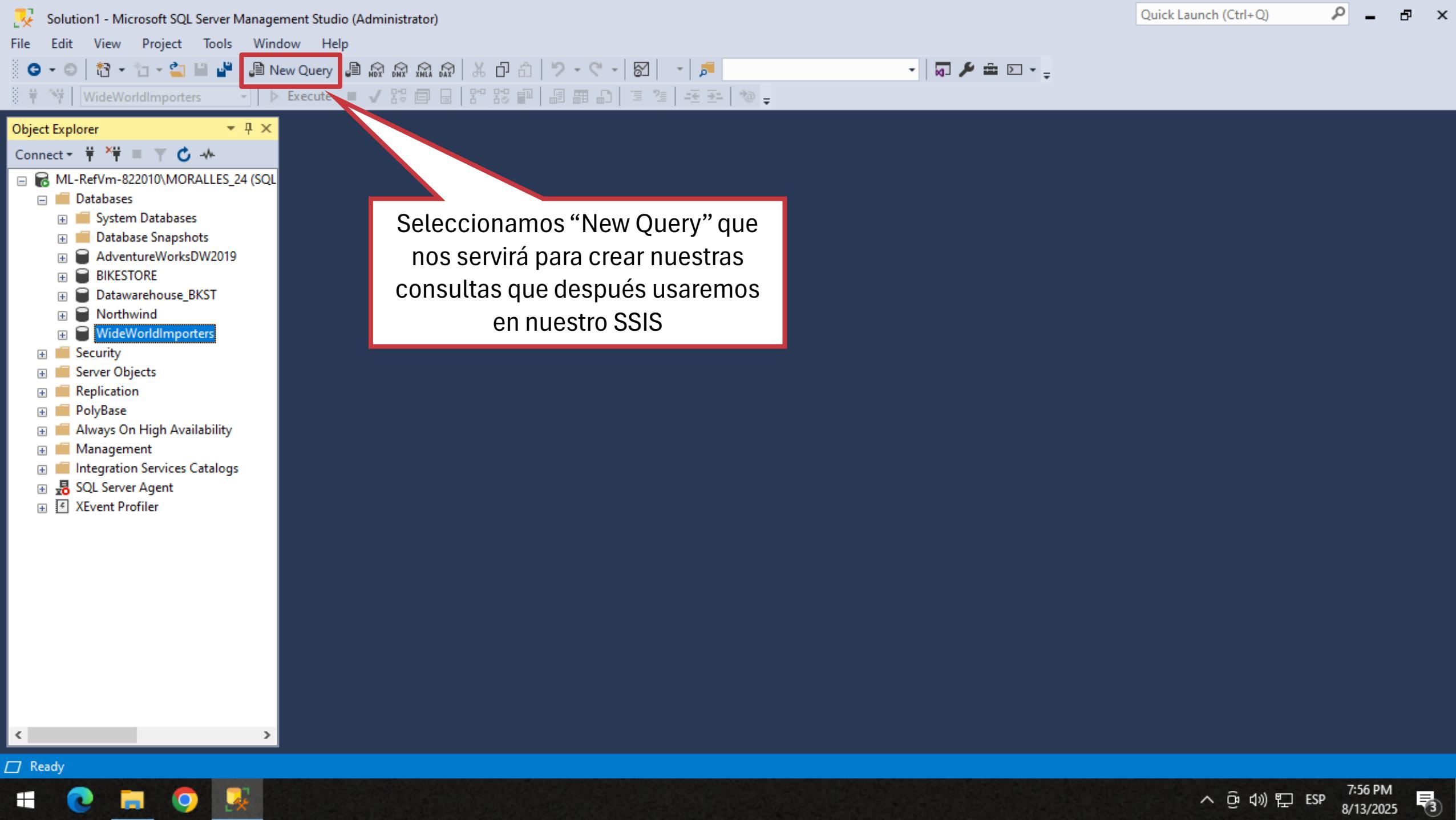
Ya tendríamos nuestra base de datos en nuestro servidor añadida

Ready

Quick Launch (Ctrl+Q)

1:51 PM 8/13/2025

The screenshot shows the Microsoft SQL Server Management Studio (SSMS) interface. The 'Object Explorer' pane is open, displaying a tree view of databases on the server 'ML-RefVm-822010\MORALLES\_24'. A red box highlights the 'WideWorldImporters' database node under the 'Databases' folder. A red callout box points from the bottom left towards the highlighted node. The status bar at the bottom right shows the time as 1:51 PM and the date as 8/13/2025.



```
USE WideWorldImporters

--DIM LOCATION
SELECT
    R.CityID,
    R.CityName,
    R.LatestRecordedPopulation AS CityPopulation,
    P.StateProvinceID,
    P.StateProvinceName,
    P.StateProvinceCode,
    P.LatestRecordedPopulation AS StatePopulation,
    N.CountryID,
    N.CountryName,
    N.Continent,
    N.LatestRecordedPopulation AS CountryPopulation
FROM Application.Cities R
INNER JOIN Application.StateProvinces P
    ON R.StateProvinceID = P.StateProvinceID
INNER JOIN Application.Countries N
    ON P.CountryID = N.CountryID;
```

```
--DIM PRODUCT
```

100 %

Results Messages

	CityID	CityName	CityPopulation	StateProvinceID	StateProvinceName	StateProvinceCode	StatePopulation	CountryID	CountryName	Continent	CountryPopulation
1	1	Aaronsburg	613	39	Pennsylvania	PA	13284753	230	United States	North America	313973000
2	3	Abanda	192	1	Alabama	AL	5437278	230	United States	North America	313973000
3	4	Abbeville	5237	42	South Carolina	SC	4774839	230	United States	North America	313973000
4	5	Abbeville	2908	11	Georgia	GA	9992167	230	United States	North America	313973000
5	6	Abbeville	2688	1	Alabama	AL	5437278	230	United States	North America	313973000
6	7	Abbeville	12257	19	Louisiana	LA	4810488	230	United States	North America	313973000
7	8	Abbeville	419	25	Mississippi	MS	2991207	230	United States	North America	313973000

✓ Query executed successfully.

ML-RefVm-822010\MORALLES\_24...

ML-RefVm-822010\estudi... | WideWorldImporters | 00:00:00 | 37,940 rows

Procedemos a crear nuestras dimensiones

```
--DIM PRODUCT
```

```
SELECT O.StockItemID, O.StockItemName, V.ColorName, V.ColorID, Y.StockGroupID, Y.StockGroupName,
G.QuantityOnHand, G.LastStocktakeQuantity, G.BinLocation, G.LastEditedWhen FROM Warehouse.StockItems O
INNER JOIN Warehouse.Colors V
ON O.ColorID = V.ColorID
INNER JOIN Warehouse.StockItemStockGroups L
ON O.StockItemID = L.StockItemID
INNER JOIN Warehouse.StockGroups Y
ON L.StockGroupID = Y.StockGroupID
INNER JOIN Warehouse.StockItemHoldings G
ON O.StockItemID = G.StockItemID
```

110 %

Results Messages

	StockItemID	StockItemName	ColorName	ColorID	StockGroupID	StockGroupName	QuantityOnHand	LastStocktakeQuantity	BinLocation	LastEditedWhen
1	76	"The Gu" red shirt XML tag t-shirt (White) 3XS	White	35	2	Clothing	129929	127169	K-1	2016-05-31 12:00:00.000
2	77	"The Gu" red shirt XML tag t-shirt (White) XXS	White	35	2	Clothing	27	15	K-1	2016-05-31 07:00:00.000
3	78	"The Gu" red shirt XML tag t-shirt (White) XS	White	35	2	Clothing	16	28	K-1	2016-05-31 12:00:00.000
4	79	"The Gu" red shirt XML tag t-shirt (White) S	White	35	2	Clothing	24895	24871	K-1	2016-05-31 07:00:00.000
5	80	"The Gu" red shirt XML tag t-shirt (White) M	White	35	2	Clothing	20	8	K-1	2016-05-31 12:00:00.000
6	81	"The Gu" red shirt XML tag t-shirt (White) L	White	35	2	Clothing	106773	103977	K-1	2016-05-31 12:00:00.000
7	82	"The Gu" red shirt XML tag t-shirt (White) XL	White	35	2	Clothing	6706	7254	K-1	2016-05-31 12:00:00.000
8	83	"The Gu" red shirt XML tag t-shirt (White) XXL	White	35	2	Clothing	224185	218581	K-1	2016-05-31 12:00:00.000
9	84	"The Gu" red shirt XML tag t-shirt (White) 3XL	White	35	2	Clothing	5439	5871	K-1	2016-05-31 07:00:00.000
10	85	"The Gu" red shirt XML tag t-shirt (White) 4XL	White	35	2	Clothing	56210	54554	K-1	2016-05-31 07:00:00.000

Query executed successfully.

| ML-RefVm-822010\MORALLES\_24... | ML-RefVm-822010\estudi... | WideWorldImporters | 00:00:00 | 297 rows

```

    INNER JOIN Warehouse.StockItemStockGroups L
    ON O.StockItemID = L.StockItemID
    INNER JOIN Warehouse.StockGroups Y
    ON L.StockGroupID = Y.StockGroupID
    INNER JOIN Warehouse.StockItemHoldings G
    ON O.StockItemID = G.StockItemID

```

--DIM PEOPLE

```
SELECT * FROM Application.People
```

110 %

Results Messages

	PersonID	FullName	PreferredName	SearchName	IsPermittedToLogon	LogonName	IsExternalLogonProvider	HashedPassword
1	1	Data Conversion Only	Data Conversion Only	Data Conversion Only Data Conversion Only	0	NO LOGON	0	NULL
2	2	Kayla Woodcock	Kayla	Kayla Kayla Woodcock	1	kaylaw@wideworldimporters.com	0	0x616E9B55897
3	3	Hudson Onslow	Hudson	Hudson Hudson Onslow	1	hudsono@wideworldimporters.com	0	0x23668CCC57
4	4	Isabella Rupp	Isabella	Isabella Isabella Rupp	1	isabellar@wideworldimporters.com	0	0xB45E7C4E37
5	5	Eva Muirden	Eva	Eva Eva Muirden	0	evam@wideworldimporters.com	0	0xE682D36E43
6	6	Sophia Hinton	Sophia	Sophia Sophia Hinton	1	sophiah@wideworldimporters.com	0	0x451BB10A51!
7	7	Amy Trefl	Amy	Amy Amy Trefl	1	amyt@wideworldimporters.com	0	0x7A92BBEA83
8	8	Anthony Grosse	Anthony	Anthony Anthony Grosse	1	anthonyg@wideworldimporters.com	0	0x2FD8B838A3
9	9	Alica Fatnowna	Alica	Alica Alica Fatnowna	1	alicaf@wideworldimporters.com	0	0x7DFAB08E9A
10	10	Stella Rosenhain	Stella	Stella Stella Rosenhain	1	stellar@wideworldimporters.com	0	0x1BA4B55887I

Query executed successfully.

ML-RefVm-822010\MORALLES\_24...

ML-RefVm-822010\estudi...

WideWorldImporters 00:00:00 1,111 rows

ML-RefVm-822010\...upplierCategories SQLQuery3.sql - ML...0\estudiantes (56)\*

```
--DIM SUPPLIERS

SELECT I.SupplierID, I.SupplierName, X.SupplierCategoryID, X.SupplierCategoryName, I.PrimaryContactPersonID, B.FullName,
B.EmailAddress, B.PhoneNumber,D.StockItemID, D.StockItemName, C.DeliveryMethodID, C.DeliveryMethodName
FROM Purchasing.Suppliers I
INNER JOIN Purchasing.SupplierCategories X
ON I.SupplierCategoryID = X.SupplierCategoryID
INNER JOIN Application.People B
ON I.PrimaryContactPersonID = B.PersonID
INNER JOIN Warehouse.StockItems D
ON I.SupplierID = D.SupplierID
INNER JOIN Application.DeliveryMethods C
ON I.DeliveryMethodID = C.DeliveryMethodID
```

110 %

	SupplierID	SupplierName	SupplierCategoryID	SupplierCategoryName	PrimaryContactPersonID	FullName	EmailAddress	PhoneNumber	StockItemID	StockItemName
1	12	The Phone Company	2	Novelty Goods Supplier	43	Hai Dam	haid@thephone-company.com	(218) 555-0101	1	USB missile launcher
2	12	The Phone Company	2	Novelty Goods Supplier	43	Hai Dam	haid@thephone-company.com	(218) 555-0101	2	USB rocket launcher
3	12	The Phone Company	2	Novelty Goods Supplier	43	Hai Dam	haid@thephone-company.com	(218) 555-0101	3	Office cube periscope
4	12	The Phone Company	2	Novelty Goods Supplier	43	Hai Dam	haid@thephone-company.com	(218) 555-0101	4	USB food flash drive
5	12	The Phone Company	2	Novelty Goods Supplier	43	Hai Dam	haid@thephone-company.com	(218) 555-0101	5	USB food flash drive
6	12	The Phone Company	2	Novelty Goods Supplier	43	Hai Dam	haid@thephone-company.com	(218) 555-0101	6	USB food flash drive
7	12	The Phone Company	2	Novelty Goods Supplier	43	Hai Dam	haid@thephone-company.com	(218) 555-0101	7	USB food flash drive
8	12	The Phone Company	2	Novelty Goods Supplier	43	Hai Dam	haid@thephone-company.com	(218) 555-0101	8	USB food flash drive
9	12	The Phone Company	2	Novelty Goods Supplier	43	Hai Dam	haid@thephone-company.com	(218) 555-0101	9	USB food flash drive
10	12	The Phone Company	2	Novelty Goods Supplier	43	Hai Dam	haid@thephone-company.com	(218) 555-0101	10	USB food flash drive

✓ Query executed successfully.

| ML-RefVm-822010\MORALLES\_24... | ML-RefVm-822010\estudi... | WideWorldImporters | 00:00:00 | 227 rows

SQLQuery3.sql - ML...0\estudiantes (56)\* X ML-RefVm-822010\...ales.BuyingGroups ML-RefVm-822010\... Sales.Customers ML-RefVm-822010\...n.DeliveryMethods

```

ON I.DeliveryMethodID = C.DeliveryMethodID

--DIM CUSTOMERS

SELECT K.CustomerID, K.CustomerName, K.CustomerCategoryID, J.CustomerCategoryName, K.BuyingGroupID, Y.BuyingGroupName,
K.PhoneNumber, K.FaxNumber FROM Sales.Customers K
INNER JOIN Sales.CustomerCategories J
ON K.CustomerCategoryID = J.CustomerCategoryID
INNER JOIN Sales.BuyingGroups Y
ON K.BuyingGroupID = Y.BuyingGroupID

```

110 %

Results Messages

	CustomerID	CustomerName	CustomerCategoryID	CustomerCategoryName	BuyingGroupID	BuyingGroupName	PhoneNumber	FaxNumber
100	100	Tailspin Toys (Tunnelhill, PA)	3	Novelty Shop	1	Tailspin Toys	(215) 555-0100	(215) 555-0101
101	101	Tailspin Toys (Cundiyo, NM)	3	Novelty Shop	1	Tailspin Toys	(505) 555-0100	(505) 555-0101
102	102	Tailspin Toys (Fieldbrook, CA)	3	Novelty Shop	1	Tailspin Toys	(209) 555-0100	(209) 555-0101
103	103	Tailspin Toys (Kalvesta, KS)	3	Novelty Shop	1	Tailspin Toys	(316) 555-0100	(316) 555-0101
104	104	Tailspin Toys (Wallagrass, ME)	3	Novelty Shop	1	Tailspin Toys	(207) 555-0100	(207) 555-0101
105	105	Tailspin Toys (Tomnolen, MS)	3	Novelty Shop	1	Tailspin Toys	(228) 555-0100	(228) 555-0101
106	106	Tailspin Toys (Tumacacori, AZ)	3	Novelty Shop	1	Tailspin Toys	(480) 555-0100	(480) 555-0101
107	107	Tailspin Toys (Glen Avon, CA)	3	Novelty Shop	1	Tailspin Toys	(209) 555-0100	(209) 555-0101
108	108	Tailspin Toys (Bemie, MO)	3	Novelty Shop	1	Tailspin Toys	(314) 555-0100	(314) 555-0101
109	109	Tailspin Toys (South Laguna, CA)	3	Novelty Shop	1	Tailspin Toys	(209) 555-0100	(209) 555-0101
110	110	Tailspin Toys (North Crows Nest, ...	3	Novelty Shop	1	Tailspin Toys	(219) 555-0100	(219) 555-0101

Query executed successfully.

ML-RefVm-822010\MORALLES\_24... | ML-RefVm-822010\estudi... | WideWorldImporters | 00:00:00 | 402 rows

## --DIM SALES

```
SELECT R.OrderID, R.OrderDate, V.CustomerID, V.CustomerName, C.StockItemID, C.StockItemName,
C.Brand, C.Size, N.ColorID, N.ColorName FROM Sales.Orders R
INNER JOIN sales.OrderLines Q
ON R.OrderID = Q.OrderID
INNER JOIN sales.Customers V
ON R.CustomerID = V.CustomerID
INNER JOIN Warehouse.StockItems C
ON Q.StockItemID = C.StockItemID
INNER JOIN Warehouse.Colors N
ON C.ColorID = N.ColorID
```

110 %

Results Messages

	OrderID	OrderDate	CustomerID	CustomerName	StockItemID	StockItemName	Brand	Size	ColorID	ColorName
1	275	2013-01-04	62	Tailspin Toys (Great Neck Estates, NY)	174	Bubblewrap dispenser (Black) 1.5m	NULL	1.5m	3	Black
2	386	2013-01-07	147	Tailspin Toys (Fishtail, MT)	174	Bubblewrap dispenser (Black) 1.5m	NULL	1.5m	3	Black
3	497	2013-01-09	946	David safranek	174	Bubblewrap dispenser (Black) 1.5m	NULL	1.5m	3	Black
4	555	2013-01-10	976	Alinne Matos	174	Bubblewrap dispenser (Black) 1.5m	NULL	1.5m	3	Black
5	585	2013-01-10	88	Tailspin Toys (Dracut, MA)	174	Bubblewrap dispenser (Black) 1.5m	NULL	1.5m	3	Black
6	643	2013-01-11	475	Wingtip Toys (Cale, AR)	174	Bubblewrap dispenser (Black) 1.5m	NULL	1.5m	3	Black
7	649	2013-01-11	516	Wingtip Toys (Harkers Island, NC)	174	Bubblewrap dispenser (Black) 1.5m	NULL	1.5m	3	Black
8	715	2013-01-14	997	Nada Ana Slosar	174	Bubblewrap dispenser (Black) 1.5m	NULL	1.5m	3	Black
9	761	2013-01-14	857	Clarissa Manfrin	174	Bubblewrap dispenser (Black) 1.5m	NULL	1.5m	3	Black
10	790	2013-01-15	586	Wingtip Toys (Lynne, FL)	174	Bubblewrap dispenser (Black) 1.5m	NULL	1.5m	3	Black
11	800	2013-01-15	133	Tailspin Toys (Lake Erie Beach, NY)	174	Bubblewrap dispenser (Black) 1.5m	NULL	1.5m	3	Black

✓ Query executed successfully.

| ML-RefVm-822010\MORALLES\_24... | ML-RefVm-822010\estudi... | WideWorldImporters | 00:00:01 | 134,665 rows

--FACT TABLE

```
SELECT Z.OrderID, X.InvoiceID, Z.OrderDate, X.InvoiceDate, B.CustomerID, B.CustomerName, K.StockItemID,
G.StockItemName, K.Description, K.PackageTypeID, I.PackageTypeName, X.DeliveryMethodID, U.DeliveryMethodName,
K.Quantity, K.UnitPrice, (K.Quantity * K.UnitPrice) AS Total, K.TaxRate, K.TaxAmount, ((K.Quantity*K.UnitPrice)+K.TaxAmount)
AS Total_with_Tax, K.LineProfit FROM Sales.Orders Z
INNER JOIN Sales.Invoices X
ON Z.OrderID = X.OrderID
INNER JOIN Sales.Customers B
ON Z.CustomerID = B.CustomerID
INNER JOIN Sales.InvoiceLines K
ON X.InvoiceID = K.InvoiceID
INNER JOIN Warehouse.StockItems G
ON K.StockItemID = G.StockItemID
INNER JOIN Warehouse.PackageTypes I
ON K.PackageTypeID = I.PackageTypeID
INNER JOIN Application.DeliveryMethods U
ON X.DeliveryMethodID = U.DeliveryMethodID
```

Y creamos nuestra Fact Table

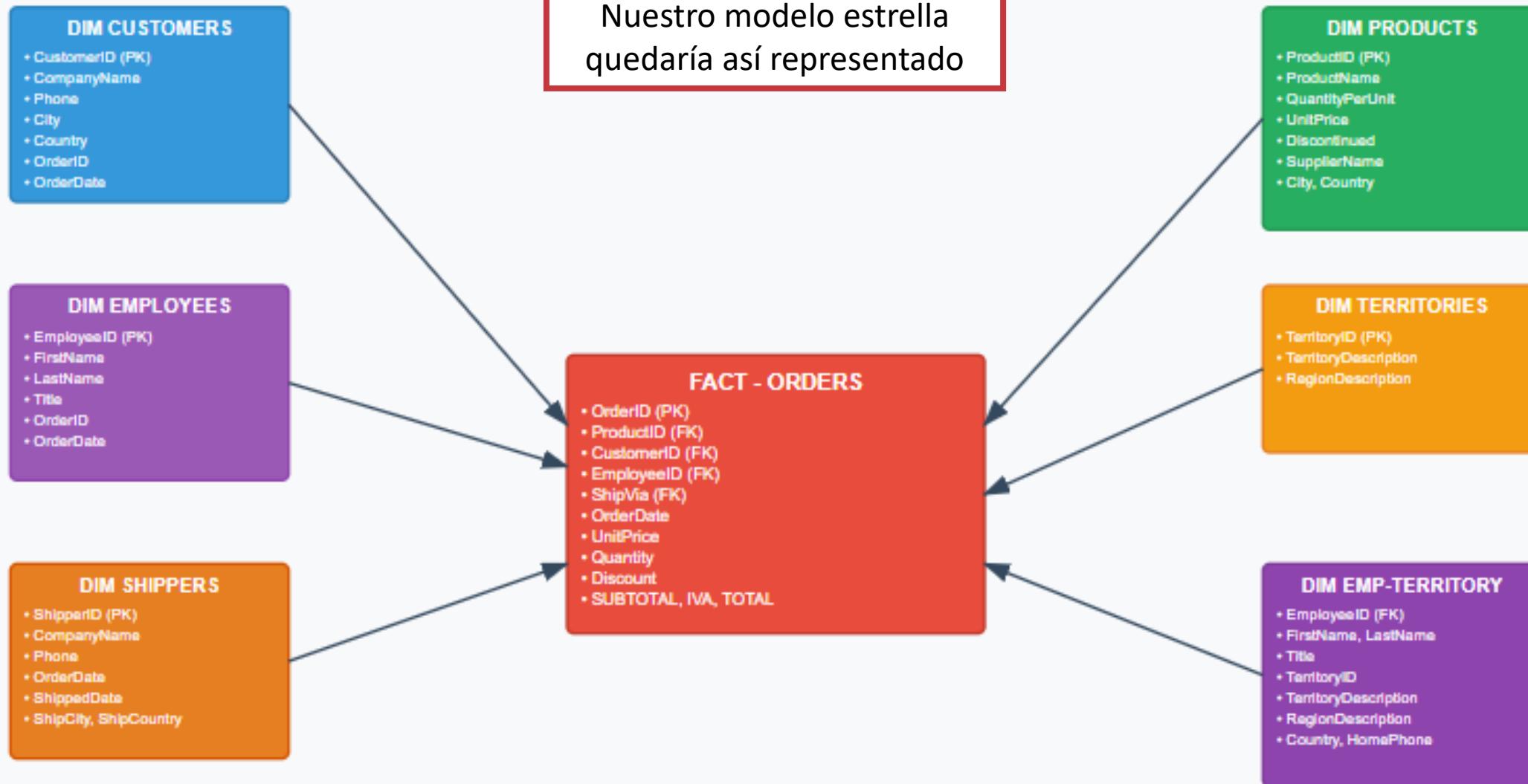
100 %

Results Messages

	OrderID	InvoiceID	OrderDate	InvoiceDate	CustomerID	CustomerName	StockItemID	StockItemName	Description
1	1	1	2013-01-01	2013-01-01	832	Aakriti Byrraju	67	Ride on toy sedan car (Black) 1/12 scale	Ride on toy sedan car (Black) 1/12 scale
2	2	2	2013-01-01	2013-01-01	803	Bala Dixit	50	Developer joke mug - old C developers never die (...)	Developer joke mug - old C developers never die (...)
3	2	2	2013-01-01	2013-01-01	803	Bala Dixit	10	USB food flash drive - chocolate bar	USB food flash drive - chocolate bar
4	3	3	2013-01-01	2013-01-01	105	Tailspin Toys (Tommolen, MS)	114	Superhero action jacket (Blue) XXL	Superhero action jacket (Blue) XXL
5	4	4	2013-01-01	2013-01-01	57	Tailspin Toys (Lakemore, OH)	206	Permanent marker black 5mm nib (Black) 5mm	Permanent marker black 5mm nib (Black) 5mm
6	4	4	2013-01-01	2013-01-01	57	Tailspin Toys (Lakemore, OH)	130	Funny gorilla with big eyes slippers (Black) S	Funny gorilla with big eyes slippers (Black) S
7	4	4	2013-01-01	2013-01-01	57	Tailspin Toys (Lakemore, OH)	50	Developer joke mug - old C developers never die /	Developer joke mug - old C developers never die /

✓ Query executed successfully.

| ML-RefVm-822010\MORALLES\_24... | ML-RefVm-822010\estudi... | WideWorldImporters | 00:00:03 | 228,265 rows



# **Paso 2: Creación del proyecto ETL en SQL Server Integration Services (SSIS).**



Recycle Bin

≡

#

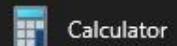
Productivity



A



C



D

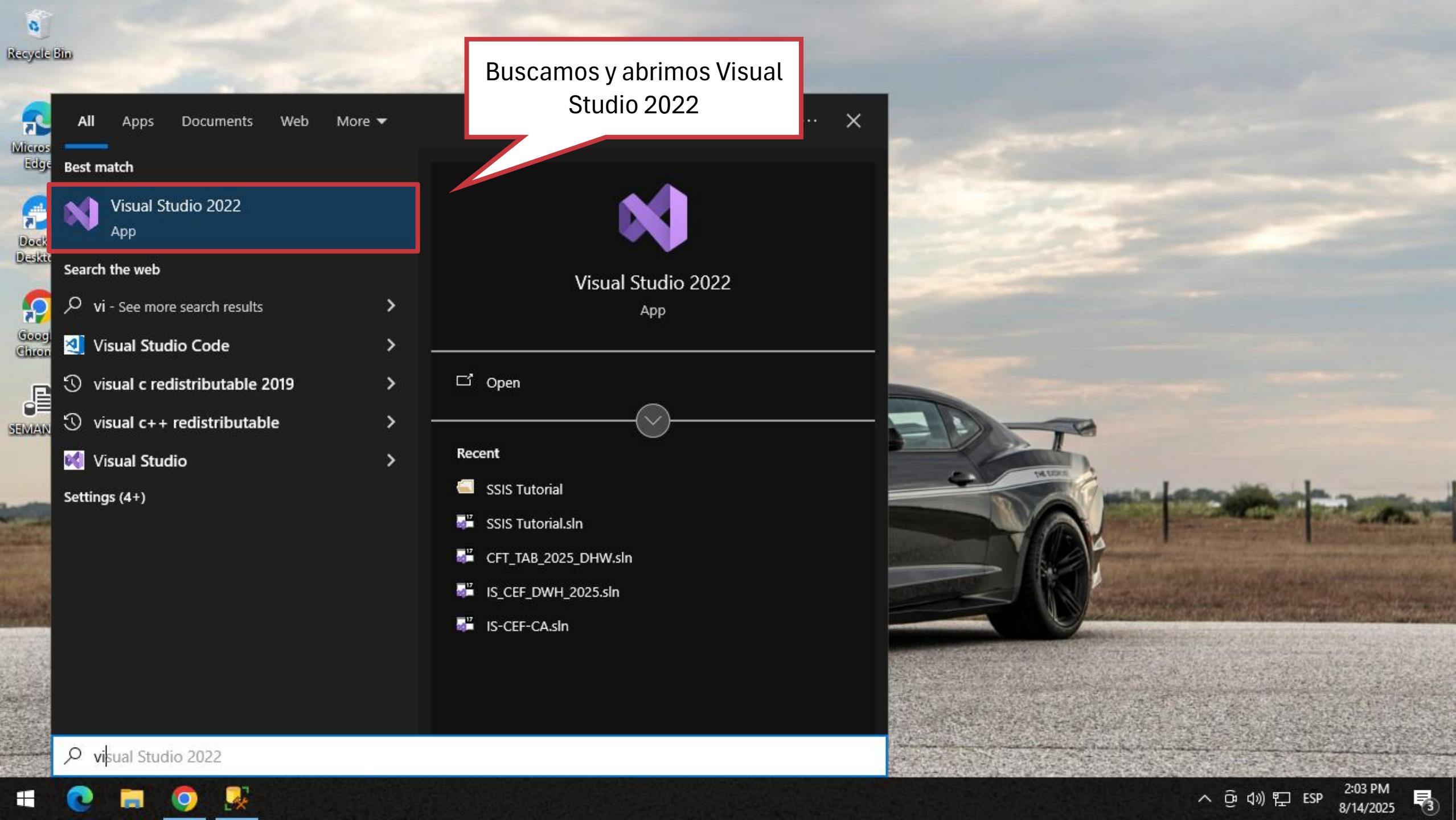


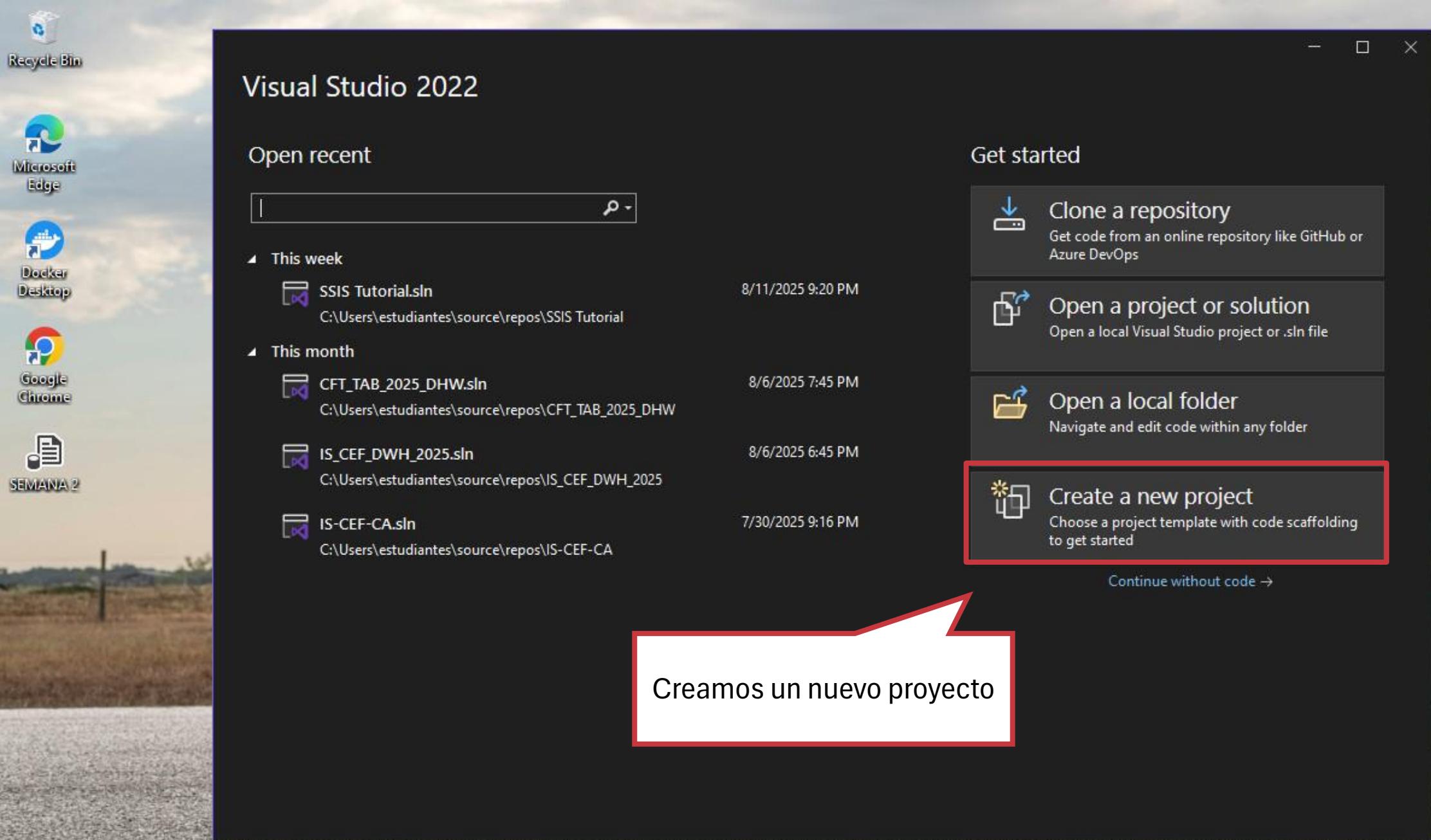
F

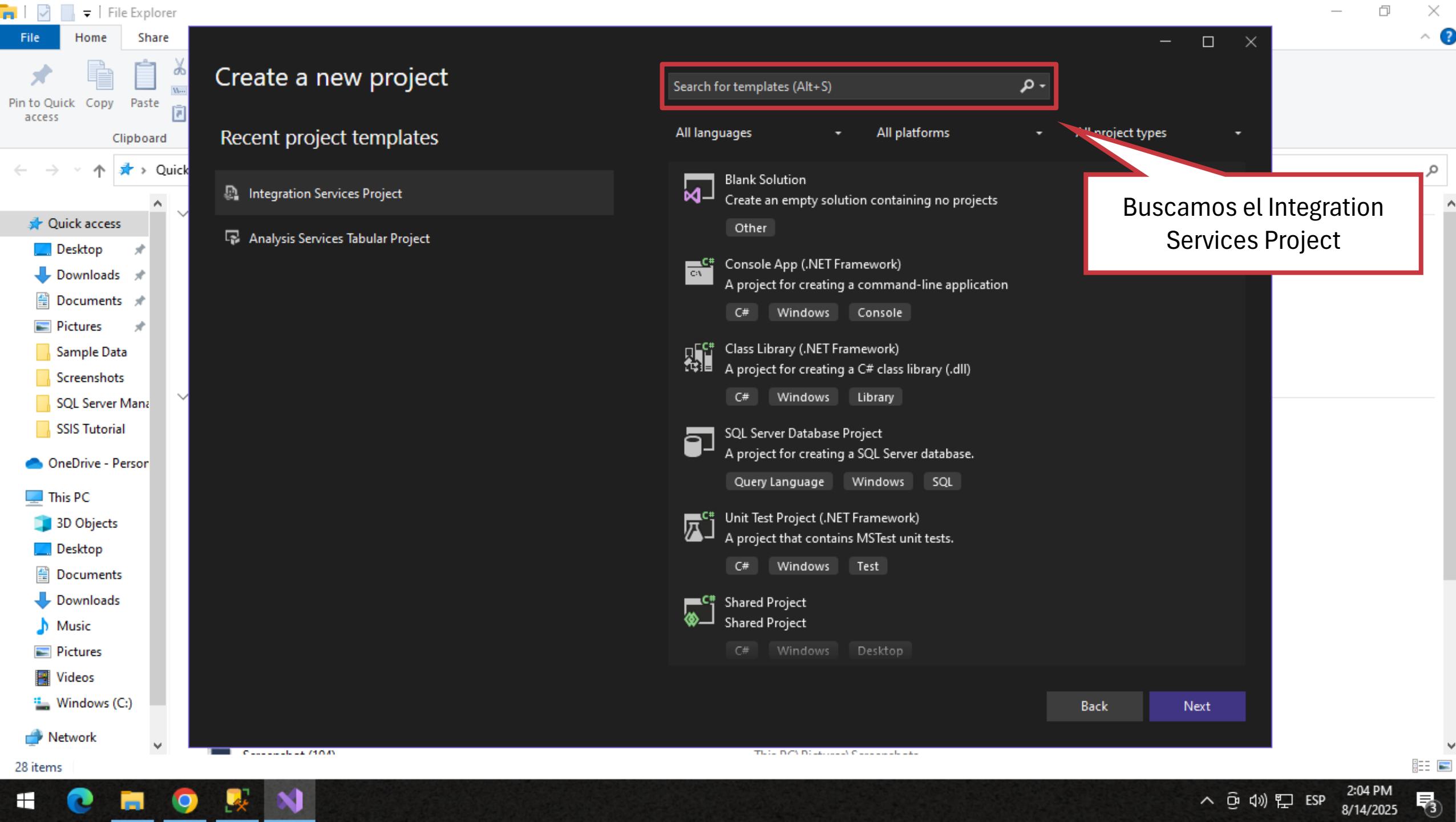


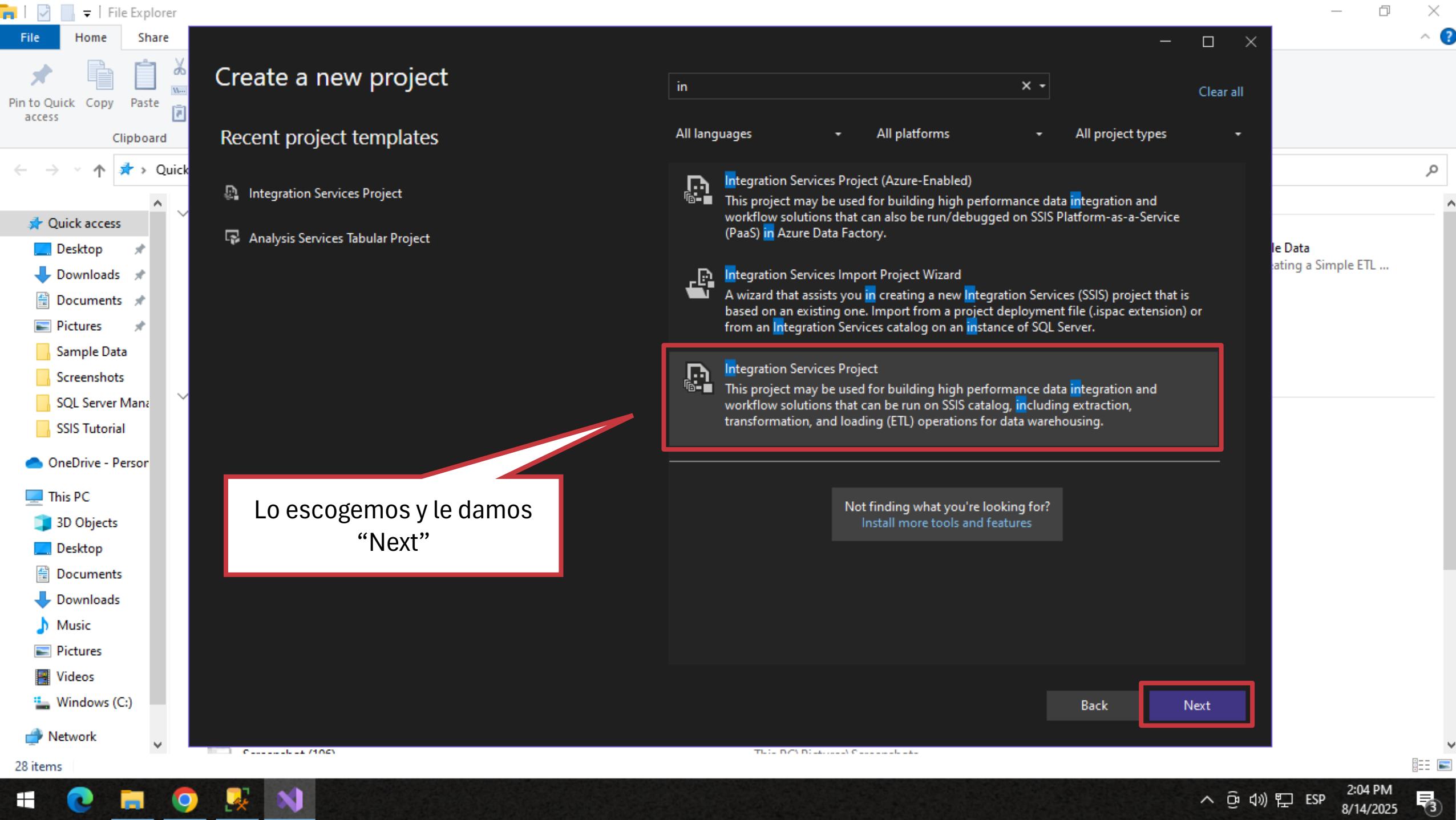
G







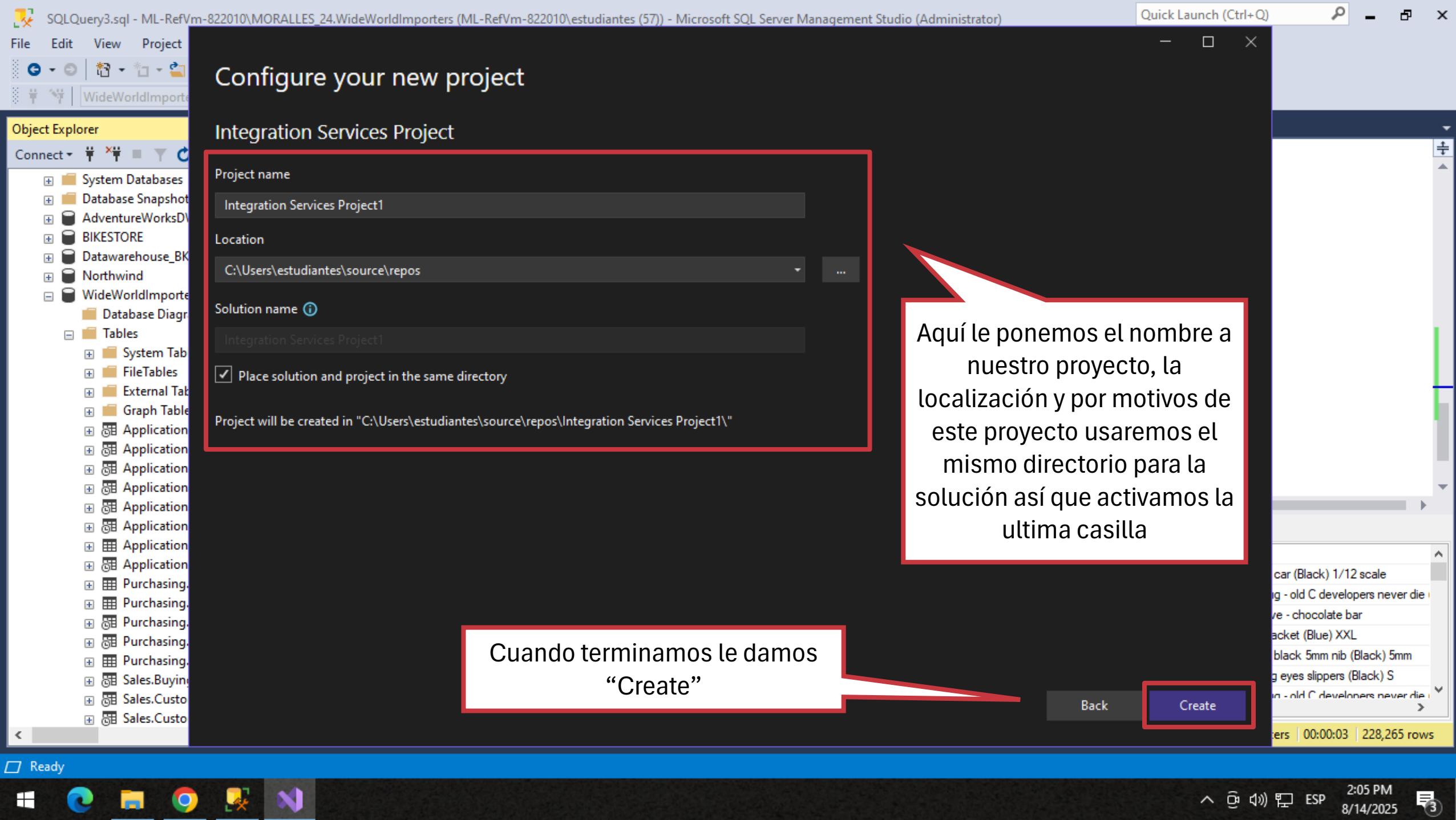




Lo escogemos y le damos  
“Next”

Back

Next



SQLQuery3.sql - ML-RefVm-822010\MORALLES\_24.WideWorldImporters (ML-RefVm-822010\estudiantes (57)) - Microsoft SQL Server Management Studio (Administrator)

Quick Launch (Ctrl+Q) - X

File Edit View Project Tools Window Help

New Query Execute

Object Explorer WideWorldImporters

ML-RefVm-822010\M...ales.InvoiceLines SQLQuery3.sql - ML...0\estudiantes (57)

INNER JOIN Warehouse.StockItems G  
ON K.StockItemID = G.StockItemID  
INNER JOIN Warehouse.PackageTypes I  
PackageTypeID = I.PackageTypeID  
INNER JOIN Application.DeliveryMethods U  
DeliveryMethodID = U.DeliveryMethodID

Database New Database...

- Attach...
- Restore Database...
- Restore Files and Filegroups...
- Filter
- Deploy Data-tier Application...
- Import Data-tier Application...
- Start PowerShell
- Reports
- Refresh

Results Messages

OrderID	InvoiceID	OrderDate	InvoiceDate	CustomerID	CustomerName	StockItemID	StockItemName	Description
1	1	2013-01-01	2013-01-01	832	Aakriti Byrraju	67	Ride on toy sedan car (Black) 1/12 scale	Ride on toy sedan car (Black) 1/12 scale
2	2	2013-01-01	2013-01-01	803	Bala Dixit	50	Developer joke mug - old C developers never die (...)	Developer joke mug - old C developers never die (...)
3	2	2013-01-01	2013-01-01	803	Bala Dixit	10	USB food flash drive - chocolate bar	USB food flash drive - chocolate bar
4	3	2013-01-01	2013-01-01	105	Tailspin Toys (Tomnolen, MS)	114	Superhero action jacket (Blue) XXL	Superhero action jacket (Blue) XXL
5	4	2013-01-01	2013-01-01	57	Tailspin Toys (Lakemore, OH)	206	Permanent marker black 5mm nib (Black) 5mm	Permanent marker black 5mm nib (Black) 5mm
6	4	2013-01-01	2013-01-01	57	Tailspin Toys (Lakemore, OH)	130	Furry gorilla with big eyes slippers (Black) S	Furry gorilla with big eyes slippers (Black) S
7	4	2013-01-01	2013-01-01	57	Tailspin Toys (Lakemore, OH)	50	Developer joke mug - old C developers never die (...)	Developer joke mug - old C developers never die (...)

Query executed successfully.

ML-RefVm-822010\MORALLES\_24... | ML-RefVm-822010\estudi... | WideWorldImporters | 00:00:03 | 228,265 rows

Ready

Windows Taskbar icons: File Explorer, Google Chrome, Visual Studio, etc.

System tray icons: Network, Battery, Volume, etc.

Bottom status bar: 2:08 PM 8/14/2025

Text box: Despues nos dirigimos a nuestro SSMS para crear una nueva base de datos que será nuestro DWH

SQLQuery3.sql - ML-RefVm-822010\MORALLES\_24.WideWorldImporters (ML-RefVm-822010\estudiantes (57) - Microsoft SQL Server Management Studio (Administrator))

Quick Launch (Ctrl+Q)

File Edit View Project Tools Window Help

New Database

Select a page: General Options Filegroups

Script Help

Database name: Datawarehouse\_WWI

Owner: <default>

Use full-text indexing

Database files:

Logical Name	File Type	Filegroup	Initial Size (MB)	Autogrowth / Maxsize	Path
Datawareh...	ROWS...	PRIMARY	8	By 64 MB, Unlimited	C:\...
Datawareh...	LOG	Not Applicable	8	By 64 MB, Unlimited	C:\...

Connection

Server: ML-RefVm-822010\MORALLES\_2

Connection: ML-RefVm-822010\estudiantes

[View connection properties](#)

Results

OrderID
1
2
3
4
5
6
7

Progress

Ready

Add Remove OK Cancel

Le ponemos nombre a nuestro DWH y luego le damos "OK"

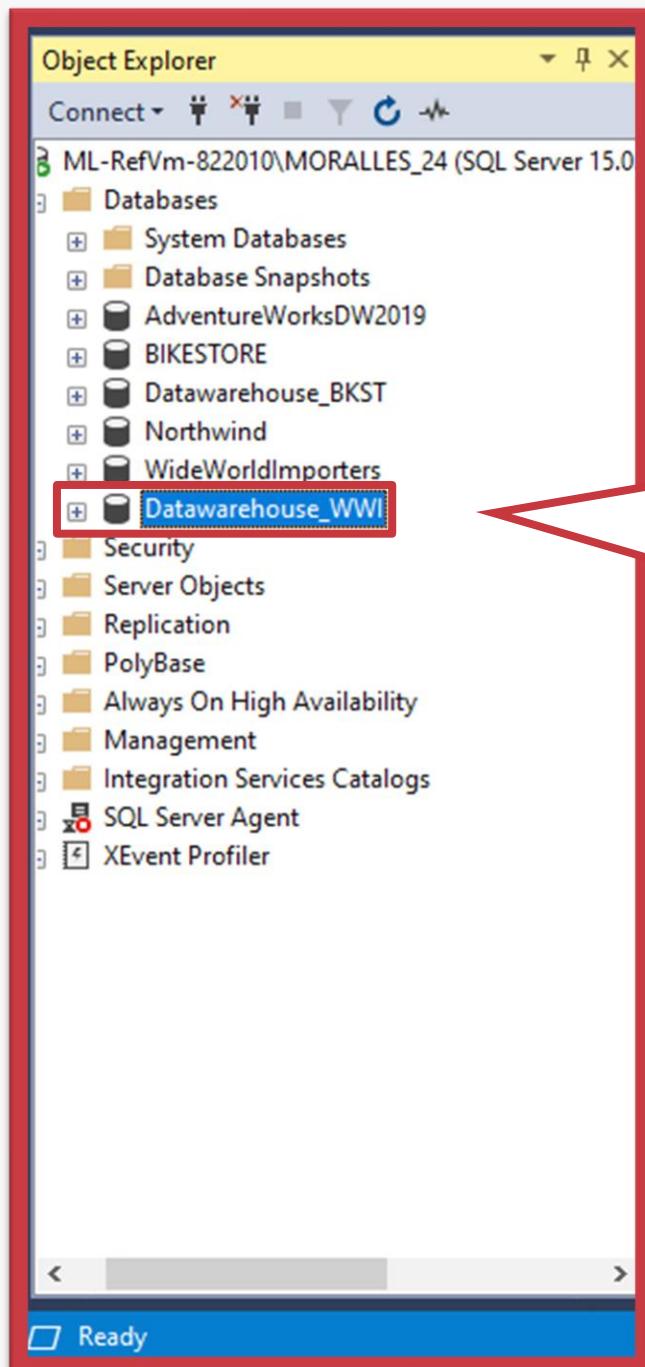
Description

- Ride on toy sedan car (Black) 1/12 scale
- Developer joke mug - old C developers never die
- USB food flash drive - chocolate bar
- Superhero action jacket (Blue) XXL
- Permanent marker black 5mm nib (Black) 5mm
- Funny gorilla with big eyes slippers (Black) S
- Developer joke mug - old C developers never die

Ready

2:09 PM 8/14/2025

SQL Server Management Studio



Ya tendríamos creado nuestra base de datos que será nuestro Data Warehouse

(Recordar que por motivos de este proyecto, el Data Warehouse se creará en el **mismo servidor** que la base de datos original (*Wide World Importers*) para simplificar la configuración y evitar la necesidad de conexiones remotas.

En un entorno real, se recomienda alojar el Data Warehouse en un servidor independiente para optimizar el rendimiento y la seguridad.)

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Default | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer | Select Perspective | GitHub Copilot | ADMIN

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

Azure

Containers: For Loop Container

Information... Drag a toolbox item to SSIS Designer to use it.

Package.dtsx [Design] | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer

Nos regresamos a Visual Studio 2022 para hacer la conexión al servidor

Solution Explorer | Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project) | IS\_DWH\_WWI\_2025 | Project.params | Connection Managers | SSIS Packages | Package.dtsx | Package Parts | Control Flow | Miscellaneous | Linked Azure Resources | Azure-SSIS Integration Runtime | Azure Storage

Properties | Package | CreationDate: 8/14/2025 2:06 PM | CreatorComputerName: ML-RefVm-822010 | CreatorName: ML-RefVm-822010\estudiante | Description: | ID: {96E1B8C4-2000-479A-8773} | Name: Package | PackageType: DTSDesinger100 | Name: Specifies the name of the object.

Ready | Add to Source Control | Select Repository | GitHub Copilot Chat | Solution Explorer | Git Changes | 2:10 PM | 8/14/2025 | 3

SSIS Toolbox | Package.dtsx [Design] | Default | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer

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

Azure: Containers, For Loop Container

Information... Drag a toolbox item to SSIS Designer to use it.

Solution Explorer: Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project), IS\_DWH\_WWI\_2025, Project.params, New Connection Manager (highlighted with red box)

Properties: Connection Managers, Location, Name

Right-click here to add a new connection manager to the SSIS package.

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Package.dtsx [Design] | Default | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer

Add SSIS Connection Manager | Select the type of connection manager to add to the package.

Connection manager type:

Type	Description	File Name
Hadoop	Connection manager for Hadoop	Microso
HTTP	Connection manager for HTTP connections	C:\Prog
MSMQ	Connection manager for the Message Queue t...	Microso
MSOLAP100	Connection manager for Analysis Services con...	C:\Prog
MULTIFILE	Connection manager for multiple files	C:\Prog
MULTIFLATFILE	Connection manager for multiple flat files	C:\Prog
ODATA	Connection Manager for OData services	Microso
ODBC	Connection manager for ODBC connections	C:\Prog
<b>OLEDB</b>	<b>Connection manager for OLE DB connections</b>	<b>C:\Prog</b>
SMOServer	Connection manager for SQL Server transfer ta...	Microso
SMTP	Connection manager for the Send Mail task	Microso
WMI	Connection manager for the WMI tasks	Microso

Add... Cancel

Elegimos la conexión tipo OLEDB y damos clic en "Add..."

Solution Explorer | Search Solution Explorer (Ctrl+)

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project) | IS\_DWH\_WWI\_2025 | Project.params | Connection Managers | SSIS Packages | Package.dtsx | Package Parts | Control Flow | Miscellaneous | Linked Azure Resources | Azure-SSIS Integration Runtime | Azure Storage

Properties | Connection Managers | Location | Name: Connection Managers

Drag a toolbox item to SSIS Designer to use it.

Right-click here to add a new connection manager to the SSIS package.

Add to Source Control | Select Repository | 2:10 PM | 8/14/2025 | 3

SSIS Toolbox | Default | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer

Configure OLE DB Connection Manager

To create a connection manager based on previously defined connection information, select a data connection, and then click OK. To create a new connection manager, click New.

Data connections: Data connection properties:

Property	Value
----------	-------

New... Delete OK Cancel

Hacemos clic en “New”

Connection Managers

Right-click here to add a new connection manager to the SSIS package.

Solution Explorer

Search Solution Explorer (Ctrl+)

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

- Project.params
- Connection Managers
- SSIS Packages
  - Package.dtsx
- Package Parts
  - Control Flow
  - Miscellaneous
- Linked Azure Resources
  - Azure-SSIS Integration Runtime
  - Azure Storage

GitHub Copilot Chat | Solution Explorer | Git Changes

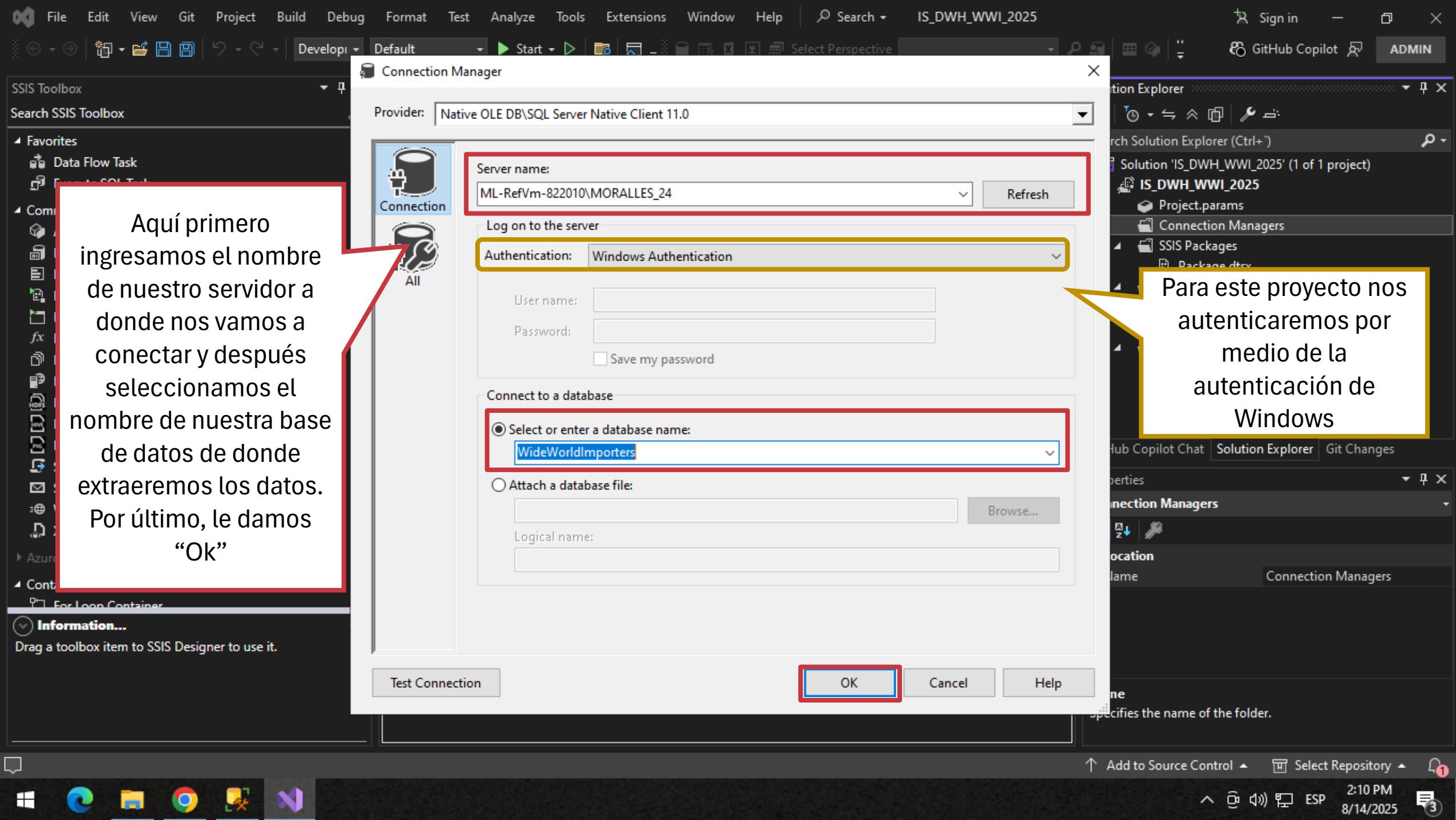
Properties

Connection Managers

Location

Name Connection Managers

Name Specifies the name of the folder.



SSIS Toolbox | Package.dtsx [Design] | Default | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer

Configure OLE DB Connection Manager

To create a connection manager based on previously defined connection information, select a data connection, and then click OK. To create a new connection manager, click New.

Data connections: ML-RefVm-822010\MORALLES\_24.WideWorldlDlr

Data connection properties:

Property	Value	
Data Source	ML-RefVm-822010\... Initial Catalog	WideWorldImporters
Integrated Se...	SSPI	
Provider	SQLNCLI11.1	

New... Delete OK Cancel

Hacemos clic en “Ok”

Right-click here to add a new connection manager to the SSIS package.

Solution Explorer | Search Solution Explorer (Ctrl+)

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

- Project.params
- Connection Managers
- SSIS Packages

  - Package.dtsx

- Package Parts

  - Control Flow
  - Miscellaneous

- Linked Azure Resources

  - Azure-SSIS Integration Runtime
  - Azure Storage

GitHub Copilot Chat | Solution Explorer | Git Changes

Properties | Connection Managers

Location

Name Connection Managers

Name Specifies the name of the folder.

Ya cuando tenemos nuestra conexión lista, arrastramos el “Data Flow Task” a nuestra área central de diseño

File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Package.dtsx [Design] | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer | Default | Start | Select Perspective | Search | GitHub Copilot | ADMIN

Solution Explorer | Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project) | IS\_DWH\_WWI\_2025 | Project.params | Connection Managers | SSIS Packages | Package.dtsx | Package Parts | Miscellaneous | Linked Azure Resources | Azure-SSIS Integration Runtime | Azure Storage | GitHub Copilot Chat | Solution Explorer | Git Changes | Properties | IS\_DWH\_WWI\_2025 | Location | FullPath: C:\Users\estudiantes\source\repo | Name: IS\_DWH\_WWI\_2025 | Name: Specifies the name of the project.

Ready | Add to Source Control | Select Repository | 2:11 PM | 8/14/2025 | 1 | 3

SSIS Toolbox | Package.dtsx [Design]\* | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer | Default | Develop | Start | Select Perspective | GitHub Copilot | ADMIN

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

Azure

Containers

- For Loop Container

**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 essential Integration Services...

Find Samples

Control Flow Data Flow Parameters Event Handlers Package Explorer

Solution Explorer

Search Solution Explorer (Ctrl+)

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

- IS\_DWH\_WWI\_2025
  - Project.params
  - Connection Managers
    - ML-RefVm-822010\_MORALLES\_24.WideWorldIm
  - SSIS Packages
    - Package.dtsx
  - Package Parts
    - Control Flow
  - Miscellaneous
  - Linked Azure Resources
    - Azure-SSIS Integration Runtime
    - Azure Storage

GitHub Copilot Chat | Solution Explorer | Git Changes

Properties

**Data Flow Task** Task

Description	Data Flow Task
ID	{1E8040A9-9094-40B0-9E71-11
Name	<b>Data Flow Task</b>
PackagePath	\Package\Data Flow Task
Misc	
AutoAdjustBufferSize	False
DL OPTTempStoragePath	
<b>Name</b>	Specifies the name of the object.

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Default | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer

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

Azure: Containers, For Loop Container

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 essential Integration Services... | Find Samples

Package.dtsx [Design]\*

Solution Explorer: Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project) | IS\_DWH\_WWI\_2025 | Project.params, Connection Managers, SSIS Packages, Package.dtsx, Package Parts, Miscellaneous, Linked Azure Resources, Azure-SSIS Integration Runtime, Azure Storage

Properties: Data Flow Task | Task

Description: Data Flow Task | ID: {1E8040A9-9094-40B0-9E71-11} | Name: Data Flow Task | PackagePath: \Package\Data Flow Task | Misc: AutoAdjustBufferSize: False, BLOPTempStoragePath: | Name: Specifies the name of the object.

Ready

Hacemos clic izquierdo sobre el Data Flow, luego hacemos clic en “Rename” para cambiarle el nombre a uno mas descriptivo que nos ayude diferenciar cada uno

Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer

Search Solution Explorer (Ctrl+Shift+F)

GitHub Copilot Chat | Solution Explorer | Git Changes

Add to Source Control | Select Repository

2:15 PM | 8/14/2025 | 3

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Package.dtsx [Design]\* | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer | Default | Develop | Start | Select Perspective | GitHub Copilot | ADMIN

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

Azure: Container, For Loop Container

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 essential Integration Services... | Find Samples

Solution Explorer: Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project) | IS\_DWH\_WWI\_2025 | Project.params | Connection Managers | SSIS Packages | Package.dtsx | Package Parts | Miscellaneous | Linked Azure Resources | Azure-SQL Integration Runtime | Azure Storage

Properties: Package | Description | ID: 96E1B8C4-2000-479A-8773 | Name: Package | PackageType: DTSDesigner100 | Misc | Configurations: (Collection) | Expressions | Name: Specifies the name of the object.

Le ponemos el nombre de nuestra primera dimensión. Seguidamente hacemos doble clic derecho sobre él para abrir panel de Data Flow

DIM\_LOCATION

Ready | Add to Source Control | Select Repository | 2:15 PM | 8/14/2025 | 3

File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Develop | Default | Start | Select Perspective | Event Handlers | Package Explorer | Solution Explorer | GitHub Copilot Chat | Solution Explorer | Git Changes | Properties

Search SSIS Toolbox

- Fuzzy Grouping
- Fuzzy Lookup
- Import Column
- Percentage Sampling
- Pivot
- Row Sampling
- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination

**OLE DB Source**

Extracts data from an OLE DB-compliant relational database. Extract from a database table or view, or use a SQL command. For example, extract data from tables in Microsoft Office Access or SQL Server databases.

[Find Samples](#)

Ya en nuestra área de diseño. Buscamos en “Other Sources” la herramienta que dice “OLE DB Source” y la arrastramos hacia nuestra área de diseño. Esta nos ayudara a extraer los datos que queremos de nuestra base de datos

Connection Managers

- (project) ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

Solution Explorer

- Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)
- IS\_DWH\_WWI\_2025
  - Project.params
  - Connection Managers
    - ML-RefVm-822010\_MORALLES\_24.WideWorldImporters
  - SSIS Packages
    - Package.dtsx
  - Package Parts
    - Control Flow
    - Miscellaneous
  - Linked Azure Resources
    - Azure-SSIS Integration Runtime
    - Azure Storage

Properties

**DIM\_LOCATION Task**

Description	Data Flow Task
ID	{1E8040A9-9094-40B0-9E71-11
Name	<b>DIM_LOCATION</b>
PackagePath	\Package\DIM_LOCATION
Misc	
AutoAdjustBufferSize	False
MaxTempStorageDepth	
Name	Specifies the name of the object.

Ready | Add to Source Control | Select Repository | 2:16 PM | 8/14/2025 | 1

Screenshot of the Microsoft Visual Studio IDE showing the SSIS Data Flow designer for the package **Package.dtsx**.

The **SSIS Toolbox** on the left lists various data source and destination components, with the **OLE DB Destination** selected.

The **Data Flow Task** pane shows a single task named **DIM\_LOCATION**.

The **Data Flow** tab is active in the main workspace, displaying a single **OLE DB Source** component.

The **Solution Explorer** on the right shows the project structure for **IS\_DWH\_WWI\_2025**, including **Project.params**, **Connection Managers**, **SSIS Packages** (containing **Package.dtsx**), **Package Parts**, **Miscellaneous**, and **Linked Azure Resources**.

The **Properties** window on the far right displays the properties for the **OLE DB Source**:

<b>Name</b>	<b>OLE DB Source</b>
<b>Description</b>	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 and after your database is migrated from one...
<b>ConnectionString</b>	(project) ML-RefVm-822010_MORALLES_24.WideWorldImporters
<b>IsDefaultLocale</b>	True
<b>LocaleID</b>	English (United States)
<b>Name</b>	<b>OLE DB Source</b>
<b>PipelineVersion</b>	0
<b>UsesDispositions</b>	True
<b>ValidateExternalMetadata</b>	True
<b>Version</b>	7

The status bar at the bottom indicates the system is **Ready**, the time is **2:16 PM**, and the date is **8/14/2025**.

Después de hacer esto buscamos en “Other Destinations” la herramienta que dice “OLE DB Destination” y la arrastramos hacia nuestra área de diseño debajo de nuestro “OLE DB Source”. Esta nos ayudara a depositar los datos en nuestro Data Warehouse

The screenshot shows the Microsoft Visual Studio interface for an SSIS package named 'IS\_DWH\_WWI\_2025'. In the center, the 'Package.dtsx [Design]' tab is active. On the left, the 'SSIS Toolbox' is open, with the 'Other Destinations' category selected. Within this category, the 'OLE DB Destination' item is highlighted with a blue selection bar and has a red arrow pointing from it towards the main design surface. The main design surface contains an 'OLE DB Source' component and an 'OLE DB Destination' component, which is also highlighted with a red selection bar. To the right of the design surface is the 'Properties' window, showing the properties for the selected 'OLE DB Destination' component. The 'Name' property is set to 'OLE DB Destination'. The 'Solution Explorer' window on the right shows the project structure, including 'Connection Managers', 'SSIS Packages' (containing 'Package.dtsx'), and 'Linked Azure Resources'. A tooltip for the 'OLE DB Destination' component in the toolbox is visible at the bottom left.

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 and after your database is migrated from one...

Find Samples

OLE DB Destination  
Data Flow Component

IsDefaultLocale	True
LocaleID	English (United States)
Name	OLE DB Destination
PipelineVersion	0
UsesDispositions	True
ValidateExternalMetadata	True
Version	4

Name  
Specifies the name of the component.

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination
- Partition Processing
- Raw File Destination
- Recordset 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 and after your database is migrated from one system to another.

Ready

OLE DB Source Editor

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

Connection Manager

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.

OLE DB connection manager:

ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

New...

Data access mode:

Table or view

Name of the table or the view:

Preview...

Select a table or view from the list.

OK Cancel Help

Después de hacer el paso anterior, hacemos doble clic sobre “OLE DB Source” y se nos abrirá este menú. Aquí revisamos que la conexión sea con nuestra base de datos donde extraeremos los datos correspondientes.

Solution Explorer

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

Project.params

Connection Managers

ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

SSIS Packages

Package.dtsx

Package Parts

Control Flow

Miscellaneous

Linked Azure Resources

Changes

States

to Source Control Select Repository

2:16 PM 8/14/2025

Después, seleccionamos el acceso a nuestra Data por medio del modo de comando de SQL. Luego copiamos y pegamos nuestro comando SQL que hicimos en el Paso 1 respectivo a esta Dimensión, para verificar que este todo correctamente hacemos clic en “Preview...”

OLE DB Source Editor

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

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.

OLE DB connection manager:

ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

Data access mode:

SQL command

SQL command text:

```
R.LatestRecordedPopulation AS CityPopulation,  
P.StateProvinceID,  
P.StateProvinceName,  
P.StateProvinceCode,  
P.LatestRecordedPopulation AS StatePopulation,  
N.CountryID,  
N.CountryName,  
N.Continent,  
N.LatestRecordedPopulation AS CountryPopulation  
FROM Application.Cities R  
INNER JOIN Application.StateProvinces P  
ON R.StateProvinceID = P.StateProvinceID  
INNER JOIN Application.Countries N  
ON P.CountryID = N.CountryID;
```

Parameters...  
Build Query...  
Browse...  
Parse Query

Preview... OK Cancel Help

SSIS Toolbox

Search SSIS Toolbox

OLE DB Destination

- Partition Processing
- Raw File Destination
- Recordset 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 and after your database is migrated from one system to another.

Find Samples

Solution Explorer

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

- Project.params
- Connection Managers
  - ML-RefVm-822010\_MORALLES\_24.WideWorldImporters
- SSIS Packages
  - Package.dtsx
- Package Parts
  - Control Flow
  - Miscellaneous
- Linked Azure Resources
  - Azure-SSIS Integration Runtime
  - Azure Storage

Copilot Chat Solution Explorer Git Changes

Source Data Flow Component

DefaultLocale	True
FieldID	English (United States)
Version	OLE DB Source
MinorVersion	0
Dispositions	True
CreateExternalMetadata	True

2:19 PM 8/14/2025

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO.NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination
- Partition Processing
- Raw File Destination
- Recordset Destination
- SQL Server Destination

OLE DB Destination

Verificamos que todo este correctamente, cuando terminamos de revisar hacemos clic en “Close”

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

Preview Query Results

Select the data access type by typing the query or by

New...

Parameters...

Build Query...

Browse...

Parse Query

Query result (up to the first 200 rows):

CityID	CityName	CityPopula...	StateProv...	StateProv...	State
1	Aaronsburg	613	39	Pennsylva...	PA
3	Abanda	192	1	Alabama	AL
4	Abbeville	5237	42	South Car...	SC
5	Abbeville	2908	11	Georgia	GA
6	Abbeville	2688	1	Alabama	AL
7	Abbeville	12257	19	Louisiana	LA
8	Abbeville	419	25	Mississippi	MS
9	Abbotsford	2310	52	Wisconsin	WI
10	Abbott	356	45	Texas	TX
11	Abbott	356	4	Arkansas	AR
12	Abbott	NULL	32	New Mexico	NM
13	Abbott	356	49	Virginia	VA
14	Abbott	NULL	51	West Virgi...	WV

Close

Preview...

OK Cancel Help

Solution Explorer

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

Project.params

Connection Managers

- ML-RefVm-822010\_MORALLES\_24.WideWorldIm...

SSIS Packages

- Package.dtsx

Package Parts

- Control Flow
- Miscellaneous

Linked Azure Resources

- Azure-SSIS Integration Runtime
- Azure Storage

Copilot Chat Solution Explorer Git Changes

Source Data Flow Component

DefaultLocale	True
FieldID	English (United States)
OLE DB Source	OLE DB Source
Version	0
Dispositions	True
CreateExternalMetadata	True

Specifies the name of the component.

Ready Add to Source Control Select Repository 1 2:19 PM 8/14/2025

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO.NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination
- Partition Processing
- Raw File Destination
- Recordset Destination
- SQL Server Destination

OLE DB

Loads data in such as SQL compliant. used before and after your database is migrated from o

Find Samples

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 mode. If using the SQL command access mode, specify the SQL command either by typing the query or by using Query Builder.

OLE DB connection manager:  
ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

Data access mode:  
SQL command

SQL command text:

```
R.LatestRecordedPopulation AS CityPopulation,  
P.StateProvinceID,  
P.StateProvinceName,  
P.StateProvinceCode,  
P.LatestRecordedPopulation AS StatePopulation,  
N.CountryID,  
N.CountryName,  
N.Continent,  
N.LatestRecordedPopulation AS CountryPopulation  
FROM Application.Cities R  
INNER JOIN Application.StateProvinces P  
ON R.StateProvinceID = P.StateProvinceID  
INNER JOIN Application.Countries N  
ON P.CountryID = N.CountryID;
```

Parameters...  
Build Query...  
Browse...  
Parse Query

Preview...

OK Cancel Help

Para terminar, hacemos clic en "OK"

Solution Explorer

Solution Explorer (Ctrl+)

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

Project.params

Connection Managers

ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

SSIS Packages

Package.dtsx

Package Parts

Control Flow

Miscellaneous

Linked Azure Resources

Azure-SSIS Integration Runtime

Azure Storage

Copilot Chat Solution Explorer Git Changes

Source Data Flow Component

DefaultLocale	True
FieldID	English (United States)
Source	OLE DB Source
Version	0
Dispositions	True
CreateExternalMetadata	True

Ready Add to Source Control Select Repository 2:20 PM 8/14/2025

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

Conectamos nuestro “OLE DB Source” con nuestro “OLE DB Destination” por medio de la flecha azul

Other Destinations

- ADO NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination**
- Partition Processing
- Raw File Destination
- Recordset 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 and after your database is migrated from one...

Find Samples

Package.dtsx [Design]\*

Control Flow Data Flow Parameters Event Handlers Package Explorer

Data Flow Task: DIM\_LOCATION

Solution Explorer

Search Solution Explorer (Ctrl+)

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

- Project.params
- Connection Managers
- SSIS Packages
- Package Parts
- Miscellaneous
- Linked Azure Resources

OLE DB Source Data Flow Component

IsDefaultLocale	True
LocaleID	English (United States)
Name	<b>OLE DB Source</b>
PipelineVersion	0
UsesDispositions	True
ValidateExternalMetadata	True
Version	7

Name  
Specifies the name of the component.

The diagram illustrates the connection between an OLE DB Source and an OLE DB Destination. An OLE DB Source component is connected to an OLE DB Destination component by a blue arrow, representing the flow of data. The OLE DB Source component has two output ports, and the OLE DB Destination component has two input ports, which are connected via the blue arrow.

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO.NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination**
- Partition Processing
- Raw File Destination
- Recordset 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 and after your database is migrated from one...

Find Samples

Package.dtsx [Design]\*

Control Flow Data Flow Parameters Event Handlers Package Explorer

Data Flow Task: DIM\_LOCATION

Solution Explorer

Search Solution Explorer (Ctrl+)

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

- IS\_DWH\_WWI\_2025
  - Project.params
  - Connection Managers
    - ML-RefVm-822010\_MORALLES\_24.WideWorldImporters
  - SSIS Packages
    - Package.dtsx
  - Package Parts
    - Control Flow
    - Miscellaneous
  - Linked Azure Resources
    - Azure-SSIS Integration Runtime
    - Azure Storage

GitHub Copilot Chat Solution Explorer Git Changes

Properties

OLE DB Destination Data Flow Component

IsDefaultLocale	True
LocaleID	English (United States)
Name	<b>OLE DB Destination</b>
PipelineVersion	0
UsesDispositions	True
ValidateExternalMetadata	True
Version	4

**Name**  
Specifies the name of the component.

```
graph TD; Source[OLE DB Source] --> Destination[OLE DB Destination]
```

Listo, cuando los conectamos  
hacemos doble clic sobre “OLE  
DB Destination”

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other

- A
- D
- D
- E
- F
- O
- Partition Processing
- Raw File Destination
- Recordset 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 and after your database is migrated from one system to another.

Find S...

Ready

OLE DB Destination Editor

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

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:** ML-RefVm-822010\_MORALLES\_24.WideWorldImporters **New...**

**Data access mode:** Table or view Fast load

Name of the table or the view: **New...**

Keep identity  Table lock

Keep nulls  Check constraints

Rows per batch:

Maximum insert commit size:  2147483647

View Existing

Select a table or view from the list.

OK Cancel Help

Solution Explorer

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

Project.params

Connection Managers

- ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

SSIS Packages

- Package.dtsx

Package Parts

- Control Flow
- Miscellaneous

Linked Azure Resources

- Azure-SSIS Integration Runtime
- Azure Storage

Copilot Chat Solution Explorer Git Changes

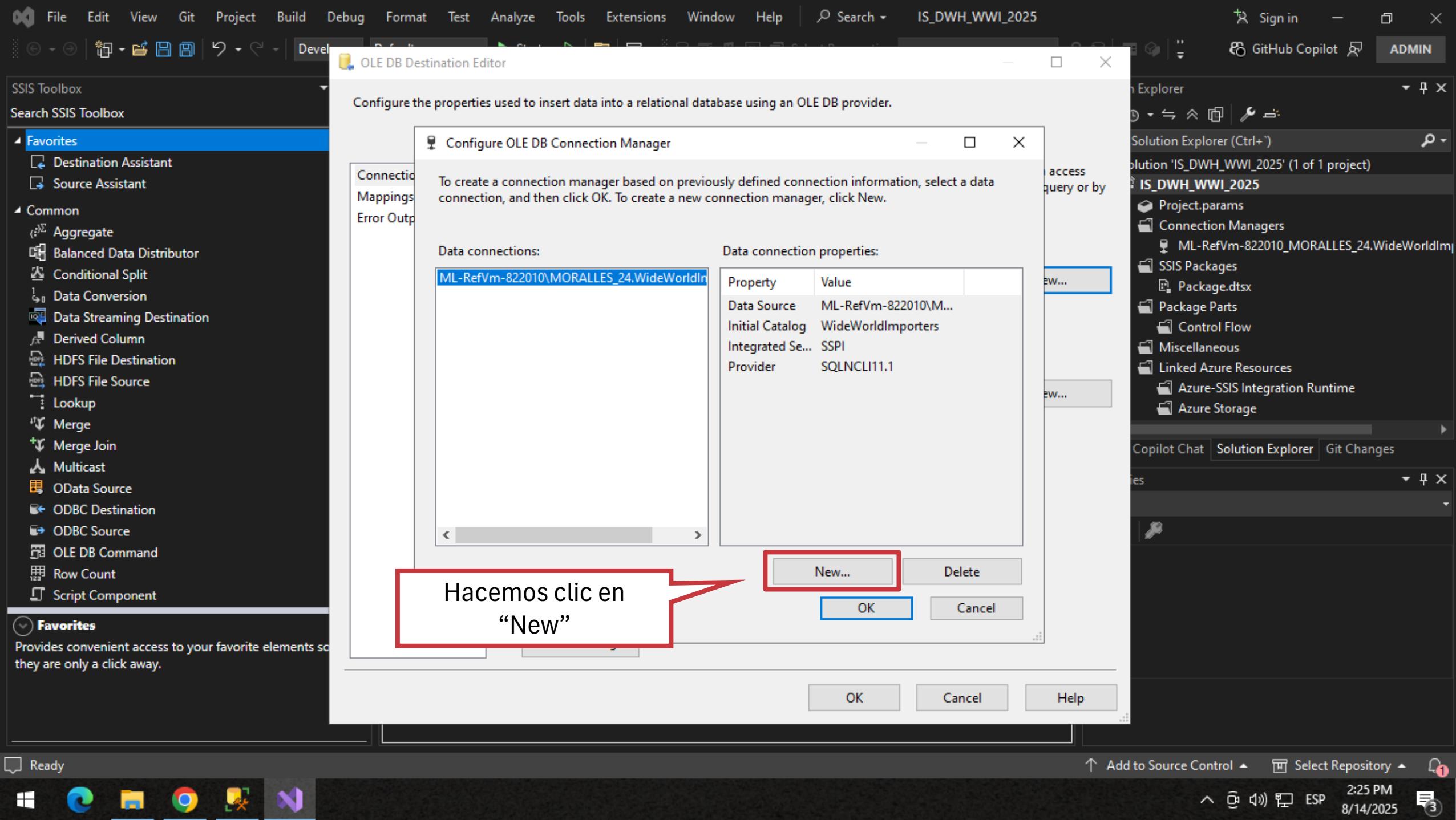
Destination Data Flow Component

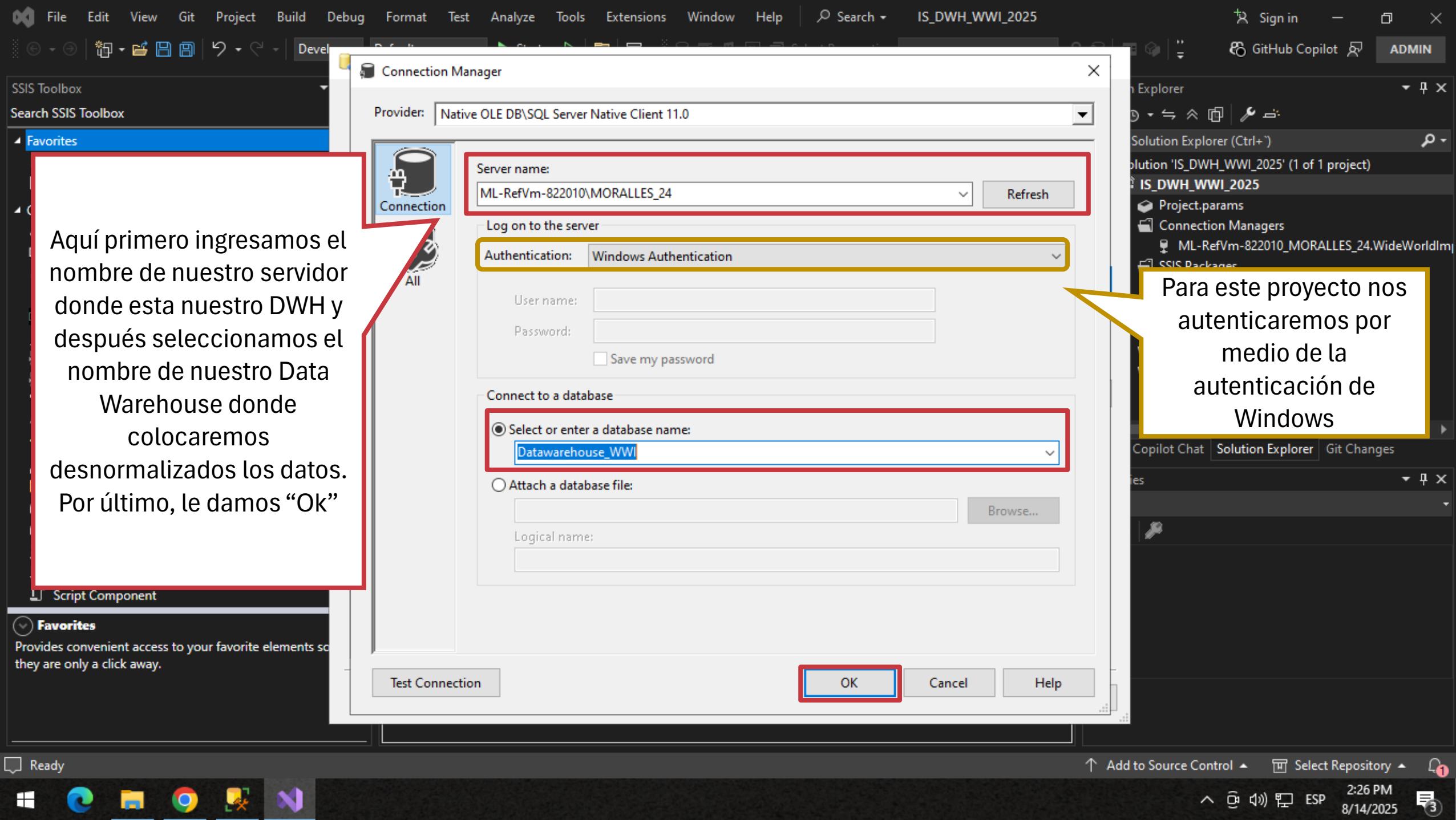
DefaultLocale	True
FieldID	English (United States)
Type	OLE DB Destination
LineVersion	0
Dispositions	True
CreateExternalMetadata	True

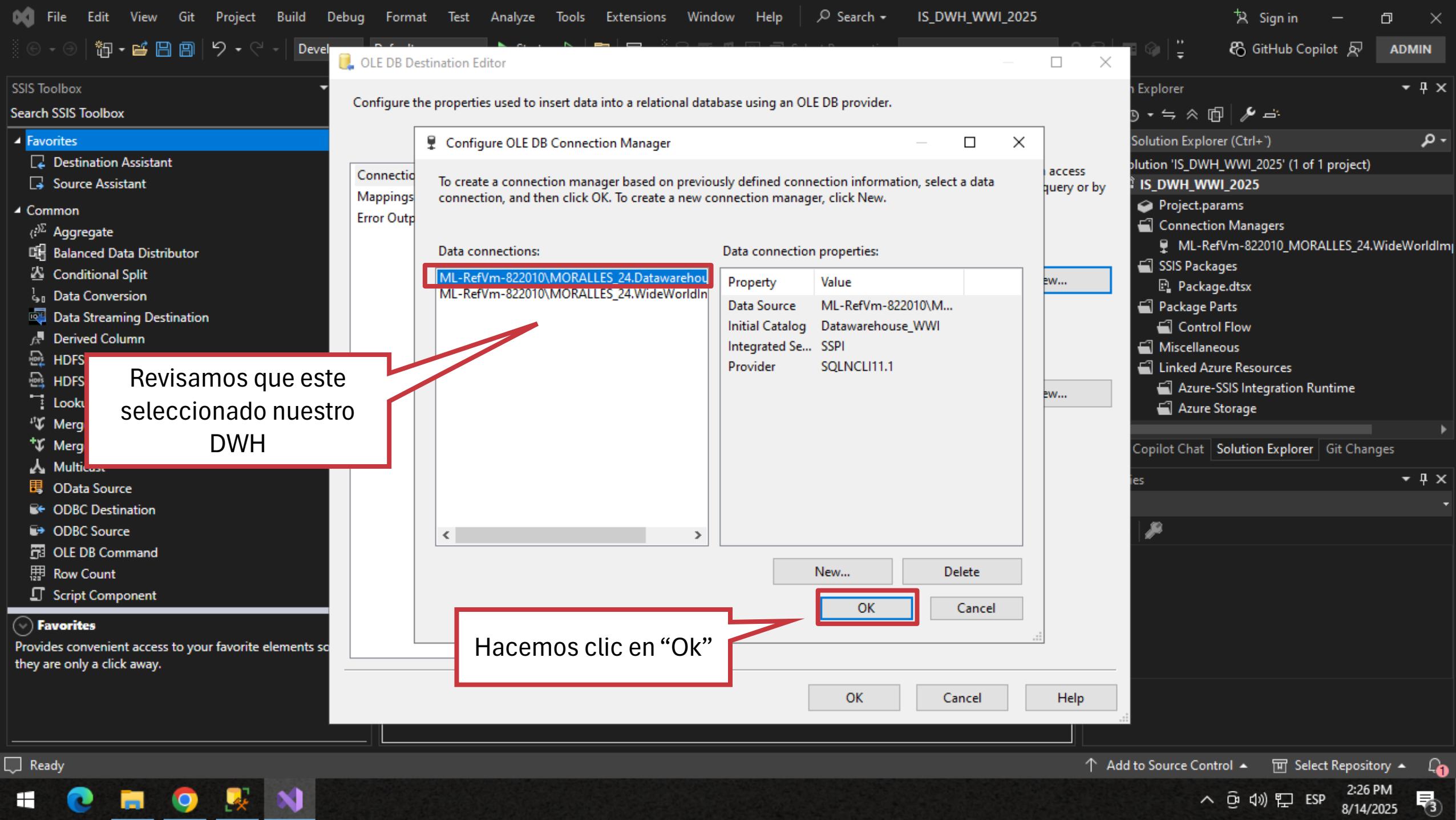
to Source Control Select Repository

2:22 PM 8/14/2025

Ahora tenemos que hacer la conexión con nuestro Data Warehouse, para hacerlo hacemos clic en "New..."







File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Search SSIS Toolbox | Favorites | Common | Connection Manager | Mappings | Error Output | OLE DB Destination Editor | Solution Explorer | Copilot Chat | Solution Explorer | Git Changes

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

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: ML-RefVm-822010\MORALLES\_24.Datawarehouse\_WWI | New...

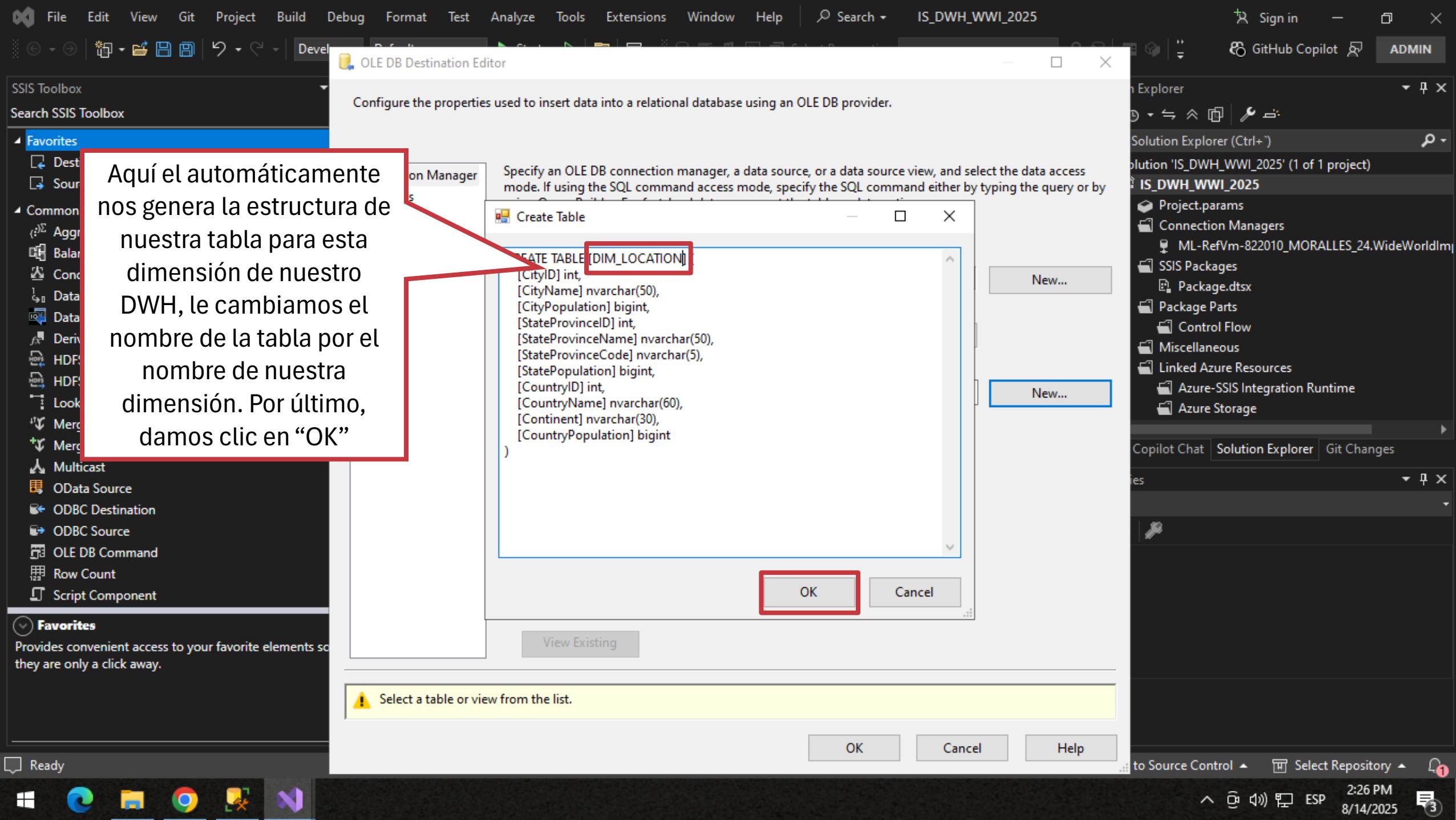
Data access mode: Table or view - fast load | New...

Luego hacemos clic en “New...”

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

View Existing | OK | Cancel | Help

Ready | Add to Source Control | Select Repository | 2:26 PM | 8/14/2025 | 3



File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Search SSIS Toolbox | Favorites | Destination Assistant | Source Assistant | Common | Aggregate | Balanced Data Distributor

Después de hacer el paso anterior hacemos clic en “Mappings”, revisamos que las relaciones de los datos de nuestras tablas estén correctamente relacionadas. Cuando terminamos damos clic en “OK”

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

Connection Manager | Mappings | Error Output

Available Input Columns | Available Destination Columns

Input Column	Destination Column
CityID	CityID
CityName	CityName
CityPopulation	CityPopulation
StateProvinceID	StateProvinceID
StateProvinceName	StateProvinceName
StateProvinceCode	StateProvinceCode
StatePopulation	StatePopulation
CountryID	CountryID
CountryName	CountryName

OK | Cancel | Help

Solution Explorer | Solution Explorer (Ctrl+) | IS\_DWH\_WWI\_2025 | Project.params | Connection Managers | SSIS Packages | Package.dtsx | Package Parts | Control Flow | Miscellaneous | Linked Azure Resources | Azure-SSIS Integration Runtime | Azure Storage | Copilot Chat | Solution Explorer | Git Changes

Ready | Add to Source Control | Select Repository | 2:26 PM | 8/14/2025 | 3

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Default | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer | Select Perspective | GitHub Copilot | ADMIN

Packaqe.dtsx [Design]\* | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer | Data Flow Task: DIM\_LOCATION

Solution Explorer | Search Solution Explorer (Ctrl+)

25' (1 of 1 project) | 10\_MORALLES\_24.WideWorldIm

Ya tendríamos nuestra primera dimensión lista para nuestro DWH. Para continuar con las demás dimensiones hacemos clic en "Control Flow"

(No se incluyen todas las dimensiones dentro de un único Data Flow Task, ya que, si una dimensión falla durante la carga, las demás podrían verse afectadas y el proceso completo se detendría. Al separar cada dimensión en su propio Data Flow Task, se garantiza que, en caso de error en una, las demás continúen ejecutándose sin interrupciones.)

OLE DB Source → OLE DB Destination

Connection Managers | (project) ML-RefVm-822010\_MORALLES\_24.WideWorldImporters | ML-RefVm-822010|MORALLES\_24.Datawarehouse\_WWI

Properties | Description | Expressions | HasExpressions: False | ID: {28DFB66C-3B89-437F-9B2B-7...} | InitialCatalog: Datawarehouse\_WWI | Name: ML-RefVm-822010|MORALLES\_24.Datawarehouse\_WWI | Password: \*\*\*\*\* | Name: Specifies the name of the object.

Add to Source Control | Select Repository | 2:26 PM | 8/14/2025 | 1

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Package.dtsx [Design]\* | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer | Default | Develop | Start | Select Perspective | Search | GitHub Copilot | ADMIN

Search SSIS Toolbox

Favorites: Data Flow Task (selected), 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

Azure: For Loop Container

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 essential Integration Services... | Find Samples

Solution Explorer: Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project) | IS\_DWH\_WWI\_2025 | Project.params | Connection Managers | SSIS Packages | Package.dtsx | Package Parts | Control Flow | Miscellaneous | Linked Azure Resources | Azure-SSIS Integration Runtime | Azure Storage

Properties: Package | CreationDate: 8/14/2025 2:06 PM | CreatorComputerName: ML-RefVm-822010 | CreatorName: ML-RefVm-822010\estudiante | Description: | ID: {96E1B8C4-2000-479A-8773} | Name: Package | PackageType: DTSDesinger100 | Name: Specifies the name of the object.

DIM\_LOCATION

Ahora seguimos con el siguiente "Data Flow Task"

Toolbox found 75 results | Add to Source Control | Select Repository | 3:16 PM | ESP | 8/14/2025 | 3

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Package.dtsx [Design]\* | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer | Default | Develop | Start | Select Perspective | Search | GitHub Copilot | ADMIN

Solution Explorer | Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project) | IS\_DWH\_WWI\_2025 | Project.params | Connection Managers | SSIS Packages | Package.dtsx | Package Parts | Miscellaneous | Linked Azure Resources | Azure-SQL Integration Runtime | Azure Storage | GitHub Copilot Chat | Solution Explorer | Git Changes | Properties | Data Flow Task | Task | ForcedExecutionValueType: Int32 | ForceExecutionValue: False | Identification | Description: Data Flow Task | ID: {EED4B229-BC6C-4B5E-AF85-1} | Name: Data Flow Task | PackagePath: \DataFlow Task | Name: Specifies the name of the object.

Le cambiamos el nombre y le ponemos el nombre de la siguiente dimensión

DIM\_LOCATION

Data Flow Task

Rename

Control Flow

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

Azure

Containers

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 essential Integration Services... | Find Samples

Focus on Zoom Slider

Windows Taskbar: File Explorer, Google Chrome, Visual Studio, 3:17 PM, 8/14/2025

SSIS Toolbox | Package.dtsx [Design]\* | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer | Default | Develop | Start | Select Perspective | Search | GitHub Copilot | ADMIN

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

Azure

Containers: For Loop Container

**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 essential Integration Services... | Find Samples

Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer

Solution Explorer: Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project) | IS\_DWH\_WWI\_2025 | Project.params | Connection Managers | SSIS Packages | Package.dtsx | Package Parts | Miscellaneous | Resources | Integration Runtime | Page

Package.dtsx [Design]: DIM\_LOCATION (Data Flow Task) | DIM\_PRODUCT (Data Flow Task)

Diagram: A red arrow points from the 'DIM\_LOCATION' Data Flow Task to the 'DIM\_PRODUCT' Data Flow Task.

**Ahora vamos a conectar nuestros Data Flow Task entre si para definir el orden y lógica de ejecución**

Properties for DIM\_LOCATION:

- ForcedExecutionValueType: Int32
- ForceExecutionValue: False
- Identification**
  - Description: Data Flow Task
  - ID: {1E8040A9-9094-40B0-9E71-11
  - Name: DIM\_LOCATION
  - PackagedPath: \Package\DIM\_LOCATION
  - Name**: Specifies the name of the object.

SSIS Toolbox | Package.dtsx [Design]\* | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer

Solution Explorer | Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project) | IS\_DWH\_WWI\_2025 | Project.params | Connection Managers | SSIS Packages | Package.dtsx | Package Parts | Miscellaneous | Linked Azure Resources | Azure-SQL Integration Runtime | Azure Storage

Properties | Constraint Precedence Constraint | EvalOp EvaluatesTrue | True | Expression | ID {F39675CB-6665-4BDA-BAD7-} | LogicalAnd True | Name Constraint | PrecedenceExecutable DIM\_LOCATION | Name Specifies the name of the object.

Diagram:

```
graph TD; DIM_LOCATION --> DIM_PRODUCT
```

A red callout box points to the connection line between the two data flow components. The text "Le hacemos doble clic" is inside the callout box.

SSIS Toolbox Details:

- Favorites: Data Flow Task (selected), 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
- Azure
- Containers: For Loop Container
- 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 essential Integration Services... [Find Samples](#)

Connection Managers:

- ML-RefVm-822010|MORALLES\_24.Datawarehouse\_WWI
- (project) ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination**
- Partition Processing
- Raw File Destination
- Recordset 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 and after your database is migrated from one...

Find Samples

Package.dtsx [Design]\*

Control Flow Data Flow Parameters Event Handlers Package Explorer

Data Flow Task: DIM\_PRODUCT

OLE DB Source

OLE DB Destination

Solution Explorer

Search Solution Explorer (Ctrl+)

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

- Project.params
- Connection Managers
- SSIS Packages
- Package.dtsx
- Package Parts
- Control Flow
- Miscellaneous
- Linked Azure Resources

Arrastramos hacia nuestra área de diseño el “OLE DB Source” y el “OLE DB Destination”

Description: OLE DB Destination  
ID: 16  
IdentificationString: OLE DB Destination  
IsDefaultLocale: True  
LocaleID: English (United States)  
Name: OLE DB Destination  
BindingVersion: 0

Name: Specifies the name of the component.

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination
- Partition Processor
- Raw File Destination
- Recordset 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 and after your database is migrated from one system to another.

Hacemos doble clic sobre OLE DB Source para empezar a configurarlo

OLE DB Source Editor

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

Connection Manager

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.

OLE DB connection manager:

ML-RefVm-822010\MORALLES\_24.Datawarehouse\_WWI

New...

Data access mode:

Table or view

Name of the table or the view:

Preview...

Select a table or view from the list.

OK Cancel Help

Solution Explorer

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

Project.params

Connection Managers

ML-RefVm-822010\_MORALLES\_24.WideWorldIm

SSIS Packages

Package.dtsx

Copilot Chat Solution Explorer Git Changes

Source Data Flow Component

Description	OLE DB Source
1	OLE DB Source
2	OLE DB Source
3	OLE DB Source
4	OLE DB Source
5	OLE DB Source

Focus on Zoom Slider

3:18 PM 8/14/2025

GitHub Copilot

Verificamos que la conexión sea con la base de datos y no el DWH

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destination

- ADO NET Dest
- DataReader D
- Dimension Pr
- Excel Destina
- Flat File Desti
- OLE DB Desti
- Partition Proc
- Raw File Destination
- Recordset 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 and after your database is migrated from one system to another.

Focus on Zoom Slider

GitHub Copilot

ADMIN

OLE DB Source Editor

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

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.

OLE DB connection manager:

ML-RefVm-822010\MORALLES\_24.Datawarehouse\_WWI

New... ML-RefVm-822010\MORALLES\_24.Datawarehouse\_WWI ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

OK Cancel

Preview...

Select a table or view from the list.

OK Cancel Help

Solution Explorer

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

- Project.params
- Connection Managers
  - ML-RefVm-822010\_MORALLES\_24.WideWorldImporters
- SSIS Packages
  - Package.dtsx
- Package Parts
  - Control Flow
- Miscellaneous
- Linked Azure Resources
  - Azure-SSIS Integration Runtime
  - Azure Storage

Copilot Chat Solution Explorer Git Changes

Source Data Flow Component

Description	Value
Connection	OLE DB Source
ConnectionString	OLE DB Source
DefaultLocale	True
LocaleID	English (United States)
OLE DB Source	OLE DB Source
Version	0

to Source Control Select Repository

3:18 PM 8/14/2025

3

**Cambiamos la conexión por el de la base de datos ya que esta seleccionado el del DWH. Cuando lo seleccionamos le damos "OK"**

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO.NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination

OLE DB Source Editor

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

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.

OLE DB connection manager:

ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

Data access mode:

SQL command

SQL command text:

```
SELECT O.StockItemID, O.StockItemName, V.ColorName, V.ColorID,  
Y.StockGroupID, Y.StockGroupName,  
G.QuantityOnHand, G.LastStocktakeQuantity, G.BinLocation,  
G.LastEditedWhen FROM Warehouse.StockItems O  
INNER JOIN Warehouse.Colors V  
ON O.ColorID = V.ColorID  
INNER JOIN Warehouse.StockItemStockGroups L  
ON O.StockItemID = L.StockItemID  
INNER JOIN Warehouse.StockGroups Y  
ON L.StockGroupID = Y.StockGroupID  
INNER JOIN Warehouse.StockItemHoldings G  
ON O.StockItemID = G.StockItemID
```

Parameters...  
Build Query...  
Browse...  
Parse Query

Preview... OK Cancel Help

Solution Explorer

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

- Project.params
- Connection Managers
- SSIS Packages
- Package.dtsx
- Package Parts
- Control Flow
- Miscellaneous
- Linked Azure Resources
- Azure-SSIS Integration Runtime
- Azure Storage

Copilot Chat Solution Explorer Git Changes

Source Data Flow Component

Description	OLE DB Source
1	OLE DB Source
ConnectionString	OLE DB Source
DefaultLocale	True
Locale	English (United States)
OLE DB Source	OLE DB Source
Version	0

Focus on Zoom Slider Add to Source Control Select Repository 3:19 PM 8/14/2025

Selecciónamos el modo comando de SQL y pegamos la consulta para esta dimensión que hicimos en el Paso 1, después damos clic en "Preview..." para verificiar

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO.NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination
- Partition Processing
- Raw File Destination
- Recordset 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 and after your database is migrated from one system to another.

Find Samples

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

Preview Query Results

Select the data access type by typing the query or by

New...

Parameters...

Build Query...

Browse...

Parse Query

Query result (up to the first 200 rows):

StockItemID	StockItem...	ColorName	ColorID	StockGrou...	Stoc
76	"The Gu" r...	White	35	2	Cloth
77	"The Gu" r...	White	35	2	Cloth
78	"The Gu" r...	White	35	2	Cloth
79	"The Gu" r...	White	35	2	Cloth
80	"The Gu" r...	White	35	2	Cloth
81	"The Gu" r...	White	35	2	Cloth
82	"The Gu" r...	White	35	2	Cloth
83	"The Gu" r...	White	35	2	Cloth
84	"The Gu" r...	White	35	2	Cloth
85	"The Gu" r...	White	35	2	Cloth
			35	2	Cloth
			35	2	Cloth
			35	2	Cloth

Preview...

Close

OK Cancel Help

Copilot Chat Solution Explorer Git Changes

Source Data Flow Component

Description	OLE DB Source
1	OLE DB Source
IdentificationString	OLE DB Source
DefaultLocale	True
LocaleID	English (United States)
Collation	OLE DB Source
InConnectionString	0

Focus on Zoom Slider Add to Source Control Select Repository 3:19 PM 8/14/2025

When we finish verifying, we click "Close".

Close

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO NET Destination
- DataReader Destination
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**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 and after your database is migrated from one system to another.

Find Samples

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 mode. If using the SQL command access mode, specify the SQL command either by typing the query or by using Query Builder.

OLE DB connection manager:  
ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

Data access mode:  
SQL command

SQL command text:

```
SELECT O.StockItemID, O.StockItemName, V.ColorName, V.ColorID,  
Y.StockGroupID, Y.StockGroupName,  
G.QuantityOnHand, G.LastStocktakeQuantity, G.BinLocation,  
G.LastEditedWhen FROM Warehouse.StockItems O  
INNER JOIN Warehouse.Colors V  
ON O.ColorID = V.ColorID  
INNER JOIN Warehouse.StockItemStockGroups L  
ON O.StockItemID = L.StockItemID  
INNER JOIN Warehouse.StockGroups Y  
ON L.StockGroupID = Y.StockGroupID  
INNER JOIN Warehouse.StockItemHoldings G  
ON O.StockItemID = G.StockItemID
```

Parameters...  
Build Query...  
Browse...  
Parse Query

Terminamos y damos clic en “OK”

OK Cancel Help

Solution Explorer

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

- Project.params
- Connection Managers
  - ML-RefVm-822010\_MORALLES\_24.WideWorldImporters
- SSIS Packages
  - Package.dtsx
- Package Parts
  - Control Flow
- Miscellaneous
- Linked Azure Resources
  - Azure-SSIS Integration Runtime
  - Azure Storage

Copilot Chat Solution Explorer Git Changes

Source Data Flow Component

Description	OLE DB Source
1	OLE DB Source
ConnectionString	OLE DB Source
DefaultLocale	True
Locale	English (United States)
OLE DB Source	OLE DB Source
Version	0

Focus on Zoom Slider Add to Source Control Select Repository 3:19 PM 8/14/2025

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Package.dtsx [Design]\* | Default | Start | Select Perspective | Search | GitHub Copilot | ADMIN

Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer

Data Flow Task: DIM\_PRODUCT

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
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- OLE DB Destination**
- Partition Processing
- Raw File Destination
- Recordset Destination
- SQL Server Destination

**OLE DB Destination**

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Find Samples

Package.dtsx [Design]\*

Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer

Data Flow Task: DIM\_PRODUCT

OLE DB Source

OLE DB Destination

Conectamos el “OLE DB Source” y el “OLE DB Destination”

Solution Explorer

Search Solution Explorer (Ctrl+)

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

- IS\_DWH\_WWI\_2025
  - Project.params
  - Connection Managers
    - ML-RefVm-822010\_MORALLES\_24.WideWorldIm
  - SSIS Packages
    - Package.dtsx
  - Package Parts
    - Control Flow
    - Miscellaneous
  - Linked Azure Resources
    - Azure-SSIS Integration Runtime
    - Azure Storage

GitHub Copilot Chat | Solution Explorer | Git Changes

Properties

DIM\_PRODUCT Task

- ForceExecutionValue: False
- Identification
  - Description: Data Flow Task
  - ID: {EED4B229-BC6C-4B5E-AF85-1
  - Name: DIM\_PRODUCT
  - PackagePath: \Package\DIM\_PRODUCT
- Misc
  - Name: Specifies the name of the object.

Focus on Zoom Slider | Add to Source Control | Select Repository | 3:19 PM | 8/14/2025 | 1

Windows | Chrome | File Explorer | Visual Studio | 3:19 PM | 8/14/2025 | 3

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

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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 and after your database is migrated from one system to another.

Focus on Zoom Slider

GitHub Copilot

ADMIN

OLE DB Destination Editor

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

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:

ML-RefVm-822010\MORALLES\_24.Datawarehouse\_WWI

New...

Data access mode:

Table or view - fast load

Name of the table or the view:

New...

Keep identity  Table lock

Keep nulls  Check constraints

Rows per batch:

Maximum insert commit size:

2147483647

View Existing

Select a table or view from the list.

OK Cancel Help

Seguimos configurando el “OLE DB Destination”. Verificamos que la conexión sea con el Data Warehouse

Properties

Destination Data Flow Component

ComponentType	16
IdentificationString	OLE DB Destination
DefaultLocale	True
DelayValidation	OLE DB Destination
MinVersion	0
DisallowParallelExecution	True

es the name of the component.

to Source Control Select Repository

3:19 PM 8/14/2025

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination**
- Partition Processing
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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 and after your database is migrated from one system to another.

Focus on Zoom Slider

GitHub Copilot | ADMIN

OLE DB Destination Editor

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

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:

ML-RefVm-822010\MORALLES\_24 Datawarehouse\_WWI

New...

Data access mode:

Table or view -

Name of the object:

Keep identity

Table lock

Keep nulls

Check constraints

Rows per batch:

Maximum insert commit size:

2147483647

Damos clic en "New..."

View Existing

Select a table or view from the list.

OK Cancel Help

Solution Explorer

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

Project.params

Connection Managers

ML-RefVm-822010\MORALLES\_24.WideWorldIm

SSIS Packages

Package.dtsx

Package Parts

Control Flow

Miscellaneous

Linked Azure Resources

Azure-SSIS Integration Runtime

Azure Storage

Copilot Chat Solution Explorer Git Changes

Destination Data Flow Component

id	16
ComponentType	OLE DB Destination
DefaultContainer	True
DefaultLocale	English (United States)
DefaultName	OLE DB Destination
DefaultNtDomain	0
DefaultOwner	True

to Source Control Select Repository

3:20 PM 8/14/2025

Screenshot of Microsoft Visual Studio SSIS Development Environment showing the OLE DB Destination Editor.

The main window title is "OLE DB Destination Editor". The sub-header says: "Configure the properties used to insert data into a relational database using an OLE DB provider."

The "Create Table" dialog box is open, showing the following SQL script:

```
CREATE TABLE [DIM_PRODUCT]
(
[StockItemID] int,
[StockItemName] nvarchar(100),
[ColorName] nvarchar(20),
[ColorID] int,
[StockGroupID] int,
[StockGroupName] nvarchar(50),
[QuantityOnHand] int,
[LastStocktakeQuantity] int,
[BinLocation] nvarchar(20),
[LastEditedWhen] datetime2(7)
)
```

A red box highlights the table name "DIM\_PRODUCT". A callout bubble with the text "Cambiamos el nombre de la tabla y hacemos clic en “OK”" points to the "OK" button at the bottom of the dialog.

The "OK" button is highlighted with a red box.

The "SSIS Toolbox" on the left shows the "OLE DB Destination" item is selected.

The "Solution Explorer" on the right shows the project "IS\_DWH\_WWI\_2025" with files like "Connection Managers", "SSIS Packages", and "Package.dtsx".

The status bar at the bottom right shows the time as "3:20 PM" and the date as "8/14/2025".

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Search SSIS Toolbox | Term Extraction, Term Lookup, Unpivot, Other Sources (ADO NET Source, CDC Source, Excel Source, Flat File Source, OLE DB Source, Raw File Source, XML Source), Other Destinations (ADO NET Destination, DataReader Destination, Dimension Processing, Excel Destination, Flat File Destination, OLE DB Destination, Partition Processing, Raw File Destination, Recordset 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 and after your database is migrated from one version to another. Dispositions: Truncate, Append, Insert, Merge, Insert and Append, Insert and Merge, Insert, Append and Merge, Insert, Append, Merge, Insert and Append and Merge, Insert and Merge and Append, Insert and Append and Merge and Append, Insert and Append and Merge and Append and Merge). Find Samples.

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

Connection Manager | Mappings | Error Output

Available Input Columns (StockItemID, StockItemName, ColorName, ColorID, StockGroupID, StockGroupName, QuantityOnHand) | Available Destination Columns (StockItemID, StockItemName, ColorName, ColorID, StockGroupID, StockGroupName, QuantityOnHand)

Input Column	Destination Column
StockItemID	StockItemID
StockItemName	StockItemName
ColorName	ColorName
ColorID	ColorID
StockGroupID	StockGroupID
StockGroupName	StockGroupName
QuantityOnHand	QuantityOnHand
LastStocktakeQuantity	LastStocktakeQuantity
BinLocation	BinLocation

OK | Cancel | Help

Hacemos clic en “Mappings” y revisamos la correlación de los datos entre ambas tablas y cuando terminamos hacemos clic en “OK”

Solution Explorer | Solution Explorer (Ctrl+) | IS\_DWH\_WWI\_2025 | Project.params, Connection Managers (ML-RefVm-822010\_MORALLES\_24.WideWorldIm...), SSIS Packages (Package.dtsx), Package Parts (Control Flow, Miscellaneous), Linked Azure Resources (Azure-SSIS Integration Runtime, Azure Storage). Copilot Chat | Solution Explorer | Git Changes

Focus on Zoom Slider | Add to Source Control | Select Repository | 3:20 PM | 8/14/2025 | 1

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

- ADO NET Source
- CDC Source
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- XML Source

Other Destinations

- ADO NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
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- Partition Processing
- Raw File Destination
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**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 and after your database is migrated from one...

Find Samples

Package.dtsx [Design]\*

Control Flow Data Flow Parameters Event Handlers Package Explorer

Data Flow Task: DIM\_PRODUCT

Terminamos de hacer esta dimensión, hacemos clic en "Control Flow" para continuar con la siguiente

OLE DB Destination

Connection Managers

ML-RefVm-822010|MORALLES\_24.Datawarehouse\_WWI (project) ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

Solution Explorer

Search Solution Explorer (Ctrl+)

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

- Project.params
- Connection Managers
- SSIS Packages
  - Package.dtsx
- Package Parts
  - Control Flow
- Miscellaneous
- Linked Azure Resources
  - Azure-SSIS Integration Runtime
  - Azure Storage

GitHub Copilot Chat Solution Explorer Git Changes

Properties

OLE DB Destination Data Flow Component

ID	16
IdentificationString	OLE DB Destination
IsDefaultLocale	True
LocaleID	English (United States)
Name	<b>OLE DB Destination</b>
PipelineVersion	0
UserDispositions	True

Name

Specifies the name of the component.

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Default | Select Perspective | Event Handlers | Package Explorer | 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 | Azure | Containers | For Loop Container | Favorites | Provides convenient access to your favorite elements so that they are only a click away.

Ahora seguimos con el siguiente “Data Flow Task”

```
graph TD; DIM_LOCATION[DIM_LOCATION] --> DIM_PRODUCT[DIM_PRODUCT]
```

Solution Explorer | Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project) | IS\_DWH\_WWI\_2025 | Project.params | Connection Managers | SSIS Packages | Package.dtsx | Package Parts | Control Flow | Miscellaneous | Linked Azure Resources | Azure-SQL Integration Runtime | Azure Storage | GitHub Copilot Chat | Solution Explorer | Git Changes | Properties | Package | PackageName | ML-RefVm-822010\estudiante | Description | ID | (96E1B8C4-2000-479A-8773) | Name | Package | PackageType | DTSDesigner100 | Name | Specifies the name of the object.

Ready | Add to Source Control | Select Repository | 3:21 PM | 8/14/2025 | 1

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Package.dtsx [Design]\* | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer | Default | Develop | Start | Select Perspective | Search | GitHub Copilot | ADMIN

Solution Explorer | Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project) | IS\_DWH\_WWI\_2025 | Project.params | Connection Managers | SSIS Packages | Package.dtsx | Package Parts | Miscellaneous | Linked Azure Resources | Azure-SSIS Integration Runtime | Azure Storage | GitHub Copilot Chat | Solution Explorer | Git Changes | Properties | Data Flow Task | Identification | Description: Data Flow Task | ID: {3FD8AF71-4CF8-4D28-8A48-1...} | Name: Data Flow Task | PackagePath: \Package\Data Flow Task | Misc | AutoAdjustBufferSize: False | Name | Specifies the name of the object.

Le cambiamos el nombre y le ponemos el nombre de la siguiente dimensión

```
graph TD; DIM_LOCATION[DIM_LOCATION] --> DIM_PR[DIM_PR]; DIM_PR --> DataFlow[Data Flow]
```

SSIS Toolbox | Package.dtsx [Design]\* | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer

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

Azure: For Loop Container

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 essential Integration Services... | Find Samples

Solution Explorer: Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project) | IS\_DWH\_WWI\_2025 | Project.params, Connection Managers, SSIS Packages, Package.dtsx, Package Parts, Miscellaneous, Linked Azure Resources, Azure-SQL Integration Runtime, Azure Storage

Properties: Package | PackageName: ML-RefVm-822010\estudiante, Description: {96E1B8C4-2000-479A-8773}, ID: {96E1B8C4-2000-479A-8773}, Name: Package, PackageType: DTSDesigner100, Misc: Configuration: (Collection), Name: Specifies the name of the object.

Diagram: A vertical flow of three data flow components: DIM\_LOCATION, DIM\_PRODUCT, and DIM\_PEOPLE. Arrows connect them sequentially from top to bottom. A red callout box points to the first component, DIM\_LOCATION.

Seguimos conectando los Data Flow Task entre si

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Package.dtsx [Design]\* | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer | Default | Develop | Start | Select Perspective | GitHub Copilot | ADMIN

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

Azure: Containers, For Loop Container

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 essential Integration Services... | Find Samples

Solution Explorer: Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project) | IS\_DWH\_WWI\_2025 | Project.params | Connection Managers | SSIS Packages | Package.dtsx | Package Parts | Miscellaneous | Linked Azure Resources | Azure-SSIS Integration Runtime | Azure Storage | GitHub Copilot Chat | Solution Explorer | Git Changes

Diagram: A data flow diagram showing three data flows. The first flow starts at 'DIM\_LOCATION' and ends at 'DIM\_PRODUCT'. The second flow starts at 'DIM\_PRODUCT' and ends at 'DIM\_PEOPLE'. A red callout box points to the 'DIM\_PEOPLE' data flow with the text 'Le hacemos doble clic'.

Properties: Description: Data Flow Task, ID: {3FD8AF71-4CF8-4D28-8A48-1, Name: Data Flow Task, PackagePath: \Package\Data Flow Task, Misc: AutoAdjustBufferSize: False, Name: Specifies the name of the object.}

Ready | Add to Source Control | Select Repository | 3:21 PM | ESP | 8/14/2025 | 3

Screenshot of the Microsoft Visual Studio IDE showing the SSIS Designer interface for a package named "Package.dtsx".

The SSIS Toolbox on the left lists various data source and destination components, with the "OLE DB Source" and "OLE DB Destination" highlighted by red boxes and arrows pointing to their respective icons in the Data Flow Task area.

The Solution Explorer on the right shows the project structure for "IS\_DWH\_WWI\_2025".

A callout box with a red border and text in Spanish points to the Data Flow Task area:

Arrastramos hacia nuestra área de diseño el “OLE BD Source” y el “OLE BD Destination”

Below the callout box, the Properties window displays the following details for the "DIM\_PEOPLE" Data Flow Task:

Identification	Description	Data Flow Task
ID	ID	{3FD8AF71-4CF8-4D28-8A48-1
Name	Name	DIM_PEOPLE
PackagePath	PackagePath	\Package\DIM_PEOPLE
Misc	AutoAdjustBufferSize	False
Name	Specifies the name of the object.	

At the bottom, the status bar shows "Focus on Zoom Slider", "Add to Source Control", "Select Repository", and the date/time "3:22 PM 8/14/2025".

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO.NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination
- Partition Processor
- Raw File Destination
- Recordset 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 and after your database is migrated from one system to another.

Focus on Zoom Slider

GitHub Copilot | ADMIN

OLE DB Source Editor

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

Connection Manager

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.

OLE DB connection manager:

ML-RefVm-822010\MORALLES\_24.Datawarehouse\_WWI

New...

Data access mode:

Table or view

Name of the table or the view:

Preview...

Select a table or view from the list.

OK Cancel Help

Verificamos que la conexión sea con la base de datos y no el DWH

Hacemos doble clic sobre OLE DB Source para empezar a configurarlo

Source Data Flow Component

ComponentType	OLE DB Source
DefaultContainer	True
DefaultLocale	English (United States)
DefaultName	OLE DB Source
DefaultVersion	0
Disposition	True
IsExternalMetadata	True

to Source Control Select Repository 3:22 PM 8/14/2025

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot
- Other Sources
  - ADO NET Source
  - CDC Source
  - Excel Source
  - Flat File Source
  - OLE DB Source
  - Raw File Source
  - XML Source
- Other Destination
  - ADO NET Dest
  - DataReader D
  - Dimension Pr
  - Excel Destina
  - Flat File Desti
  - OLE DB Desti
  - Partition Proc
  - Raw File Destination
  - Recordset Destination
  - SQL Server Destination
- OLE DB Destination**

Loads data into an OLE DB-compliant relational databases such as SQL Server. Many types of databases are OLE DB compliant. With minor reconfiguration, this destination can be used before and after your database is migrated from one system to another.

OLE DB Source Editor

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

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.

OLE DB connection manager:

ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

New... ML-RefVm-822010\MORALLES\_24.Datawarehouse\_WWI

ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

OK Cancel

Preview...

Select a table or view from the list.

OK Cancel Help

Solution Explorer

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

- Project.params
- Connection Managers
  - ML-RefVm-822010\_MORALLES\_24.WideWorldImporters
- SSIS Packages
  - Package.dtsx
- Package Parts
  - Control Flow
- Miscellaneous
- Linked Azure Resources
  - Azure-SSIS Integration Runtime
  - Azure Storage

Copilot Chat Solution Explorer Git Changes

Source Data Flow Component

ComponentName	OLE DB Source
DefaultContainer	True
DefaultLocale	English (United States)
DefaultPrecision	OLE DB Source
DefaultScale	0
DefaultSort	True
DisallowExternalMetadata	True

Focus on Zoom Slider

to Source Control Select Repository

3:22 PM 8/14/2025

**Cambiamos la conexión por el de la base de datos ya que esta seleccionado el del DWH. Cuando lo seleccionamos le damos "OK"**

The screenshot shows the 'OLE DB Source Editor' window in Visual Studio. On the left, the 'SSIS Toolbox' is open with the 'OLE DB Destination' node expanded. The main area displays the 'OLE DB Source Editor' configuration page. A red callout box points from the text in the bottom-left towards the 'Connection Manager' dropdown. Inside the dropdown, the 'ML-RefVm-822010\...WWI' option is selected and highlighted with a red box. At the bottom right of the editor window, the 'OK' button is also highlighted with a red box. The status bar at the bottom of the screen shows 'Focus on Zoom Slider' and the date/time '8/14/2025 3:22 PM'.

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO.NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination

OLE DB Source Editor

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

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.

OLE DB connection manager:

ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

Data access mode:

SQL command

SQL command text:

```
SELECT * FROM Application.People
```

Parameters...  
Build Query...  
Browse...  
Parse Query

Preview... OK Cancel Help

GitHub Copilot Solution Explorer (Ctrl+) Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project) IS\_DWH\_WWI\_2025 Project.params Connection Managers ML-RefVm-822010\_MORALLES\_24.WideWorldImporters SSIS Packages Package.dtsx Package Parts Control Flow Miscellaneous Linked Azure Resources Azure-SSIS Integration Runtime Azure Storage Copilot Chat Solution Explorer Git Changes

Source Data Flow Component

ComponentName	OLE DB Source
DefaultContainer	True
DefaultLocale	English (United States)
DefaultRowDisposition	OLE DB Source
DefaultSequenceNumber	0
DefaultWriteDisposition	True
GenerateExternalMetadata	True

Focus on Zoom Slider Add to Source Control Select Repository 3:22 PM 8/14/2025

Selecciónamos el modo comando de SQL y pegamos la consulta para esta dimensión que hicimos en el Paso 1, después damos clic en "Preview..." para verificiar

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

- ADO.NET Source
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- OLE DB Source
- Raw File Source
- XML Source

Other Destinations

- ADO.NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination
- Partition Processing
- Raw File Destination
- Recordset 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 and after your database is migrated from one system to another.

Find Samples

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

Preview Query Results

Select the data access type by typing the query or by

New...

Parameters...

Build Query...

Browse...

Parse Query

Query result (up to the first 200 rows):

PersonID	FullName	PreferredName	SearchName	IsPermitted	Logo
1	Data Control	Data Control	Data Control	False	NO LOGO
2	Kayla Wong	Kayla	Kayla Kayla	True	kayla
3	Hudson O'Connor	Hudson	Hudson Hudson	True	huds
4	Isabella Rodriguez	Isabella	Isabella Isabella	True	isabe
5	Eva Muirden	Eva	Eva Eva	False	evan
6	Sophia Hill	Sophia	Sophia Sophia	True	soph
7	Amy Trefl	Amy	Amy Amy	True	amy1
8	Anthony Parker	Anthony	Anthony Anthony	True	anth
9	Alica Fatnay	Alica	Alica Alica	True	alicai
10	Stella Rose	Stella	Stella Stella	True	stella
	Ethan Ethan	Ethan	Ethan Ethan	True	ethan
	Henry Henry	Henry	Henry Henry	True	henry
	Hudson Hudson	Hudson	Hudson Hudson	True	huds

Preview...

Close

OK Cancel Help

Cuando concluimos de verificar hacemos clic en "Close"

Source Data Flow Component

ComponentType	OLE DB Source
DefaultLocale	True
ConnectionString	OLE DB Source
ConnectionStringID	English (United States)
Version	0
Dispositions	True
AutoExternalMetadata	True

Add to Source Control Select Repository 3:23 PM 8/14/2025

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

- ADO NET Source
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- OLE DB Source
- Raw File Source
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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 and after your database is migrated from one system to another.

[Find Samples](#)

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 mode. If using the SQL command access mode, specify the SQL command either by typing the query or by using Query Builder.

OLE DB connection manager:  
ML-RefVm-822010\_MORALLES\_24.WideWorldImporters [New...](#)

Data access mode:  
SQL command

SQL command text:  
SELECT \* FROM Application.People

[Parameters...](#)  
[Build Query...](#)  
[Browse...](#)  
[Parse Query](#)

Terminamos y damos clic en “OK”

OK Cancel Help

Solution Explorer

Solution Explorer (Ctrl+)

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

Project.params

Connection Managers

ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

SSIS Packages

Package.dtsx

Package Parts

Control Flow

Miscellaneous

Linked Azure Resources

Azure-SSIS Integration Runtime

Azure Storage

Copilot Chat Solution Explorer Git Changes

Source Data Flow Component

ComponentName	OLE DB Source
DefaultLocale	True
ConnectionString	OLE DB Source
MinVersion	0
Dispositions	True
AutoExternalMetadata	True

Add to Source Control Select Repository

Focus on Zoom Slider

3:23 PM 8/14/2025

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination
- Partition Processing
- Raw File Destination
- Recordset 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 and after your database is migrated from one...

[Find Samples](#)

Package.dtsx [Design]\*

Control Flow Data Flow Parameters Event Handlers Package Explorer

Data Flow Task: DIM\_PEOPLE

Conectamos el “OLE DB Source” y el “OLE DB Destination”

```
graph TD; Source[OLE DB Source] --> Destination[OLE DB Destination]
```

Solution Explorer

Search Solution Explorer (Ctrl+)

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

- IS\_DWH\_WWI\_2025
  - Project.params
  - Connection Managers
    - ML-RefVm-822010\_MORALLES\_24.WideWorldImporters
  - SSIS Packages
    - Package.dtsx
  - Package Parts
    - Control Flow
    - Miscellaneous
  - Linked Azure Resources
    - Azure-SSIS Integration Runtime
    - Azure Storage

GitHub Copilot Chat Solution Explorer Git Changes

Properties

OLE DB Source Output Data Flow Path

Description	96
IdentificationString	Paths[OLE DB Source.OLE DB...
Name	OLE DB Source Output

Design

PathAnnotation AsNeeded

Misc

Name

Specifies the name of the path.

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination**
- Partition Processing
- Raw File Destination
- Recordset 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 and after your database is migrated from one system to another.

Find S...

Focus on Zoom Slider

GitHub Copilot

ADMIN

OLE DB Destination Editor

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

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:

ML-RefVm-822010\MORALLES\_24.Datawarehouse\_WWI

New...

Data access mode:

Table or view - fast load

Name of the table or the view:

New...

Keep identity  Table lock

Keep nulls  Check constraints

Rows per batch:

Maximum insert commit size:

2147483647

View Existing

Select a table or view from the list.

OK Cancel Help

Seguimos configurando el “OLE DB Destination”. Verificamos que la conexión sea con el Data Warehouse

Destination Data Flow Component

IdentificationString	OLE DB Destination
faultLocale	True
leID	English (United States)
lineVersion	OLE DB Destination
Dispositions	0
reExternalMetadata	True

to Source Control Select Repository 3:23 PM 8/14/2025

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination
- Partition Processing
- Raw File Destination
- Recordset 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 and after your database is migrated from one system to another.

Focus on Zoom Slider

GitHub Copilot | ADMIN

OLE DB Destination Editor

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

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:

ML-RefVm-822010\MORALLES\_24 Datawarehouse\_WWI

New...

Data access mode:

Table or view -

Name of the object:

Keep identity  Table lock

Keep nulls  Check constraints

Rows per batch:

Maximum insert commit size:

2147483647

Damos clic en "New..."

New...

View Existing

Select a table or view from the list.

OK Cancel Help

Solution Explorer

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

Project.params

Connection Managers

ML-RefVm-822010\MORALLES\_24.WideWorldIm

SSIS Packages

Package.dtsx

Package Parts

Control Flow

Miscellaneous

Linked Azure Resources

Azure-SSIS Integration Runtime

Azure Storage

Copilot Chat Solution Explorer Git Changes

Destination Data Flow Component

IdentificationString	OLE DB Destination
DefaultLocale	True
DefaultContainerID	English (United States)
DefaultConnectionString	OLE DB Destination
DefaultVersion	0
DefaultWriteDisposition	True
DefaultExternalMetadataCache	True

to Source Control Select Repository

3:23 PM 8/14/2025

Screenshot of the Microsoft Visual Studio IDE showing the SSIS Toolbox and the OLE DB Destination Editor.

The SSIS Toolbox on the left lists various data source and destination components, with "OLE DB Destination" selected. The "OLE DB Destination" details pane provides information about loading data into an OLE DB-compliant relational database.

The main window shows the "OLE DB Destination Editor" configuration page. A sub-dialog titled "Create Table" displays a SQL script for creating a table named "DIM\_PEOPLE". The table structure includes columns such as PersonID, FullName, PreferredName, SearchName, IsPermittedToLogon, LogonName, IsExternalLogonProvider, HashedPassword, IsSystemUser, IsEmployee, IsSalesperson, UserPreferences, PhoneNumber, FaxNumber, EmailAddress, Photo, CustomFields, and OtherLanguages.

A red callout box with the text "Cambiamos el nombre de la tabla y hacemos clic en “OK”" points to the "OK" button at the bottom of the "Create Table" dialog. The "OK" button is also highlighted with a red border.

The Solution Explorer on the right shows the project structure for "IS\_DWH\_WWI\_2025", including "Project.params", "Connection Managers", "SSIS Packages", and "Control Flow".

The status bar at the bottom indicates the time as 3:23 PM and the date as 8/14/2025.

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox  
Search SSIS Toolbox  
Term Extraction  
Term Lookup  
Unpivot  
Other Sources  
ADO NET Source  
CDC Source  
Excel Source  
Flat File Source  
OLE DB Source  
Raw File Source  
XML Source  
Other Destinations  
ADO NET Destination  
DataReader Destination  
Dimension Processing  
Excel Destination  
Flat File Destination  
OLE DB Destination  
Partition Processing  
Raw File Destination  
Recordset 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 and after your database is migrated from one system to another.

Find Samples

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

Connection Manager  
**Mappings**  
Error Output

Available Input Column...  
Name  
PersonID  
FullName  
PreferredName  
SearchName  
IsPermittedToLogon  
LogonName  
IsExternalLogonProvider

Available Destination...  
Name  
PersonID  
FullName  
PreferredName  
SearchName  
IsPermittedToLogon  
LogonName  
IsExternalLogonProvider

Input Column	Destination Column
PersonID	PersonID
FullName	FullName
PreferredName	PreferredName
SearchName	SearchName
IsPermittedToLogon	IsPermittedToLogon
LogonName	LogonName
IsExternalLogonProvider	IsExternalLogonProvider
HashedPassword	HashedPassword
IsSystemUser	IsSystemUser

OK Cancel Help

Hacemos clic en “Mappings” y revisamos la correlación de los datos entre ambas tablas y cuando terminamos hacemos clic en “OK”

Solution Explorer  
Solution Explorer (Ctrl+Shift+E)  
IS\_DWH\_WWI\_2025  
Project.params  
Connection Managers  
ML-RefVm-822010\_MORALLES\_24.WideWorldIm...  
SSIS Packages  
Package.dtsx  
Package Parts  
Control Flow  
Miscellaneous  
Linked Azure Resources  
Azure-SSIS Integration Runtime  
Azure Storage  
Copilot Chat Solution Explorer Git Changes

Focus on Zoom Slider Add to Source Control Select Repository 3:24 PM 8/14/2025

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Default | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer | Select Perspective | GitHub Copilot | ADMIN

Search SSIS Toolbox  
Term Extraction  
Term Lookup  
Unpivot  
Other Sources  
ADO NET Source  
CDC Source  
Excel Source  
Flat File Source  
OLE DB Source  
Raw File Source  
XML Source  
Other Destinations  
ADO NET Destination  
DataReader Destination  
Dimension Processing  
Excel Destination  
Flat File Destination  
**OLE DB Destination**  
Partition Processing  
Raw File Destination  
Recordset 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 and after your database is migrated from one...  
[Find Samples](#)

Package.dtsx [Design]\* | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer | Data Flow Task: DIM\_PEOPLE | UDL Source | OLE DB Destination

Terminamos de hacer esta dimensión, hacemos clic en “Control Flow” para continuar con la siguiente

Solution Explorer | GitHub Copilot Chat | Solution Explorer | Git Changes | Properties

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)  
IS\_DWH\_WWI\_2025  
Project.params  
Connection Managers  
ML-RefVm-822010\_MORALLES\_24.WideWorldIm...  
SSIS Packages  
Package.dtsx  
Package Parts  
Control Flow  
Miscellaneous  
Linked Azure Resources  
Azure-SSIS Integration Runtime  
Azure Storage

OLE DB Destination Data Flow Component

IdentificationString	OLE DB Destination
IsDefaultLocale	True
LocaleID	English (United States)
Name	OLE DB Destination
PipelineVersion	0
UsesDispositions	True
ValidateExternalMetadata	True

**Name**  
Specifies the name of the component.

Focus on Zoom Slider | Add to Source Control | Select Repository | 3:24 PM | 8/14/2025 | 1 | 3

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Default | Event Handlers | Package Explorer | Select Perspective | GitHub Copilot Chat | Solution Explorer | Git Changes | Properties

Search SSIS Toolbox

Favorites: Data Flow Task (selected), 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

Azure

Containers: For Loop Container

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 essential Integration Services... | Find Samples

LOCATION → DIM\_PRODUCT → DIM\_PEOPLE

Solution Explorer: Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project) | IS\_DWH\_WWI\_2025 | Project.params, Connection Managers, SSIS Packages, Package.dtsx, Package Parts, Miscellaneous, Linked Azure Resources, Azure-SQL Integration Runtime, Azure Storage

Properties: Package | Package

CreatorName	ML-RefVm-822010\estudiante
Description	
ID	{96E1B8C4-2000-479A-8773}
Name	Package
PackageType	DTSDesigner100
Misc	
Configurations	(Collection)
Name	Specifies the name of the object.

Focus on Zoom Slider | Add to Source Control | Select Repository | 3:24 PM | 8/14/2025 | 1

Ahora seguimos con el siguiente “Data Flow Task”

```
graph TD; LOCATION[LOCATION] -->|arrow| DIM_PRODUCT[DIM_PRODUCT]; DIM_PRODUCT -->|arrow| DIM_PEOPLE[DIM_PEOPLE]
```

SSIS Toolbox | Package.dtsx [Design]\* | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer | Default | Develop | Start | Select Perspective | Search | GitHub Copilot | ADMIN

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 MapReduce Task
- HDFS Task
- Hadoop Task
- Script Task
- Send Mail Task
- Web Service Task
- XML Task

Azure

Containers

For Loop Container

**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 essential Integration Services... [Find Samples](#)

Seguimos conectando los Data Flow Task entre si

```
graph TD; DIM_LOCATION --> DIM_PRODUCT; DIM_PRODUCT --> DIM_PEOPLE; DIM_PEOPLE --> DataFlowTask[Data Flow Task]
```

Solution Explorer

Search Solution Explorer (Ctrl+Shift+F)

- Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)
  - IS\_DWH\_WWI\_2025
    - Project.params
    - Connection Managers
      - ML-RefVm-822010\_MORALLES\_24.WideWorldImporters
    - SSIS Packages
      - Package.dtsx
    - Package Parts
      - Control Flow
    - Miscellaneous
    - Linked Azure Resources
      - Azure-SSIS Integration Runtime
      - Azure Storage

GitHub Copilot Chat | Solution Explorer | Git Changes

Properties

**Constraint 2 Precedence Constraint**

Expression	ID
LogicalAnd	{609CADF5-FCE0-414A-97CF-}
Name	True
PrecedenceExecutable	Constraint 2
Value	DIM_PEOPLE

**Name**  
Specifies the name of the object.

SSIS Toolbox | Package.dtsx [Design]\* | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer | Default | Develop | Start | Select Perspective | Search | GitHub Copilot | ADMIN

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

Azure

Containers

For Loop Container

**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 essential Integration Services...

Find Samples

Control Flow

DIM\_LOCATION

DIM\_PRODUCT

DIM\_PEOPLE

Data Flow Task

Le hacemos doble clic

Solution Explorer

Search Solution Explorer (Ctrl+)

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

- IS\_DWH\_WWI\_2025
  - Project.params
  - Connection Managers
    - ML-RefVm-822010\_MORALLES\_24.WideWorldIm
  - SSIS Packages
    - Package.dtsx
  - Package Parts
    - Control Flow
  - Miscellaneous
  - Linked Azure Resources
    - Azure-SSIS Integration Runtime
    - Azure Storage

GitHub Copilot Chat | Solution Explorer | Git Changes

Properties

Constraint 2 Precedence Constraint

Expression	{609CADF5-FCE0-414A-97CF-}
ID	
LogicalAnd	True
Name	Constraint 2
PrecedenceExecutable	DIM_PEOPLE
Value	Success

Name  
Specifies the name of the object.

```
graph TD; DIM_LOCATION --> DIM_PRODUCT; DIM_PRODUCT --> DIM_PEOPLE; DIM_PEOPLE --> DFT[Data Flow Task]
```

Screenshot of the Microsoft Visual Studio IDE showing the SSIS Toolbox and Solution Explorer.

The SSIS Toolbox (left) contains the following items under "Other Sources": Term Extraction, Term Lookup, Unpivot, ADO NET Source, CDC Source, Excel Source, Flat File Source, OLE DB Source (highlighted with a red box), Raw File Source, and XML Source. Under "Other Destinations": ADO NET Destination, DataReader Destination, Dimension Processing, Excel Destination, Flat File Destination, OLE DB Destination (highlighted with a red box), Partition Processing, Raw File Destination, Recordset Destination, and SQL Server Destination. A tooltip for "OLE DB Destination" is displayed at the bottom left.

The Solution Explorer (right) shows the project structure: Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project) containing IS\_DWH\_WWI\_2025, Project.params, Connection Managers, SSIS Packages, Package.dtsx, Package Parts, Control Flow, Miscellaneous, and Linked Azure Resources.

The main workspace displays a Data Flow Task named "DIM SUPPLIERS". The Data Flow tab is selected. A red arrow points from the "OLE DB Source" icon in the toolbox to its instance in the Data Flow Task. Another red arrow points from the "OLE DB Destination" icon in the toolbox to its instance in the Data Flow Task. A callout box with the text "Arrastramos hacia nuestra área de diseño el ‘OLE BD Source’ y el ‘OLE BD Destination’" is positioned over the destination icon.

Bottom status bar: Focus on Zoom Slider, Add to Source Control, Select Repository, 3:25 PM, 8/14/2025, ESP, 1.

Hacemos doble clic sobre OLE DB Source para empezar a configurarlo

Verificamos que la conexión sea con la base de datos y no el DWH

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 mode. If using the SQL command access mode, specify the SQL command either by typing the query or by using Query Builder.

OLE DB connection manager:  
ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

Data access mode:  
SQL command

SQL command text:

```
SELECT I.SupplierID, I.SupplierName, X.SupplierCategoryID,  
X.SupplierCategoryName, I.PrimaryContactPersonID, B.FullName,  
B.EmailAddress, B.PhoneNumber, D.StockItemID, D.StockItemName,  
C.DeliveryMethodID, C.DeliveryMethodName  
FROM Purchasing.Suppliers I  
INNER JOIN Purchasing.SupplierCategories X  
ON I.SupplierCategoryID = X.SupplierCategoryID  
INNER JOIN Application.People B  
ON I.PrimaryContactPersonID = B.PersonID  
INNER JOIN Warehouse.StockItems D  
ON I.SupplierID = D.SupplierID  
INNER JOIN Application.DeliveryMethods C  
ON I.DeliveryMethodID = C.DeliveryMethodID
```

Parameters...  
Build Query...  
Browse...  
Parse Query

Preview...  
OK Cancel Help

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 and after your database is migrated from one system to another.

Find Samples

Focus on Zoom Slider Add to Source Control Select Repository 3:26 PM 8/14/2025

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help Search IS\_DWH\_WWI\_2025 GitHub Copilot ADMIN

Solution Explorer Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project) IS\_DWH\_WWI\_2025 Project.params Connection Managers ML-RefVm-822010\_MORALLES\_24.WideWorldImporters SSIS Packages Package.dtsx

Copilot Chat Solution Explorer Git Changes

Source Data Flow Component

ComponentName	OLE DB Source
DefaultLocale	True
DefaultContainer	OLE DB Source
DefaultVersion	0
Disposition	True
IsExternalMetadata	True

is the name of the component.

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination

OLE DB Source Editor

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

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.

OLE DB connection manager:

ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

Data access mode:

SQL command

SQL command text:

```
SELECT I.SupplierID, I.SupplierName, X.SupplierCategoryID,  
X.SupplierCategoryName, I.PrimaryContactPersonID, B.FullName,  
B.EmailAddress, B.PhoneNumber, D.StockItemID, D.StockItemName,  
C.DeliveryMethodID, C.DeliveryMethodName  
FROM Purchasing.Suppliers I  
INNER JOIN Purchasing.SupplierCategories X  
ON I.SupplierCategoryID = X.SupplierCategoryID  
INNER JOIN Application.People B  
ON I.PrimaryContactPersonID = B.PersonID  
INNER JOIN Warehouse.StockItems D  
ON I.SupplierID = D.SupplierID  
INNER JOIN Application.DeliveryMethods C  
ON I.DeliveryMethodID = C.DeliveryMethodID
```

Parameters...  
Build Query...  
Browse...  
Parse Query

Preview... OK Cancel Help

Solution Explorer

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

- Project.params
- Connection Managers
- SSIS Packages
- Package.dtsx
- Package Parts
- Control Flow
- Miscellaneous
- Linked Azure Resources
- Azure-SSIS Integration Runtime
- Azure Storage

Copilot Chat Solution Explorer Git Changes

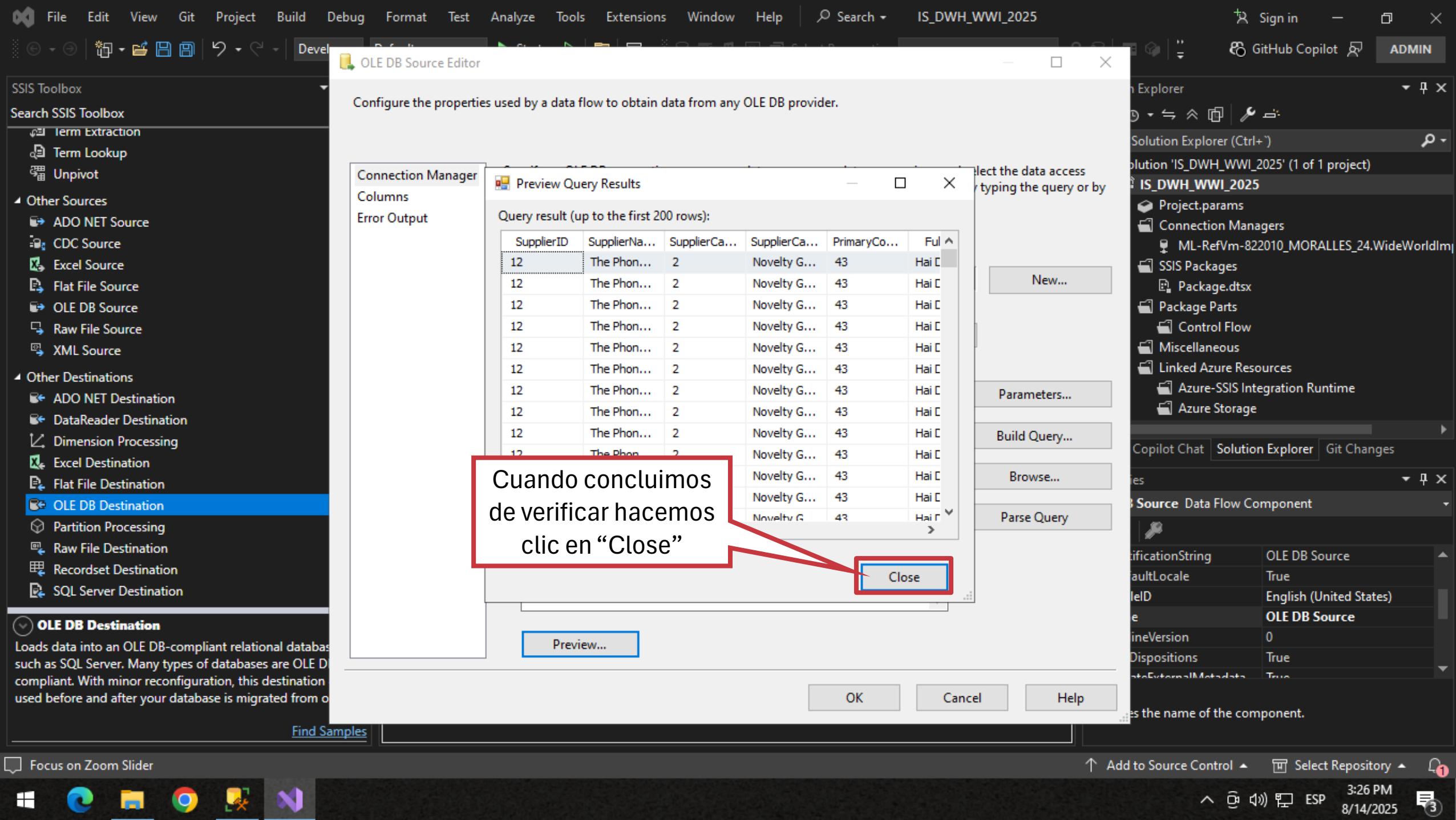
Source Data Flow Component

ComponentName	OLE DB Source
DefaultLocale	True
ConnectionString	OLE DB Source
CacheVersion	0
Dispositions	True
AutoExternalMetadata	True

Focus on Zoom Slider Add to Source Control Select Repository 3:26 PM 8/14/2025

Selecciónamos el modo comando de SQL y pegamos la consulta para esta dimensión que hicimos en el Paso 1, después damos clic en "Preview..." para verificiar

The screenshot shows the Microsoft Visual Studio interface for an SSIS package named 'IS\_DWH\_WWI\_2025'. In the center, the 'OLE DB Source Editor' window is open. On the left, the 'SSIS Toolbox' contains various data source components like Term Extraction, Term Lookup, and Unpivot. The main workspace displays the 'OLE DB Source Editor' configuration page. A red box highlights the 'Data access mode:' dropdown, which is set to 'SQL command'. Another red box highlights the 'SQL command text:' area, which contains a detailed multi-table query. A callout arrow originates from the explanatory text on the left side of the image and points directly to the 'SQL command text:' area in the editor. The status bar at the bottom includes standard VS icons and text like 'Focus on Zoom Slider', 'Add to Source Control', 'Select Repository', and the system time ('3:26 PM 8/14/2025').



File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination
- Partition Processing
- Raw File Destination
- Recordset 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 and after your database is migrated from one system to another.

Find Samples

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 mode. If using the SQL command access mode, specify the SQL command either by typing the query or by using Query Builder.

OLE DB connection manager:  
ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

Data access mode:  
SQL command

SQL command text:

```
SELECT I.SupplierID, I.SupplierName, X.SupplierCategoryID,  
X.SupplierCategoryName, I.PrimaryContactPersonID, B.FullName,  
B.EmailAddress, B.PhoneNumber, D.StockItemID, D.StockItemName,  
C.DeliveryMethodID, C.DeliveryMethodName  
FROM Purchasing.Suppliers I  
INNER JOIN Purchasing.SupplierCategories X  
ON I.SupplierCategoryID = X.SupplierCategoryID  
INNER JOIN Application.People B  
ON I.PrimaryContactPersonID = B.PersonID  
INNER JOIN Warehouse.StockItems D  
ON I.SupplierID = D.SupplierID  
INNER JOIN Application.DeliveryMethods C  
= C.DeliveryMethodID |
```

Parameters...  
Build Query...  
Browse...  
Parse Query

Terminamos y damos clic en “OK”

OK Cancel Help

Solution Explorer

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

- Project.params
- Connection Managers
  - ML-RefVm-822010\_MORALLES\_24.WideWorldImporters
- SSIS Packages
  - Package.dtsx
- Package Parts
  - Control Flow
  - Miscellaneous
- Linked Azure Resources
  - Azure-SSIS Integration Runtime
  - Azure Storage

Copilot Chat Solution Explorer Git Changes

Source Data Flow Component

ComponentType	OLE DB Source
DefaultLocale	True
ConnectionString	OLE DB Source
Version	0
Dispositions	True
AutoExternalMetadata	True

Focus on Zoom Slider Add to Source Control Select Repository 3:26 PM 8/14/2025

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Package.dtsx [Design]\* | Default | Start | Select Perspective | Search | GitHub Copilot | ADMIN

Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer

Data Flow Task: DIM SUPPLERS

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination
- Partition Processing
- Raw File Destination
- Recordset 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 and after your database is migrated from one...

[Find Samples](#)

Package.dtsx [Design]\*

Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer

Data Flow Task: DIM SUPPLERS

Conectamos el “OLE DB Source” y el “OLE DB Destination”

OLE DB Source

OLE DB Destination

Connection Managers

ML-RefVm-822010|MORALLES\_24.Datawarehouse\_WWI (project) ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

Solution Explorer

Search Solution Explorer (Ctrl+)

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

- Project.params
- Connection Managers
- SSIS Packages
  - Package.dtsx
- Package Parts
  - Control Flow
  - Miscellaneous
- Linked Azure Resources
  - Azure-SSIS Integration Runtime
  - Azure Storage

GitHub Copilot Chat | Solution Explorer | Git Changes

Properties

OLE DB Source Output Data Flow Path

Description	
ID	69
IdentificationString	Paths[OLE DB Source.OLE DB...
Name	OLE DB Source Output

Design

PathAnnotation AsNeeded

Misc

Name

Specifies the name of the path.

Ready | Add to Source Control | Select Repository | 3:26 PM | 8/14/2025 | 1

Windows Taskbar icons: File Explorer, Microsoft Edge, Google Chrome, FileZilla, Visual Studio

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Search SSIS Toolbox | Term Extraction, Term Lookup, Unpivot, Other Sources (ADO NET Source, CDC Source, Excel Source, Flat File Source, OLE DB Source, Raw File Source, XML Source), Other Destinations (ADO NET Destination, DataReader Destination, Dimension Processing, Excel Destination, Flat File Destination, OLE DB Destination, Partition Processing, Raw File Destination, Recordset Destination, SQL Server Destination). OLE DB Destination is selected.

OLE DB Destination Editor: Configure the properties used to insert data into a relational database using an OLE DB provider. Connection Manager dropdown shows "ML-RefVm-822010\MORALLES\_24.Datawarehouse\_WWI". Data access mode is set to "Table or view - fast load". Name of the table or the view is empty. Checkboxes for Keep identity, Keep nulls, Table lock, and Check constraints are present. Rows per batch and Maximum insert commit size are set to 2147483647. A warning message at the bottom says "Select a table or view from the list." Buttons OK, Cancel, and Help are at the bottom.

Solution Explorer: Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project) | IS\_DWH\_WWI\_2025 | Project.params, Connection Managers (ML-RefVm-822010\MORALLES\_24.WideWorldIm), SSIS Packages (Package.dtsx).

Properties: ComponentType is set to OLE DB Destination.

Taskbar: Ready, Windows Start button, Task View, File Explorer, Google Chrome, Visual Studio, 3:26 PM, 8/14/2025.

Text annotation: Seguimos configurando el “OLE DB Destination”. Verificamos que la conexión sea con el Data Warehouse.

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Search SSIS Toolbox | Term Extraction, Term Lookup, Unpivot, Other Sources (ADO NET Source, CDC Source, Excel Source, Flat File Source, OLE DB Source, Raw File Source, XML Source), Other Destinations (ADO NET Destination, DataReader Destination, Dimension Processing, Excel Destination, Flat File Destination, OLE DB Destination, Partition Processing, Raw File Destination, Recordset Destination, SQL Server Destination), OLE DB Destination (selected). 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 and after your database is migrated from one provider to another.

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

Connection Manager: ML-RefVm-822010\MORALLES\_24 Datawarehouse\_WWI | New... | Data access mode: Table or view - | Name of the object: | Keep identity | Table lock | Keep nulls | Check constraints | Rows per batch: | Maximum insert commit size: 2147483647 | View Existing | OK | Cancel | Help | Select a table or view from the list.

Solution Explorer | Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project) | IS\_DWH\_WWI\_2025 | Project.params, Connection Managers (ML-RefVm-822010\MORALLES\_24.WideWorldIm...), SSIS Packages (Package.dtsx), Package Parts (Control Flow, Miscellaneous), Linked Azure Resources (Azure-SQL Integration Runtime, Azure Storage). Copilot Chat | Solution Explorer | Git Changes.

Destination Data Flow Component | Properties: IdentificationString (OLE DB Destination), IsDefaultLocale (True), Locale (English (United States)), OleDBVersion (0), Dispositions (True), AutoExternalMetadata (True). Notes: This component is used to load 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 and after your database is migrated from one provider to another.

Ready | to Source Control | Select Repository | 3:26 PM | 8/14/2025 | 1 | 3

Damos clic en "New..."

Screenshot of the Microsoft SQL Server Integration Services (SSIS) Development environment. The main window shows the 'OLE DB Destination Editor' configuration dialog. A red callout box points to the 'OK' button in the bottom right corner of the inner dialog, with the text: 'Cambiamos el nombre de la tabla y hacemos clic en "OK"' (We change the table name and click 'OK').

The SSIS Toolbox on the left lists various data source and destination components. The 'OLE DB Destination' component is currently selected.

The Solution Explorer on the right shows the project 'IS\_DWH\_WWI\_2025' containing a package named 'Package.dtsx'.

The 'Properties' window on the right displays the following settings for the selected OLE DB Destination:

ComponentName	OLE DB Destination
DefaultContainer	True
DefaultLocale	English (United States)
DefaultPrecision	OLE DB Destination
DefaultScale	0
DefaultTableName	True
DefaultTruncate	True
DefaultExternalMetadata	True

A note at the bottom of the Properties window states: 'This property specifies the name of the component.'

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Search SSIS Toolbox | Term Extraction, Term Lookup, Unpivot, Other Sources (ADO NET Source, CDC Source, Excel Source, Flat File Source, OLE DB Source, Raw File Source, XML Source), Other Destinations (ADO NET Destination, DataReader Destination, Dimension Processing, Excel Destination, Flat File Destination, OLE DB Destination, Partition Processing, Raw File Destination, Recordset 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 and after your database is migrated from one type to another). Find Samples.

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

Connection Manager | Mappings | Error Output

Available Input Columns: SupplierID, SupplierName, SupplierCategoryID, SupplierCategoryName, PrimaryContactPersonID, FullName, EmailAddress

Available Destination Columns: SupplierID, SupplierName, SupplierCategoryID, SupplierCategoryName, PrimaryContactPersonID, FullName, EmailAddress

Input Column | Destination Column

Input Column	Destination Column
SupplierID	SupplierID
SupplierName	SupplierName
SupplierCategoryID	SupplierCategoryID
SupplierCategoryName	SupplierCategoryName
PrimaryContactPersonID	PrimaryContactPersonID
FullName	FullName
EmailAddress	EmailAddress
PhoneNumber	PhoneNumber
StockItemID	StockItemID

OK | Cancel | Help

Hacemos clic en “Mappings” y revisamos la correlación de los datos entre ambas tablas y cuando terminamos hacemos clic en “OK”

Solution Explorer | Solution Explorer (Ctrl+) | IS\_DWH\_WWI\_2025 | Project.params, Connection Managers (ML-RefVm-822010\_MORALLES\_24.WideWorldIm...), SSIS Packages (Package.dtsx), Package Parts (Control Flow, Miscellaneous), Linked Azure Resources (Azure-SSIS Integration Runtime, Azure Storage).

Copilot Chat | Solution Explorer | Git Changes

Ready | Add to Source Control | Select Repository | 3:27 PM | 8/14/2025 | 1

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Default | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer | Select Perspective | GitHub Copilot | ADMIN

Search SSIS Toolbox  
Term Extraction  
Term Lookup  
Unpivot  
Other Sources  
ADO NET Source  
CDC Source  
Excel Source  
Flat File Source  
OLE DB Source  
Raw File Source  
XML Source  
Other Destinations  
ADO NET Destination  
DataReader Destination  
Dimension Processing  
Excel Destination  
Flat File Destination  
**OLE DB Destination**  
Partition Processing  
Raw File Destination  
Recordset 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 and after your database is migrated from one...  
[Find Samples](#)

Package.dtsx [Design]\* | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer | Data Flow Task: DIM SUPPLIERS

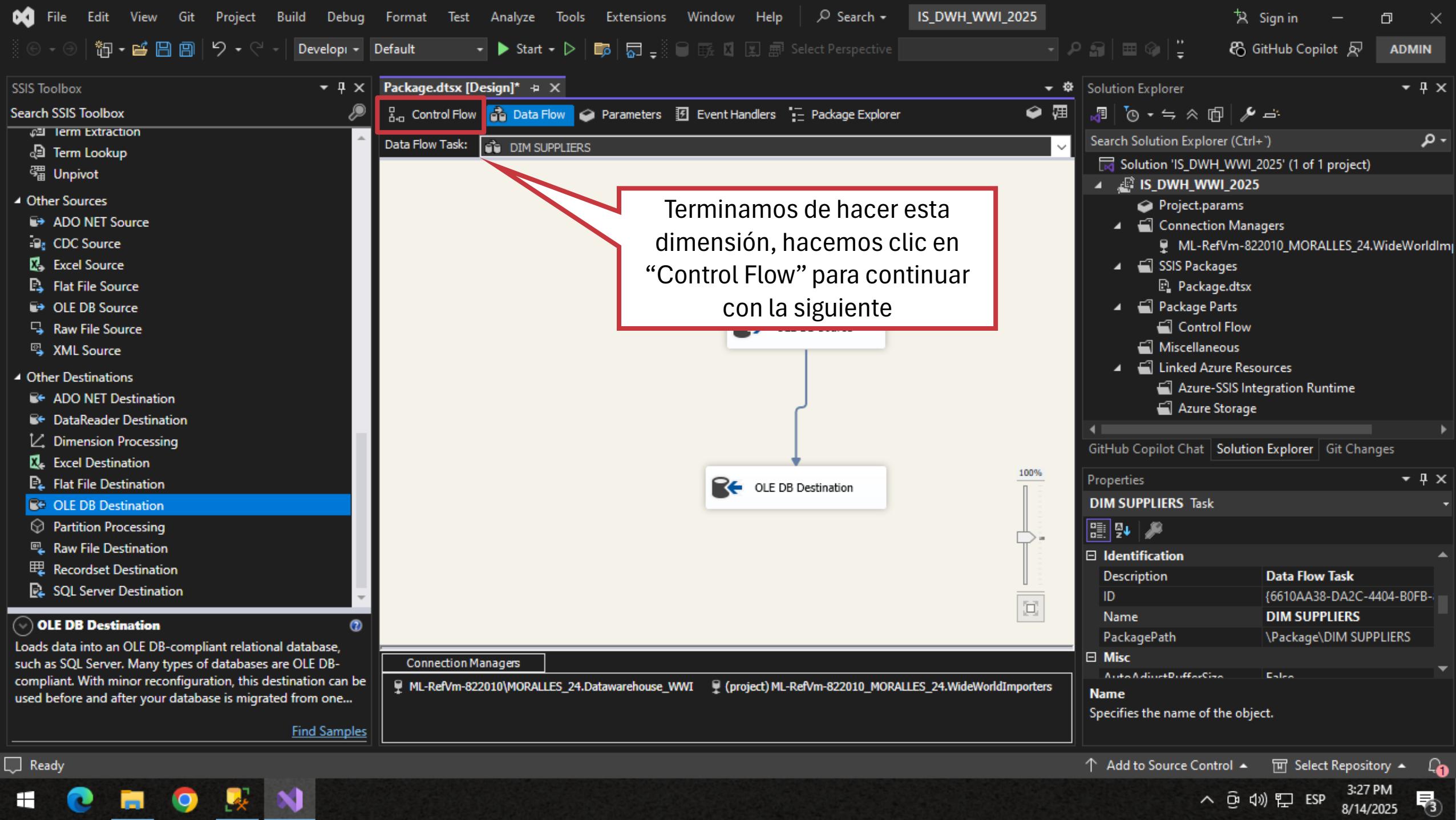
Terminamos de hacer esta dimensión, hacemos clic en “Control Flow” para continuar con la siguiente

Solution Explorer | GitHub Copilot Chat | Solution Explorer | Git Changes | Properties

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)  
IS\_DWH\_WWI\_2025  
Project.params  
Connection Managers  
ML-RefVm-822010\_MORALLES\_24.WideWorldIm...  
SSIS Packages  
Package.dtsx  
Package Parts  
Control Flow  
Miscellaneous  
Linked Azure Resources  
Azure-SSIS Integration Runtime  
Azure Storage

DIM SUPPLIERS Task  
Identification  
Description: Data Flow Task  
ID: {6610AA38-DA2C-4404-B0FB-...  
Name: DIM SUPPLIERS  
PackagePath: \Package\DIM SUPPLIERS  
Misc  
AutoAdjustBufferSize: False  
Name  
Specifies the name of the object.

Ready | Add to Source Control | Select Repository | 3:27 PM | 8/14/2025 | 1



File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Default | Select Perspective | Search SSIS Toolbox | Event Handlers | Package Explorer | 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 | Azure | Containers | For Loop Container | 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 essential Integration Services... | Find Samples

Ahora seguimos con el siguiente “Data Flow Task”

```
graph TD; LOCATION[LOCATION] --> DIM_PRODUCT[DIM_PRODUCT]; DIM_PRODUCT --> DIM_PEOPLE[DIM_PEOPLE]; DIM_PEOPLE --> DIM_SUPPLIERS[DIM_SUPPLIERS];
```

Solution Explorer | Search Solution Explorer (Ctrl+) | Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project) | IS\_DWH\_WWI\_2025 | Project.params | Connection Managers | SSIS Packages | Package.dtsx | Package Parts | Control Flow | Miscellaneous | Linked Azure Resources | Azure-SSIS Integration Runtime | Azure Storage | GitHub Copilot Chat | Solution Explorer | Git Changes | Properties | DIM\_SUPPLIERS Task | Identification | Description: Data Flow Task | ID: {6610AA38-DA2C-4404-B0FB-...} | Name: DIM\_SUPPLIERS | PackagePath: \Package\DIM SUPPLIERS | Misc | AutoAdjustBufferSize: False | Name | Specifies the name of the object.

Ready | Add to Source Control | Select Repository | 3:27 PM | ESP | 8/14/2025 | 1

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
- Hadoop
- Hadoop
- Hadoop
- Script
- Send Mail Task
- Web Service Task
- XML Task

Azure

Containers

For Loop Container

**Favorites**

Provides convenient access to your favorite elements so that they are only a click away.

Package.dtsx [Design]\*

Control Flow Data Flow Parameters Event Handlers Package Explorer

DIM\_LOCATION → DIM\_PRODUCT → DIM\_PEOPLE → DIM\_SUPPLIERS → DIM\_CUSTOMERS

Solution Explorer

Search Solution Explorer (Ctrl+)

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

- IS\_DWH\_WWI\_2025
  - Project.params
  - Connection Managers
    - ML-RefVm-822010\_MORALLES\_24.WideWorldIm
  - SSIS Packages
    - Package.dtsx
  - Package Parts
    - Control Flow
  - Miscellaneous
  - Linked Azure Resources
    - Azure-SSIS Integration Runtime
    - Azure Storage

GitHub Copilot Chat Solution Explorer Git Changes

Properties

Package Package

CreatorName	ML-RefVm-822010\estudiante
Description	
ID	{96E1B8C4-2000-479A-8773}
Name	Package
PackageType	DTSDesigner100
Misc	
Configurations	(Collection)
Name	Specifies the name of the object.

Focus on Zoom Slider Add to Source Control Select Repository 3:28 PM 8/14/2025

Seguimos conectando los Data Flow Task entre si

SSIS Toolbox | Package.dtsx [Design]\* | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer

Solution Explorer | Search Solution Explorer (Ctrl+)

Control Flow Diagram:

```
graph TD; DIM_LOCATION[DIM_LOCATION] --> DIM_PRODUCT[DIM_PRODUCT]; DIM_PRODUCT --> DIM_PEOPLE[DIM_PEOPLE]; DIM_PEOPLE --> DIM_SUPPLIERS[DIM SUPPLIERS]; DIM_SUPPLIERS --> DIM_CUSTOMERS[DIM CUSTOMERS]
```

Properties Panel:

Package	Package
Name	ML-RefVm-822010\estudiante
PackageType	DTSDesigner100
Misc	
Configurations	(Collection)
Name	Specifies the name of the object.

Le hacemos doble clic

Focus on Zoom Slider

Add to Source Control | Select Repository | 3:28 PM | 8/14/2025 | 1



Screenshot of the Microsoft Visual Studio IDE showing the SSIS Toolbox and Solution Explorer.

The SSIS Toolbox is open on the left, displaying various data source and destination components. The 'OLE DB Source' and 'OLE DB Destination' are highlighted with red boxes and arrows pointing to them from the text annotation.

The Solution Explorer on the right shows the project structure for 'IS\_DWH\_WWI\_2025'.

A large callout box with a red border contains the text:

Arrastramos hacia nuestra área de diseño el “OLE BD Source” y el “OLE BD Destination”

The 'OLE DB Destination' component is currently selected in the Data Flow Task area, and its properties are displayed in the Properties window on the right.

Properties of the selected OLE DB Destination:

IdentificationString	OLE DB Destination
IsDefaultLocale	True
LocaleID	English (United States)
Name	OLE DB Destination
PipelineVersion	0
UsesDispositions	True
ValidateExternalMetadata	True
<b>Name</b>	Specifies the name of the component.

Bottom navigation bar:

- Focus on Zoom Slider
- Add to Source Control
- Select Repository
- 3:28 PM
- 8/14/2025

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO.NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination
- Partition Processor
- Raw File Destination
- Recordset 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 and after your database is migrated from one system to another.

Find Samples

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 mode. If using the SQL command access mode, specify the SQL command either by typing the query or by using Query Builder.

OLE DB connection manager:

ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

New...

Data access mode:

SQL command

SQL command text:

```
SELECT K.CustomerID, K.CustomerName, K.CustomerCategoryID, J.CustomerCategoryName, K.BuyingGroupID, Y.BuyingGroupName, K.PhoneNumber, K.FaxNumber FROM Sales.Customers K  
INNER JOIN Sales.CustomerCategories J  
ON K.CustomerCategoryID = J.CustomerCategoryID  
INNER JOIN Sales.BuyingGroups Y  
ON K.BuyingGroupID = Y.BuyingGroupID
```

Parameters...  
Build Query...  
Browse...  
Parse Query

Preview...

OK Cancel Help

GitHub Copilot | Solution Explorer (Ctrl+) | Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project) | IS\_DWH\_WWI\_2025 | Project.params | Connection Managers | ML-RefVm-822010\_MORALLES\_24.WideWorldImporters | SSIS Packages | Package.dtsx

Copilot Chat | Solution Explorer | Git Changes

Source Data Flow Component

ComponentType	OLE DB Source
DefaultLocale	True
ConnectionString	OLE DB Source
Version	0
Dispositions	True
AutoExternalMetadata	True

Focus on Zoom Slider | Add to Source Control | Select Repository | 3:28 PM | ESP | 8/14/2025 | 1

Hacemos doble clic sobre OLE DB Source para empezar a configurarlo

Verificamos que la conexión sea con la base de datos y no el DWH

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination

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 mode. If using the SQL command access mode, specify the SQL command either by typing the query or by using Query Builder.

OLE DB connection manager: ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

Data access mode: SQL command

SQL command text:

```
SELECT K.CustomerID, K.CustomerName, K.CustomerCategoryID, J.CustomerCategoryName, K.BuyingGroupID, Y.BuyingGroupName, K.PhoneNumber, K.FaxNumber FROM Sales.Customers K  
INNER JOIN Sales.CustomerCategories J  
ON K.CustomerCategoryID = J.CustomerCategoryID  
INNER JOIN Sales.BuyingGroups Y  
ON K.BuyingGroupID = Y.BuyingGroupID
```

Parameters...  
Build Query...  
Browse...  
Parse Query

Preview... OK Cancel Help

Solution Explorer

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

- IS\_DWH\_WWI\_2025
- Project.params
- Connection Managers
- ML-RefVm-822010\_MORALLES\_24.WideWorldImporters
- SSIS Packages
- Package.dtsx
- Package Parts
- Control Flow
- Miscellaneous
- Linked Azure Resources
- Azure-SSIS Integration Runtime
- Azure Storage

Copilot Chat Solution Explorer Git Changes

Source Data Flow Component

ComponentName	OLE DB Source
DefaultLocale	True
LocaleID	English (United States)
OLE DB Connection	OLE DB Source
OLEDBCommandVersion	0
OpenExternalMetadata	True

Focus on Zoom Slider Add to Source Control Select Repository 3:28 PM 8/14/2025

Selecciónamos el modo comando de SQL y pegamos la consulta para esta dimensión que hicimos en el Paso 1, después damos clic en "Preview..." para verificiar

```
SELECT K.CustomerID, K.CustomerName, K.CustomerCategoryID, J.CustomerCategoryName, K.BuyingGroupID, Y.BuyingGroupName, K.PhoneNumber, K.FaxNumber FROM Sales.Customers K  
INNER JOIN Sales.CustomerCategories J  
ON K.CustomerCategoryID = J.CustomerCategoryID  
INNER JOIN Sales.BuyingGroups Y  
ON K.BuyingGroupID = Y.BuyingGroupID
```

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO.NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination
- Partition Processing
- Raw File Destination
- Recordset 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 and after your database is migrated from one system to another.

[Find Samples](#)

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

Preview Query Results

Select the data access type by typing the query or by

New...

Parameters...

Build Query...

Browse...

Parse Query

Query result (up to the first 200 rows):

CustomerID	CustomerName	CustomerType	CustomerStatus	BuyingGroup	BuyerType
1	Tailspin T...	3	Novelty S...	1	Tails...
2	Tailspin T...	3	Novelty S...	1	Tails...
3	Tailspin T...	3	Novelty S...	1	Tails...
4	Tailspin T...	3	Novelty S...	1	Tails...
5	Tailspin T...	3	Novelty S...	1	Tails...
6	Tailspin T...	3	Novelty S...	1	Tails...
7	Tailspin T...	3	Novelty S...	1	Tails...
8	Tailspin T...	3	Novelty S...	1	Tails...
9	Tailspin T...	3	Novelty S...	1	Tails...
10	Tailspin T...	3	Novelty S...	1	Tails...
			Novelty S...	1	Tails...
			Novelty S...	1	Tails...
			Novelty S...	1	Tails...
			Novelty S...	1	Tails...

Preview...

Close

OK Cancel Help

Copilot Chat Solution Explorer Git Changes

Source Data Flow Component

ComponentString	OLE DB Source
DefaultLocale	True
LocaleID	English (United States)
Source	OLE DB Source
Version	0
Disposition	True
AutoExternalMetadata	True

es the name of the component.

Focus on Zoom Slider Add to Source Control Select Repository 3:28 PM 8/14/2025 1

Cuando concluimos de verificar hacemos clic en "Close"

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination
- Partition Processing
- Raw File Destination
- Recordset 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 and after your database is migrated from one system to another.

Find Samples

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 mode. If using the SQL command access mode, specify the SQL command either by typing the query or by using Query Builder.

OLE DB connection manager:  
ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

Data access mode:  
SQL command

SQL command text:

```
SELECT K.CustomerID, K.CustomerName, K.CustomerCategoryID, J.CustomerCategoryName, K.BuyingGroupID, Y.BuyingGroupName, K.PhoneNumber, K.FaxNumber FROM Sales.Customers K  
INNER JOIN Sales.CustomerCategories J  
ON K.CustomerCategoryID = J.CustomerCategoryID  
INNER JOIN Sales.BuyingGroups Y  
ON K.BuyingGroupID = Y.BuyingGroupID
```

Parameters...  
Build Query...  
Browse...  
Parse Query

Terminamos y damos clic en “OK”

OK Cancel Help

Solution Explorer

Solution Explorer (Ctrl+Shift+E)

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

Project.params

Connection Managers

ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

SSIS Packages

Package.dtsx

Package Parts

Control Flow

Miscellaneous

Linked Azure Resources

Azure-SSIS Integration Runtime

Azure Storage

Copilot Chat Solution Explorer Git Changes

Source Data Flow Component

ComponentType	OLE DB Source
DefaultLocale	True
ConnectionString	OLE DB Source
ConnectionStringVersion	0
Dispositions	True
GenerateExternalMetadata	True

Focus on Zoom Slider Add to Source Control Select Repository 3:28 PM 8/14/2025

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination
- Partition Processing
- Raw File Destination
- Recordset 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 and after your database is migrated from one...

Find Samples

Package.dtsx [Design]\*

Control Flow Data Flow Parameters Event Handlers Package Explorer

Data Flow Task: DIM CUSTOMERS

Conectamos el “OLE DB Source” y el “OLE DB Destination”

```
graph TD; Source[OLE DB Source] --> Destination[OLE DB Destination]
```

Solution Explorer

Search Solution Explorer (Ctrl+)

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

- IS\_DWH\_WWI\_2025
  - Project.params
  - Connection Managers
    - ML-RefVm-822010\_MORALLES\_24.WideWorldIm
  - SSIS Packages
    - Package.dtsx
  - Package Parts
    - Control Flow
  - Miscellaneous
  - Linked Azure Resources
    - Azure-SSIS Integration Runtime
    - Azure Storage

GitHub Copilot Chat Solution Explorer Git Changes

Properties

OLE DB Source Output Data Flow Path

Description	
ID	57
IdentificationString	Paths[OLE DB Source.OLE DB
Name	OLE DB Source Output

Design

PathAnnotation AsNeeded

Misc

Name

Specifies the name of the path.

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination**
- Partition Processing
- Raw File Destination
- Recordset 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 and after your database is migrated from one system to another.

Find S...

Focus on Zoom Slider

GitHub Copilot

ADMIN

OLE DB Destination Editor

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

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:

ML-RefVm-822010\MORALLES\_24.Datawarehouse\_WWI

New...

Data access mode:

Table or view - fast load

Name of the table or the view:

New...

Keep identity

Table lock

Keep nulls

Check constraints

Rows per batch:

Maximum insert commit size:

2147483647

View Existing

Select a table or view from the list.

OK Cancel Help

Seguimos configurando el “OLE DB Destination”. Verificamos que la conexión sea con el Data Warehouse

Destination Data Flow Component

IdentificationString	OLE DB Destination
DefaultLocale	True
Locale	English (United States)
LineVersion	0
Dispositions	True
AutoExternalMetadata	True

to Source Control Select Repository

3:29 PM 8/14/2025

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Search SSIS Toolbox | Term Extraction, Term Lookup, Unpivot, Other Sources (ADO NET Source, CDC Source, Excel Source, Flat File Source, OLE DB Source, Raw File Source, XML Source), Other Destinations (ADO NET Destination, DataReader Destination, Dimension Processing, Excel Destination, Flat File Destination, OLE DB Destination, Partition Processing, Raw File Destination, Recordset Destination, SQL Server Destination), OLE DB Destination (selected). 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 and after your database is migrated from one provider to another.

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

Connection Manager: ML-RefVm-822010\MORALLES\_24 Datawarehouse\_WWI | New... | Data access mode: Table or view - | Name of the object: | Keep identity | Table lock | Keep nulls | Check constraints | Rows per batch: | Maximum insert commit size: 2147483647 | View Existing | OK | Cancel | Help | Select a table or view from the list.

Solution Explorer | Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project) | IS\_DWH\_WWI\_2025 | Project.params, Connection Managers (ML-RefVm-822010\MORALLES\_24.WideWorldIm...), SSIS Packages (Package.dtsx), Package Parts (Control Flow, Miscellaneous), Linked Azure Resources (Azure-SQL Integration Runtime, Azure Storage).

Copilot Chat | Solution Explorer | Git Changes | Destination Data Flow Component | IdentificationString: OLE DB Destination, IsDefault: True, Name: OLE DB Destination, PipelineVersion: 0, Dispositions: True, AutoExternalMetadata: True | Description: This component is used to load 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 and after your database is migrated from one provider to another.

Focus on Zoom Slider | to Source Control | Select Repository | 3:29 PM | ESP | 8/14/2025 | 1 | 3

Damos clic en "New..."

Screenshot of the Microsoft Visual Studio IDE showing the SSIS Toolbox and the OLE DB Destination Editor.

The SSIS Toolbox on the left lists various data source and destination components, with "OLE DB Destination" selected. The "OLE DB Destination" properties window is open at the bottom, showing the following configuration:

IdentificationString	OLE DB Destination
DefaultLocale	True
Locale	English (United States)
OLE DB Destination	OLE DB Destination
RowVersion	0
Dispositions	True
AutoExternalMetadata	True

The "OLE DB Destination Editor" window shows the SQL command for creating a table:

```
CREATE TABLE [DIM_CUSTOMERS] (
    [CustomerID] int,
    [CustomerName] nvarchar(100),
    [CustomerCategoryID] int,
    [CustomerCategoryName] nvarchar(50),
    [BuyingGroupID] int,
    [BuyingGroupName] nvarchar(50),
    [PhoneNumber] nvarchar(20),
    [FaxNumber] nvarchar(20)
)
```

A red box highlights the table name "DIM\_CUSTOMERS" in the SQL command. A callout bubble with the text "Cambiamos el nombre de la tabla y hacemos clic en “OK”" points to the "OK" button at the bottom of the "Create Table" dialog. The "OK" button is also highlighted with a red box.

The Solution Explorer on the right shows the project "IS\_DWH\_WWI\_2025" with files like "Project.params", "Connection Managers", "SSIS Packages", and "Package.dtsx".

Screenshot of the Microsoft Visual Studio IDE showing the SSIS Toolbox and the OLE DB Destination Editor.

The SSIS Toolbox on the left lists various data source and destination components, with "OLE DB Destination" currently selected. A tooltip for "OLE DB Destination" provides its description: "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 and after your database is migrated from one type to another." Below the tooltip are "Find Samples" and "Focus on Zoom Slider" buttons.

The main window displays the "OLE DB Destination Editor" configuration dialog. The "Mappings" tab is selected, highlighted by a red box. The dialog shows two columns of available columns: "Available Input Columns" and "Available Destination Columns". Both lists contain the same seven columns: CustomerID, CustomerName, CustomerCategoryID, CustomerCategoryName, BuyingGroupID, BuyingGroupName, and PhoneNumber. Below these lists is a mapping grid:

Input Column	Destination Column
CustomerID	CustomerID
CustomerName	CustomerName
CustomerCategoryID	CustomerCategoryID
CustomerCategoryName	CustomerCategoryName
BuyingGroupID	BuyingGroupID
BuyingGroupName	BuyingGroupName
PhoneNumber	PhoneNumber
FaxNumber	FaxNumber

A red arrow points from the text instructions to the "OK" button at the bottom right of the dialog. The "OK" button is also highlighted with a red box.

**Hacemos clic en “Mappings” y revisamos la correlación de los datos entre ambas tablas y cuando terminamos hacemos clic en “OK”**

Bottom right corner of the screen shows the date and time: 8/14/2025, 3:29 PM.

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination**
- Partition Processing
- Raw File Destination
- Recordset 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 and after your database is migrated from one...

Find Samples

Package.dtsx [Design]\*

Control Flow Data Flow Parameters Event Handlers Package Explorer

Data Flow Task: DIM CUSTOMERS

Terminamos de hacer esta dimensión, hacemos clic en "Control Flow" para continuar con la siguiente

OLE DB Source

OLE DB Destination

Properties

OLE DB Destination Data Flow Component

IdentificationString	OLE DB Destination
IsDefaultLocale	True
LocaleID	English (United States)
Name	OLE DB Destination
PipelineVersion	0
UsesDispositions	True
ValidateExternalMetadata	True

Name  
Specifies the name of the component.

```
graph TD; Source[OLE DB Source] --> Destination[OLE DB Destination];
```

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Default | Select Perspective | GitHub Copilot | ADMIN

Ahora seguimos con el siguiente “Data Flow Task”

```
graph TD; LOCATION --> DIM_PRODUCT; LOCATION --> DIM_PEOPLE; LOCATION --> DIM_SUPPLIERS; LOCATION --> DIM_CUSTOMERS; LOCATION --> DIM_SALES; DIM_CUSTOMERS --> DIM_SALES;
```

Solution Explorer | Event Handlers | Package Explorer

Search Solution Explorer (Ctrl+)

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

- IS\_DWH\_WWI\_2025
  - Project.params
  - Connection Managers
    - ML-RefVm-822010\_MORALLES\_24.WideWorldImporters
  - SSIS Packages
    - Package.dtsx
  - Package Parts
    - Control Flow
    - Miscellaneous
  - Linked Azure Resources
    - Azure-SSIS Integration Runtime
    - Azure Storage

GitHub Copilot Chat | Solution Explorer | Git Changes

Properties | DIM\_SALES Task

**Identification**  
Description: Data Flow Task  
ID: {254944ED-BB7B-4444-AFE7-6...}  
Name: DIM\_SALES  
PackagePath: \Package\DIM\_SALES

**Misc**  
AutoAdjustBufferSize: False

**Name**  
Specifies the name of the object.

Focus on Zoom Slider | Add to Source Control | Select Repository | 3:30 PM | 8/14/2025 | 1

Windows Taskbar icons: File Explorer, Google Chrome, Microsoft Edge, File Explorer, Microsoft Visual Studio

Seguimos conectando los Data Flow Task entre si

```
graph TD; DIM_LOCATION[DIM_LOCATION] --> DIM_PRODUCT[DIM_PRODUCT]; DIM_PRODUCT --> DIM_PEOPLE[DIM_PEOPLE]; DIM_PEOPLE --> DIM_SUPPLIERS[DIM SUPPLIERS]; DIM_SUPPLIERS --> DIM_CUSTOMERS[DIM CUSTOMERS]; DIM_CUSTOMERS --> DIM_SALES[DIM SALES];
```

The diagram illustrates the SSIS Control Flow. It starts with a 'Data Flow Task' for 'DIM\_LOCATION', which feeds into a 'Data Flow Task' for 'DIM\_PRODUCT'. This is followed by 'DIM\_PEOPLE', 'DIM\_SUPPLIERS', and 'DIM\_CUSTOMERS'. Finally, the flow reaches a 'Data Flow Task' for 'DIM\_SALES'. A red callout box highlights the 'Data Flow Task' for 'DIM\_SALES' in the Control Flow tab.

Control Flow Data Flow Parameters Event Handlers Package Explorer

Solution Explorer

Properties

SSIS Toolbox | Package.dtsx [Design]\* | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer

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

Azure: Containers, For Loop Container

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 essential Integration Services... | Find Samples

Solution Explorer: Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project) | IS\_DWH\_WWI\_2025 | Project.params, Connection Managers, SSIS Packages, Package.dtsx, Package Parts, Miscellaneous, Linked Azure Resources, Azure-SQL Integration Runtime, Azure Storage

Properties: DIM\_SALES Task, Identification, Description, Data Flow Task, {254944ED-BB7B-4444-AFE7-6}, DIM\_SALES, \Package\DIM\_SALES

Diagram: A vertical flow of data flow tasks from top to bottom: DIM\_LOCATION, DIM\_PRODUCT, DIM\_PEOPLE, DIM\_SUPPLIERS, DIM\_CUSTOMERS, and DIM\_SALES. DIM\_CUSTOMERS has a green arrow pointing to DIM\_SALES, indicating a transformation step.

Le hacemos doble clic

Screenshot of the Microsoft Visual Studio IDE showing the SSIS Designer interface for a package named "Package.dtsx".

The SSIS Toolbox on the left lists various data source and destination components, with "OLE DB Source" and "OLE DB Destination" highlighted and selected.

The Data Flow Task "DIM\_SALES" is displayed in the center workspace.

The Solution Explorer on the right shows the project structure:

- Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)
  - IS\_DWH\_WWI\_2025
    - Project.params
    - Connection Managers
      - ML-RefVm-822010\_MORALLES\_24.WideWorldImporters
    - SSIS Packages
      - Package.dtsx
    - Package Parts
      - Control Flow
      - Miscellaneous
    - Linked Azure Resources

A red arrow points from the "OLE DB Source" icon in the toolbox to its corresponding component in the Data Flow Task. Another red arrow points from the "OLE DB Destination" icon in the toolbox to its corresponding component in the Data Flow Task.

A callout box with a red border contains the text: "Arrastramos hacia nuestra área de diseño el ‘OLE BD Source’ y el ‘OLE BD Destination’".

The Properties window on the right shows the configuration for the selected "OLE DB Destination" component:

IdentificationString	OLE DB Destination
IsDefaultLocale	True
LocaleID	English (United States)
Name	OLE DB Destination
PipelineVersion	0
UsesDispositions	True
ValidateExternalMetadata	True
<b>Name</b>	Specifies the name of the component.

Bottom navigation bar:

- Focus on Zoom Slider
- Add to Source Control
- Select Repository
- 3:30 PM
- 8/14/2025
- 3

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox  
Search SSIS Toolbox  
Term Extraction  
Term Lookup  
Unpivot  
Other Sources  
ADO NET Source  
CDC Source  
Excel Source  
Flat File Source  
OLE DB Source  
Raw File Source  
XML Source  
Other Destinations  
ADO NET Destination  
DataReader Destination  
Dimension Processing  
Excel Destination  
Flat File Destination  
OLE DB Destination  
Partition Processor  
Raw File Destination  
Recordset Destination  
SQL Server Destination

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 mode. If using the SQL command access mode, specify the SQL command either by typing the query or by using Query Builder.

OLE DB connection manager:  
ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

Data access mode:  
SQL command

SQL command text:

```
SELECT R.OrderID, R.OrderDate, V.CustomerID, V.CustomerName,  
C.StockItemID, C.StockItemName,  
C.Brand, C.Size, N.ColorID, N.ColorName FROM Sales.Orders R  
INNER JOIN sales.OrderLines Q  
ON R.OrderID = Q.OrderID  
INNER JOIN sales.Customers V  
ON R.CustomerID = V.CustomerID  
INNER JOIN Warehouse.StockItems C  
ON Q.StockItemID = C.StockItemID  
INNER JOIN Warehouse.Colors N  
ON C.ColorID = N.ColorID
```

Parameters...  
Build Query...  
Browse...  
Parse Query

Preview... OK Cancel Help

Hacemos doble clic sobre OLE DB Source para empezar a configurarlo

Verificamos que la conexión sea con la base de datos y no el DWH

Source Data Flow Component

ComponentType	OLE DB Source
DefaultLocale	True
ConnectionString	OLE DB Source
CacheVersion	0
Dispositions	True
AutoExternalMetadata	True

Focus on Zoom Slider Add to Source Control Select Repository 3:31 PM 8/14/2025

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination

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 mode. If using the SQL command access mode, specify the SQL command either by typing the query or by using Query Builder.

OLE DB connection manager:  
ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

Data access mode:  
SQL command

SQL command text:

```
SELECT R.OrderID, R.OrderDate, V.CustomerID, V.CustomerName,
C.StockItemID, C.StockItemName,
C.Brand, C.Size, N.ColorID, N.ColorName FROM Sales.Orders R
INNER JOIN sales.OrderLines Q
ON R.OrderID = Q.OrderID
INNER JOIN sales.Customers V
ON R.CustomerID = V.CustomerID
INNER JOIN Warehouse.StockItems C
ON Q.StockItemID = C.StockItemID
INNER JOIN Warehouse.Colors N
ON C.ColorID = N.ColorID|
```

Parameters...  
Build Query...  
Browse...  
Parse Query

Preview...

Solution Explorer

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

- IS\_DWH\_WWI\_2025
- Project.params
- Connection Managers
- ML-RefVm-822010\_MORALLES\_24.WideWorldImporters
- SSIS Packages
- Package.dtsx
- Package Parts
- Control Flow
- Miscellaneous
- Linked Azure Resources
- Azure-SSIS Integration Runtime
- Azure Storage

Copilot Chat Solution Explorer Git Changes

Source Data Flow Component

ComponentName	OLE DB Source
DefaultLocale	True
ConnectionString	OLE DB Source
Version	0
Dispositions	True
AutoExternalMetadata	True

Focus on Zoom Slider Add to Source Control Select Repository 3:31 PM 8/14/2025

Selecciónamos el modo comando de SQL y pegamos la consulta para esta dimensión que hicimos en el Paso 1, después damos clic en "Preview..." para verificiar

```
SELECT R.OrderID, R.OrderDate, V.CustomerID, V.CustomerName,
C.StockItemID, C.StockItemName,
C.Brand, C.Size, N.ColorID, N.ColorName FROM Sales.Orders R
INNER JOIN sales.OrderLines Q
ON R.OrderID = Q.OrderID
INNER JOIN sales.Customers V
ON R.CustomerID = V.CustomerID
INNER JOIN Warehouse.StockItems C
ON Q.StockItemID = C.StockItemID
INNER JOIN Warehouse.Colors N
ON C.ColorID = N.ColorID|
```

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination
- Partition Processing
- Raw File Destination
- Recordset 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 and after your database is migrated from one...

Find Samples

Package.dtsx [Design]\*

Control Flow Data Flow Parameters Event Handlers Package Explorer

Data Flow Task: DIM\_SALES

Conectamos el “OLE DB Source” y el “OLE DB Destination”

```
graph TD; Source[OLE DB Source] --> Destination[OLE DB Destination]
```

Solution Explorer

Search Solution Explorer (Ctrl+)

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

- IS\_DWH\_WWI\_2025
  - Project.params
  - Connection Managers
    - ML-RefVm-822010\_MORALLES\_24.WideWorldImporters
  - SSIS Packages
    - Package.dtsx
  - Package Parts
    - Control Flow
  - Miscellaneous
  - Linked Azure Resources
    - Azure-SSIS Integration Runtime
    - Azure Storage

GitHub Copilot Chat Solution Explorer Git Changes

Properties

OLE DB Source Output Data Flow Path

Common Properties

Description	63
IdentificationString	Paths[OLE DB Source.OLE DB...
Name	OLE DB Source Output

Design

Name

Specifies the name of the path.

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Search SSIS Toolbox | Term Extraction, Term Lookup, Unpivot, Other Sources (ADO NET Source, CDC Source, Excel Source, Flat File Source, OLE DB Source, Raw File Source, XML Source), Other Destinations (ADO NET Destination, DataReader Destination, Dimension Processing, Excel Destination, Flat File Destination, OLE DB Destination, Partition Processing, Raw File Destination, Recordset Destination, SQL Server Destination), OLE DB Destination (selected). 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 and after your database is migrated from one system to another.

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

Connection Manager: ML-RefVm-822010\MORALLES\_24.Datawarehouse\_WWI (highlighted with a red box)

Data access mode: Table or view - fast load

Name of the table or the view: (empty)

Keep identity:  (unchecked)

Table lock:

Keep nulls:  (unchecked)

Check constraints:

Rows per batch: (empty)

Maximum insert commit size: 2147483647

View Existing

Select a table or view from the list. (yellow warning bar)

OK Cancel Help

Solution Explorer | Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project) | IS\_DWH\_WWI\_2025 | Project.params, Connection Managers, SSIS Packages, Package.dtsx

Properties | Destination Data Flow Component | Name: 16, Type: OLE DB Destination, DefaultContainer: True, DefaultLocale: English (United States), DefaultConnectionString: OLE DB Destination, DefaultDelayValidation: 0, DefaultDelayValidationVersion: 0, DefaultDelayValidationType: True, Description: This is the name of the component.

Ready | to Source Control | Select Repository | 3:31 PM | 8/14/2025 | 1

Seguimos configurando el “OLE DB Destination”. Verificamos que la conexión sea con el Data Warehouse

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Search SSIS Toolbox | Term Extraction, Term Lookup, Unpivot, Other Sources (ADO NET Source, CDC Source, Excel Source, Flat File Source, OLE DB Source, Raw File Source, XML Source), Other Destinations (ADO NET Destination, DataReader Destination, Dimension Processing, Excel Destination, Flat File Destination, OLE DB Destination, Partition Processing, Raw File Destination, Recordset Destination, SQL Server Destination), OLE DB Destination (selected). 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 and after your database is migrated from one provider to another.

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

Connection Manager: ML-RefVm-822010\MORALLES\_24 Datawarehouse\_WWI | New... | Data access mode: Table or view - | Name of the object: | Keep identity | Table lock | Check constraints | Rows per batch: | Maximum insert commit size: 2147483647 | View Existing | OK | Cancel | Help | Select a table or view from the list.

Damos clic en “New...”

Solution Explorer | Solution Explorer (Ctrl+) | Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project) | IS\_DWH\_WWI\_2025 | Project.params, Connection Managers (ML-RefVm-822010\MORALLES\_24.WideWorldIm...), SSIS Packages (Package.dtsx), Package Parts (Control Flow, Miscellaneous), Linked Azure Resources (Azure-SSIS Integration Runtime, Azure Storage).

Copilot Chat | Solution Explorer | Git Changes

Destination Data Flow Component | 16, OLE DB Destination, True, English (United States), OLE DB Destination, 0, True.

Ready | to Source Control | Select Repository | 3:31 PM | ESP | 8/14/2025 | 1 | 3

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Search SSIS Toolbox | Term Extraction, Term Lookup, Unpivot, Other Sources (ADO NET Source, CDC Source, Excel Source, Flat File Source, OLE DB Source, Raw File Source, XML Source), Other Destinations (ADO NET Destination, DataReader Destination, Dimension Processing, Excel Destination, Flat File Destination, OLE DB Destination, Partition Processing, Raw File Destination, Recordset Destination, SQL Server Destination), OLE DB Destination (selected). Description: 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 and after your database is migrated from one version to another. Find Samples.

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

Connection Manager | Mappings (highlighted) | Error Output

Available Input Columns (OrderID, OrderDate, CustomerID, CustomerName, StockItemID, StockItemName, Brand) | Available Destination Columns (OrderID, OrderDate, CustomerID, CustomerName, StockItemID, StockItemName, Brand)

Input Column	Destination Column
OrderID	OrderID
OrderDate	OrderDate
CustomerID	CustomerID
CustomerName	CustomerName
StockItemID	StockItemID
StockItemName	StockItemName
Brand	Brand
Size	Size
ColorID	ColorID

OK | Cancel | Help

Hacemos clic en “Mappings” y revisamos la correlación de los datos entre ambas tablas y cuando terminamos hacemos clic en “OK”

Solution Explorer | Solution Explorer (Ctrl+) | IS\_DWH\_WWI\_2025 | Project.params, Connection Managers (ML-RefVm-822010\_MORALLES\_24.WideWorldIm...), SSIS Packages (Package.dtsx), Package Parts (Control Flow, Miscellaneous), Linked Azure Resources (Azure-SSIS Integration Runtime, Azure Storage).

Copilot Chat | Solution Explorer | Git Changes

Ready | Add to Source Control | Select Repository | 3:32 PM | 8/14/2025 | 1

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination
- Partition Processing
- Raw File Destination
- Recordset 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 and after your database is migrated from one...

[Find Samples](#)

Package.dtsx [Design]\*

Control Flow Data Flow Parameters Event Handlers Package Explorer

Data Flow Task: DIM\_SALES

Terminamos de hacer esta dimensión, hacemos clic en “Control Flow” para continuar con la Fact Table

OLE DB Source

OLE DB Destination

Properties

**OLE DB Destination** Data Flow Component

ID	16
IdentificationString	OLE DB Destination
IsDefaultLocale	True
LocaleID	English (United States)
Name	<b>OLE DB Destination</b>
PipelineVersion	0
UserDispositions	True

**Name**  
Specifies the name of the component.

```
graph TD; Source[OLE DB Source] --> Destination[OLE DB Destination];
```

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Default | Select Perspective | GitHub Copilot | ADMIN

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

Azure

Containers

For Loop Container

**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 essential Integration Services...

Find Samples

Ahora seguimos con el siguiente “Data Flow Task”

```
graph TD; DIM_PRODUCT[DIM_PRODUCT] --> DIM_PEOPLE[DIM_PEOPLE]; DIM_PEOPLE --> DIM_SUPPLIERS[DIM SUPPLIERS]; DIM_SUPPLIERS --> DIM_CUSTOMERS[DIM CUSTOMERS]; DIM_CUSTOMERS --> DIM_SALES[DIM SALES]; DIM_SALES --> FACT_TABLE[FACT_TABLE]
```

Connection Managers

- ML-RefVm-822010|MORALLES\_24.Datawarehouse\_WWI
- (project) ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

Solution Explorer

Search Solution Explorer (Ctrl+)

- Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)
  - IS\_DWH\_WWI\_2025
    - Project.params
    - Connection Managers
      - ML-RefVm-822010\_MORALLES\_24.WideWorldImporters
    - SSIS Packages
      - Package.dtsx
    - Package Parts
      - Control Flow
      - Miscellaneous
    - Linked Azure Resources
      - Azure-SSIS Integration Runtime
      - Azure Storage

GitHub Copilot Chat | Solution Explorer | Git Changes

Properties

Package Package

CreatorComputerName	ML-RefVm-822010
CreatorName	ML-RefVm-822010\estudiante
Description	
ID	{96E1B8C4-2000-479A-8773}
Name	Package
PackageType	DTSDesigner100
Misc	
Name	Specifies the name of the object.

Ready | Add to Source Control | Select Repository | 3:33 PM | 8/14/2025 | 1

Windows Taskbar icons: File Explorer, Google Chrome, Microsoft Edge, Visual Studio, and others.

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
- Hado
- Script
- Send
- Web
- XML

Azure

Containers

For Loop Container

**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 essential Integration Services...

Find Samples

Package.dtsx [Design]\*

Control Flow Data Flow Parameters Event Handlers Package Explorer

DIM\_LOCATION

DIM\_PRODUCT

DIM\_PEOPLE

DIM\_SUPPLIERS

DIM\_CUSTOMERS

DIM\_SALES

FACT\_TABLE

Solution Explorer

Search Solution Explorer (Ctrl+)

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

- Project.params
- Connection Managers
  - ML-RefVm-822010\_MORALLES\_24.WideWorldIm
- SSIS Packages
  - Package.dtsx
- Package Parts
  - Control Flow
  - Miscellaneous
- Linked Azure Resources
  - Azure-SSIS Integration Runtime
  - Azure Storage

GitHub Copilot Chat Solution Explorer Git Changes

Properties

Package Package

CreatorComputerName	ML-RefVm-822010
CreatorName	ML-RefVm-822010\estudiante
Description	
ID	{96E1B8C4-2000-479A-8773}
Name	Package
PackageType	DTSDesigner100

Name  
Specifies the name of the object.

Seguimos conectando los Data Flow Task entre si

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Package.dtsx [Design]\* | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer | Default | Start | Select Perspective | GitHub Copilot | ADMIN

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

Azure

Containers: For Loop Container

**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 essential Integration Services... [Find Samples](#)

Control Flow Diagram:

```
graph TD; DIM_LOCATION --> DIM_PRODUCT; DIM_PRODUCT --> DIM_PEOPLE; DIM_PEOPLE --> DIM_SUPPLIERS; DIM_SUPPLIERS --> DIM_CUSTOMERS; DIM_CUSTOMERS --> DIM_SALES; DIM_SALES --> FACT_TABLE;
```

Solution Explorer:

- Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)
  - IS\_DWH\_WWI\_2025
    - Project.params
    - Connection Managers
      - ML-RefVm-822010\_MORALLES\_24.WideWorldIm...
    - SSIS Packages
      - Package.dtsx
    - Package Parts
      - Control Flow
      - Miscellaneous
    - Linked Azure Resources
      - Azure-SSIS Integration Runtime
      - Azure Storage

Properties:

CreatorComputerName	ML-RefVm-822010
CreatorName	ML-RefVm-822010\estudiante
Description	(96E1B8C4-2000-479A-8773)
Package	DTSDesigner100
Name	Specifies the name of the object.

Le hacemos doble clic

Ready | Add to Source Control | Select Repository | GitHub Copilot | ADMIN | 3:33 PM | 8/14/2025 | 1

Screenshot of the Microsoft Visual Studio IDE showing the SSIS Toolbox and Solution Explorer.

The SSIS Toolbox on the left lists various data source and destination components. Two components are highlighted with red boxes: "OLE DB Source" under "Other Sources" and "OLE DB Destination" under "Other Destinations". Red arrows point from these highlighted components towards the center design area.

The central design area shows a "Data Flow Task" named "FACT\_TABLE". Inside the task, there is an "OLE DB Source" component connected to an "OLE DB Destination" component. A third component, a small grey rectangle, is also present in the flow.

The Solution Explorer on the right shows the project structure for "IS\_DWH\_WWI\_2025". It includes a "Project.params" file, "Connection Managers", "SSIS Packages" (containing "Package.dtsx"), "Package Parts", "Miscellaneous", and "Linked Azure Resources".

A callout box with a red border and white background is overlaid on the right side of the interface, containing the text:

Arrastramos hacia nuestra área de diseño el “OLE BD Source” y el “OLE BD Destination”

The status bar at the bottom provides navigation and repository information.

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO.NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination
- Partition Processor
- Raw File Destination
- Recordset 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 and after your database is migrated from one system to another.

Find Samples

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 mode. If using the SQL command access mode, specify the SQL command either by typing the query or by using Query Builder.

OLE DB connection manager:

ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

New...

Data access mode:

SQL command

SQL command text:

```
K.TaxAmount, ((K.Quantity*K.UnitPrice)+K.TaxAmount)  
AS Total_With_Tax, K.LineProfit FROM Sales.Orders Z  
INNER JOIN Sales.Invoices X  
ON Z.OrderID = X.OrderID  
INNER JOIN Sales.Customers B  
ON Z.CustomerID = B.CustomerID  
INNER JOIN Sales.InvoiceLines K  
ON X.InvoiceID = K.InvoiceID  
INNER JOIN Warehouse.StockItems G  
ON K.StockItemID = G.StockItemID  
INNER JOIN Warehouse.PackageTypes I  
ON K.PackageTypeID = I.PackageTypeID  
INNER JOIN Application.DeliveryMethods U  
ON X.DeliveryMethodID = U.DeliveryMethodID
```

Parameters...  
Build Query...  
Browse...  
Parse Query

Preview...

OK Cancel Help

Verificamos que la conexión sea con la base de datos y no el DWH

Hacemos doble clic sobre OLE DB Source para empezar a configurarlo

Solution Explorer

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

Project.params

Connection Managers

ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

SSIS Packages

Package.dtsx

Copilot Chat Solution Explorer Git Changes

Source Data Flow Component

ComponentName	1
ConnectionString	OLE DB Source
DefaultLocale	True
DelayValidation	English (United States)
OLE DB Source	OLE DB Source
Version	0
WriteDispositions	True

Focus on Zoom Slider Add to Source Control Select Repository 3:33 PM 8/14/2025

Windows Taskbar icons: File Explorer, Google Chrome, Microsoft Edge, File Explorer, Visual Studio

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Search SSIS Toolbox | Term Extraction | Term Lookup | Unpivot | Other Sources | ADO NET Source | CDC Source | Excel Source | Flat File Source | OLE DB Source | Raw File Source | XML Source | Other Destinations | ADO NET Destination | DataReader Destination | Dimension Processing | Excel Destination

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 mode. If using the SQL command access mode, specify the SQL command either by typing the query or by using Query Builder.

OLE DB connection manager: ML-RefVm-822010\_MORALLES\_24.WideWorldImporters | New...

Data access mode: SQL command

SQL command text:

```
K.TaxAmount, ((K.Quantity*K.UnitPrice)+K.TaxAmount)  
AS Total_with_Tax, K.LineProfit FROM Sales.Orders Z  
INNER JOIN Sales.Invoices X  
ON Z.OrderID = X.OrderID  
INNER JOIN Sales.Customers B  
ON Z.CustomerID = B.CustomerID  
INNER JOIN Sales.InvoiceLines K  
ON X.InvoiceID = K.InvoiceID  
INNER JOIN Warehouse.StockItems G  
ON K.StockItemID = G.StockItemID  
INNER JOIN Warehouse.PackageTypes I  
ON K.PackageTypeID = I.PackageTypeID  
INNER JOIN Application.DeliveryMethods U  
ON X.DeliveryMethodID = U.DeliveryMethodID
```

Parameters... | Build Query... | Browse... | Parse Query

Preview... | OK | Cancel | Help

Solution Explorer | Solution Explorer (Ctrl+) | Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project) | IS\_DWH\_WWI\_2025 | Project.params | Connection Managers | ML-RefVm-822010\_MORALLES\_24.WideWorldImporters | SSIS Packages | Package.dtsx | Package Parts | Control Flow | Miscellaneous | Linked Azure Resources | Azure-SSIS Integration Runtime | Azure Storage | Copilot Chat | Solution Explorer | Git Changes

Source Data Flow Component

ComponentName	1
ConnectionString	OLE DB Source
DefaultLocale	True
DelayValidation	English (United States)
DefaultContainer	OLE DB Source
DefaultVersion	0
Dispositions	True

Focus on Zoom Slider | Add to Source Control | Select Repository | 3:33 PM | ESP | 8/14/2025 | 3

Seleccionamos el modo comando de SQL y pegamos la consulta para la Fact Table que hicimos en el Paso 1, después damos clic en "Preview..." para verificiar

The screenshot shows the Microsoft Visual Studio interface for an SSIS package named 'IS\_DWH\_WWI\_2025'. In the center, the 'OLE DB Source Editor' window is open, displaying configuration options for a data source. A red box highlights the 'Data access mode' dropdown, which is set to 'SQL command'. Below it, another red box highlights the 'SQL command text' area, which contains a detailed multi-table JOIN query. To the left of the editor, there is a large text box with Spanish instructions. A red callout arrow points from this text box to the 'SQL command text' area in the editor window. The overall environment includes the Visual Studio ribbon at the top, the Solution Explorer on the right, and the SSIS Toolbox on the far left.

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination
- Partition Processing
- Raw File Destination
- Recordset 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 and after your database is migrated from one system to another.

Find Samples

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

Preview Query Results

Select the data access type by typing the query or by

New... Parameters... Build Query... Browse... Parse Query

Query result (up to the first 200 rows):

OrderID	InvoiceID	OrderDate	InvoiceDate	CustomerID	Cust
1	1	1/1/2013 ...	1/1/2013 ...	832	Aakr
2	2	1/1/2013 ...	1/1/2013 ...	803	Bala
2	2	1/1/2013 ...	1/1/2013 ...	803	Bala
3	3	1/1/2013 ...	1/1/2013 ...	105	Tails
4	4	1/1/2013 ...	1/1/2013 ...	57	Tails
4	4	1/1/2013 ...	1/1/2013 ...	57	Tails
4	4	1/1/2013 ...	1/1/2013 ...	57	Tails
5	5	1/1/2013 ...	1/1/2013 ...	905	Sara
5	5	1/1/2013 ...	1/1/2013 ...	905	Sara
5	5	1/1/2013 ...	1/1/2013 ...	905	Sara
		1/1/2013 ...	1/1/2013 ...	976	Alinn
		1/1/2013 ...	1/1/2013 ...	976	Alinn
		1/1/2013 ...	1/1/2013 ...	976	Alinn

Preview... Close OK Cancel Help

Cuando concluimos de verificar hacemos clic en "Close"

Solution Explorer

Solution Explorer (Ctrl+)

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

- Project.params
- Connection Managers
  - ML-RefVm-822010\_MORALLES\_24.WideWorldIm
- SSIS Packages
  - Package.dtsx
- Package Parts
  - Control Flow
- Miscellaneous
- Linked Azure Resources
  - Azure-SSIS Integration Runtime
  - Azure Storage

Copilot Chat Solution Explorer Git Changes

Source Data Flow Component

1	OLE DB Source
DefaultConnectionString	OLE DB Source
DefaultLocale	True
DefaultLanguage	English (United States)
DefaultOLEDBSource	OLE DB Source
DefaultOLEDBSourceName	0
DefaultOLEDBSourceVersion	True

Focus on Zoom Slider Add to Source Control Select Repository 3:33 PM 8/14/2025

Windows Taskbar Icons: File Explorer, Microsoft Edge, Google Chrome, FileZilla, Visual Studio

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination
- Partition Processing
- Raw File Destination
- Recordset 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 and after your database is migrated from one system to another.

Find Samples

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 mode. If using the SQL command access mode, specify the SQL command either by typing the query or by using Query Builder.

OLE DB connection manager:  
ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

Data access mode:  
SQL command

SQL command text:

```
K.TaxAmount, ((K.Quantity*K.UnitPrice)+K.TaxAmount)  
AS Total_with_Tax, K.LineProfit FROM Sales.Orders Z  
INNER JOIN Sales.Invoices X  
ON Z.OrderID = X.OrderID  
INNER JOIN Sales.Customers B  
ON Z.CustomerID = B.CustomerID  
INNER JOIN Sales.InvoiceLines K  
ON X.InvoiceID = K.InvoiceID  
INNER JOIN Warehouse.StockItems G  
ON K.StockItemID = G.StockItemID  
INNER JOIN Warehouse.PackageTypes I  
ON K.PackageTypeID = I.PackageTypeID  
INNER JOIN Sales.DeliveryMethods U  
ON I.DeliveryMethodID = U.DeliveryMethodID
```

Parameters...  
Build Query...  
Browse...  
Parse Query

Terminamos y damos clic en “OK”

OK Cancel Help

Solution Explorer

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

- Project.params
- Connection Managers
  - ML-RefVm-822010\_MORALLES\_24.WideWorldImporters
- SSIS Packages
  - Package.dtsx
- Package Parts
  - Control Flow
  - Miscellaneous
- Linked Azure Resources
  - Azure-SSIS Integration Runtime
  - Azure Storage

Copilot Chat Solution Explorer Git Changes

Source Data Flow Component

1	OLE DB Source
AutenticationString	OLE DB Source
DefaultLocale	True
DefaultLanguage	English (United States)
DefaultPrecision	OLE DB Source
DefaultScale	0
DefaultTruncation	True

Focus on Zoom Slider Add to Source Control Select Repository 3:33 PM 8/14/2025

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination**
- Partition Processing
- Raw File Destination
- Recordset 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 and after your database is migrated from one...

Find Samples

Package.dtsx [Design]\*

Control Flow Data Flow Parameters Event Handlers Package Explorer

Data Flow Task: FACT\_TABLE

Conectamos el “OLE DB Source” y el “OLE DB Destination”

OLE DB Source

OLE DB Destination

Solution Explorer

Search Solution Explorer (Ctrl+)

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

- Project.params
- Connection Managers
- SSIS Packages
- Package.dtsx
- Package Parts
- Control Flow
- Miscellaneous
- Linked Azure Resources
- Azure-SSIS Integration Runtime
- Azure Storage

GitHub Copilot Chat Solution Explorer Git Changes

Properties

OLE DB Source Output Data Flow Path

Common Properties

Description	93
ID	Paths[OLE DB Source.OLE DB
IdentificationString	(project) ML-RefVm-822010_MORALLES_24.WideWorldImporters
Name	OLE DB Source Output

Design

Name

Specifies the name of the path.

```
graph TD; Source([OLE DB Source]) --> Destination([OLE DB Destination]);
```

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox  
Search SSIS Toolbox  
Term Extraction  
Term Lookup  
Unpivot  
Other Sources  
ADO NET Source  
CDC Source  
Excel Source  
Flat File Source  
OLE DB Source  
Raw File Source  
XML Source  
Other Destinations  
ADO NET Destination  
DataReader Destination  
Dimension Processing  
Excel Destination  
Flat File Destination  
**OLE DB Destination**  
Partition Processing  
Raw File Destination  
Recordset 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 and after your database is migrated from one system to another.

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

**Connection Manager:** ML-RefVm-822010\MORALLES\_24.Datawarehouse\_WWI  
Data access mode: Table or view - fast load  
Name of the table or the view:  
  
 Keep identity    Table lock  
 Keep nulls    Check constraints  
Rows per batch:  
  
Maximum insert commit size:  
 2147483647  
View Existing  
Select a table or view from the list.  
OK Cancel Help

Seguimos configurando el “OLE DB Destination”. Verificamos que la conexión sea con el Data Warehouse

Solution Explorer  
Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)  
IS\_DWH\_WWI\_2025  
Project.params  
Connection Managers  
ML-RefVm-822010\_MORALLES\_24.WideWorldIm  
SSIS Packages  
Package.dtsx

Properties  
Destination Data Flow Component  
id 16  
componentString OLE DB Destination  
faultLocale True  
field English (United States)  
name OLE DB Destination  
onlineVersion 0  
persisted True  
uses the name of the component.

Focus on Zoom Slider

Windows Taskbar: 3:33 PM 8/14/2025

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox

Search SSIS Toolbox

- Term Extraction
- Term Lookup
- Unpivot

Other Sources

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

Other Destinations

- ADO NET Destination
- DataReader Destination
- Dimension Processing
- Excel Destination
- Flat File Destination
- OLE DB Destination
- Partition Processing
- Raw File Destination
- Recordset 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 and after your database is migrated from one system to another.

Focus on Zoom Slider

GitHub Copilot | ADMIN

OLE DB Destination Editor

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

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:

ML-RefVm-822010\MORALLES\_24 Datawarehouse\_WWI

New...

Damos clic en "New..."

Data access mode:

Table or view -

Name of the object:

Keep identity  Table lock

Keep nulls  Check constraints

Rows per batch:

Maximum insert commit size:

View Existing

OK Cancel Help

Select a table or view from the list.

Solution Explorer

Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)

IS\_DWH\_WWI\_2025

Project.params

Connection Managers

- ML-RefVm-822010\MORALLES\_24.WideWorldIm

SSIS Packages

- Package.dtsx

Package Parts

- Control Flow
- Miscellaneous

Linked Azure Resources

- Azure-SSIS Integration Runtime
- Azure Storage

Copilot Chat Solution Explorer Git Changes

Destination Data Flow Component

id	16
ComponentType	OLE DB Destination
DefaultContainer	True
DefaultLocale	English (United States)
DefaultName	OLE DB Destination
DefaultNtDomain	0
DefaultOwner	True

es the name of the component.

to Source Control Select Repository

3:33 PM 8/14/2025

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox  
Search SSIS Toolbox  
Term Extraction  
Term Lookup  
Unpivot  
Other Sources  
ADO NET Source  
CDC Source  
Excel Source  
Flat File Source  
OLE DB Source  
Raw File Source  
XML Source  
Other Destinations  
ADO NET Destination  
DataReader Destination  
Dimension Processing  
Excel Destination  
Flat File Destination  
OLE DB Destination  
Partition Processing  
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Recordset 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 and after your database is migrated from one system to another.

OLE DB Destination Editor  
Configure the properties used to insert data into a relational database using an OLE DB provider.  
Connection Manager  
**Mappings**  
Error Output

Available Input Columns  
Name  
OrderID  
InvoiceID  
OrderDate  
InvoiceDate  
CustomerID  
CustomerName  
StockItemID

Available Destination Columns  
Name  
OrderID  
InvoiceID  
OrderDate  
InvoiceDate  
CustomerID  
CustomerName  
StockItemID

Input Column	Destination Column
OrderID	OrderID
InvoiceID	InvoiceID
OrderDate	OrderDate
InvoiceDate	InvoiceDate
CustomerID	CustomerID
CustomerName	CustomerName
StockItemID	StockItemID
StockItemName	StockItemName
Description	Description

OK Cancel Help

Hacemos clic en “Mappings” y revisamos la correlación de los datos entre ambas tablas y cuando terminamos hacemos clic en “OK”

Solution Explorer  
Solution 'IS\_DWH\_WWI\_2025' (1 of 1 project)  
IS\_DWH\_WWI\_2025  
Project.params  
Connection Managers  
ML-RefVm-822010\_MORALLES\_24.WideWorldlmp  
SSIS Packages  
Package.dtsx  
Package Parts  
Control Flow  
Miscellaneous  
Linked Azure Resources  
Azure-SSIS Integration Runtime  
Azure Storage  
Copilot Chat Solution Explorer Git Changes

Focus on Zoom Slider Add to Source Control Select Repository 3:34 PM 8/14/2025

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Default | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer | Select Perspective | GitHub Copilot | ADMIN

Search SSIS Toolbox  
Term Extraction  
Term Lookup  
Unpivot  
Other Sources  
ADO NET Source  
CDC Source  
Excel Source  
Flat File Source  
OLE DB Source  
Raw File Source  
XML Source  
Other Destinations  
ADO NET Destination  
DataReader Destination  
Dimension Processing  
Excel Destination  
Flat File Destination  
**OLE DB Destination**  
Partition Processing  
Raw File Destination  
Recordset 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 and after your database is migrated from one...  
[Find Samples](#)

Package.dtsx [Design]\* | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer | Data Flow Task: DIM\_SALES | GitHub Copilot Chat | Solution Explorer | Git Changes | Properties

Terminamos de hacer la Fact Table y todas las dimensiones. Hacemos clic en **Control Flow** para ir a correr el sistema y ejecutar el flujo completo de carga del Data Warehouse.

Diagram:

```
graph TD; Source[OLE DB Source] --> OLE_DEST[OLE DB Destination];
```

OLE DB Destination Properties:

ID	16
IdentificationString	OLE DB Destination
IsDefaultLocale	True
LocaleID	English (United States)
Name	<b>OLE DB Destination</b>
PipelineVersion	0
UserDispositions	True

OLE DB Destination Properties - Name:  
Specifies the name of the component.

Ready | Add to Source Control | Select Repository | GitHub Copilot | ADMIN | 3:32 PM | 8/14/2025 | 3

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

Develop Default Start ▶ | Select Perspective | Solution Explorer | GitHub Copilot Chat | Solution Explorer | Git Changes | Properties | Package | Package

SSIS Toolbox | Search SSIS Toolbox | Back Up Database Task, CDC Control Task, Check Database Integrity Task, Execute SQL Server Agent Job Task, Execute T-SQL Statement Task, History Cleanup Task, Maintenance Cleanup Task, Message Queue Task, Notify Operator Task, Rebuild Index Task, Reorganize Index Task, Shrink Database Task, Transfer Database Task, Transfer Error Messages Task, Transfer Jobs Task, Transfer Logins Task, Transfer Master Stored Procedures Task, Transfer SQL Server Objects Task, Update Statistics Task, WMI Data Reader Task, WMI Event Watcher Task | Package Parts | Favorites | Provides convenient access to your favorite elements so that they are only a click away.

Control Flow | Data Flow | Parameters | DIM\_PRODUCT | DIM\_PEOPLE | DIM\_SUPPLIERS | DIM\_CUSTOMERS | DIM\_SALES | FACT\_TABLE

Hacemos clic en “Start” para correr el sistema y ejecutar el flujo completo de carga del Data Warehouse

Connection Managers | ML-RefVm-822010\_MORALLES\_24.WideWorldImporters | ML-RefVm-822010\estudiante | (project) ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

Add to Source Control | Select Repository | Focus on Zoom Slider | 3:34 PM | 8/14/2025 | 3

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

Process: [1724] DtsDebugHost.exe | Lifecycle Events | Thread:

Package.dtsx [Design] | Control Flow | Data Flow | Parameters | Event Handlers | Package Explorer | Progress

DIM\_PEOPLE  
DIM SUPPLIERS  
DIM CUSTOMERS  
DIM\_LOCATION  
DIM\_PRODUCT  
DIM\_PERSON  
DIM\_SUPPLIER  
DIM\_CUSTOMER  
DIM\_NATION  
FACT\_TABLE

Connection Managers  
ML-RefVm-822010|MORALLES\_24.Datawarehouse\_WWI (project) ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

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

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

Zoom Change: 100% | Add to Source Control | Select Repository | 3:35 PM | 8/14/2025 | 3

Al correr el flujo completo, verificamos que todos los componentes se ejecutan correctamente sin errores y como podemos observar, al ejecutar el flujo, todos los procesos se ejecutan correctamente.

The screenshot displays the Microsoft SQL Server Integration Services (SSIS) environment. The main workspace shows a package named 'Package.dtsx' in 'Design' mode. A red callout box points to three specific data flow components: 'DIM\_PEOPLE', 'DIM SUPPLIERS', and 'DIM CUSTOMERS', all of which have green checkmarks indicating successful execution. Another red box highlights the entire vertical stack of components: 'DIM\_LOCATION', 'DIM\_PRODUCT', 'DIM\_PERSON', 'DIM\_SUPPLIER', 'DIM\_CUSTOMER', 'DIM\_NATION', and 'FACT\_TABLE', all showing green checkmarks. The bottom status bar indicates a successful execution with the message 'Package execution completed with success.' Clicking the link in the status bar switches to 'design mode'.

SQLQuery1.sql - ML-RefVm-822010\MORALLES\_24.Datawarehouse\_WWI (ML-RefVm-822010\estudiantes (54)) - Microsoft SQL Server Management Studio (Administrator)

File Edit View Query Project Tools Window Help

New Query NDX DMX XMLA DAX Execute

Datawarehouse\_WWI

Object Explorer

Connect

- ML-RefVm-822010\MORALLES\_24 (SQL Server)
- Databases
  - System Databases
  - Database Snapshots
  - AdventureWorksDW2019
  - BIKESTORE
  - Datawarehouse\_BKST
  - Datawarehouse\_WWI
    - Database Diagrams
    - Tables
      - System Tables
      - FileTables
      - External Tables
      - Graph Tables
      - dbo.DIM\_SUPPLIERS
      - dbo.DIM\_CUSTOMERS
      - dbo.DIM\_LOCATION
      - dbo.DIM\_PEOPLE
      - dbo.DIM\_PRODUCT
      - dbo.DIM\_SALES
      - dbo.FACT\_TABLE\_ORDERS
    - Views
    - External Resources
    - Synonyms
    - Programmability
    - Service Broker
    - Storage
    - Security
  - Northwind

SQLQuery1.sql - ML-RefVm-822010\MORALLES\_24\estudiantes (54)

```
SELECT TOP (1000) [CityID]
    ,[CityName]
    ,[CityPopulation]
    ,[StateProvinceID]
    ,[StateProvinceName]
    ,[StateProvinceCode]
    ,[StatePopulation]
    ,[CountryID]
    ,[CountryName]
    ,[Continent]
    ,[CountryPopulation]
FROM [Datawarehouse_WWI].[dbo].[DIM_L]
```

Como podemos observar en SQL Server Management Studio (SSMS), la base de datos correspondiente al Data Warehouse contiene todas las tablas previamente diseñadas (dimensiones y tabla de hechos), y cada una de ellas presenta los datos cargados correctamente como resultado de la ejecución del flujo ETL.

Results Messages

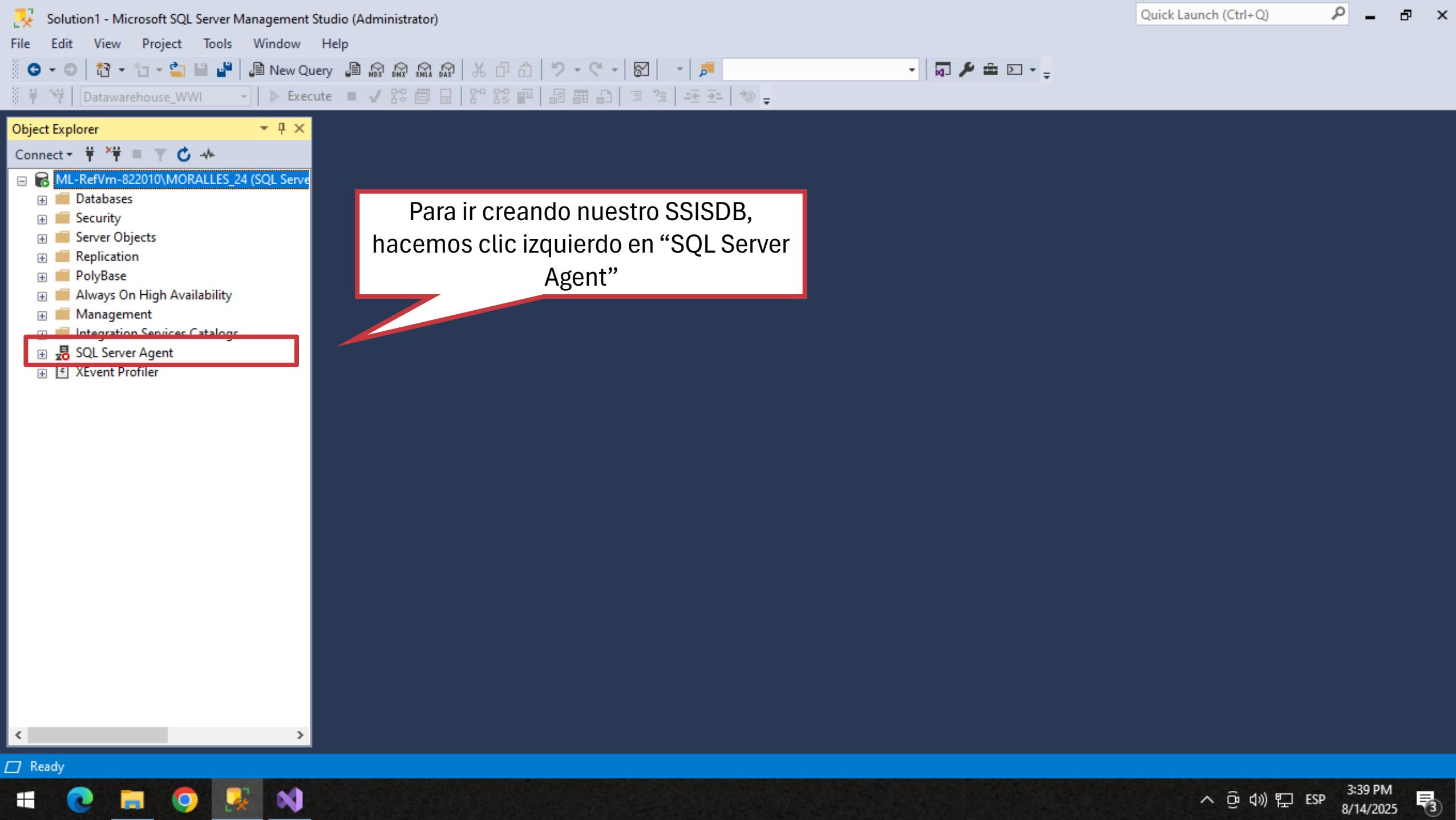
	CityID	CityName	CityPopulation	StateProvinceID	StateProvinceName	StateProvinceCode	StatePopulation	CountryID	CountryName	Continent	CountryPopulation
1	28265	Ramos	1821	40	Puerto Rico (US Territory)	PR	3613149	230	United States	North America	313973000
2	28266	Rampart	24	2	Alaska	AK	735132	230	United States	North America	313973000
3	28267	Ramsay	NULL	27	Montana	MT	1187597	230	United States	North America	313973000
4	28268	Ramsay	NULL	23	Michigan	MI	9895622	230	United States	North America	313973000
5	28269	Ramseur	1692	34	North Carolina	NC	10241982	230	United States	North America	313973000
6	28270	Ramsey	1037	14	Illinois	IL	13397420	230	United States	North America	313973000
7	28271	Ramsey	23668	24	Minnesota	MN	5637195	230	United States	North America	313973000
8	28272	Ramsey	14473	31	New Jersey	NJ	8899339	230	United States	North America	313973000
9	28273	Ramsey	NULL	4	Arkansas	AR	3077747	230	United States	North America	313973000
10	28274	Ranburne	409	1	Alabama	AL	5437278	230	United States	North America	313973000
11	28275	Ranchester	855	53	Wyoming	WY	605964	230	United States	North America	313973000

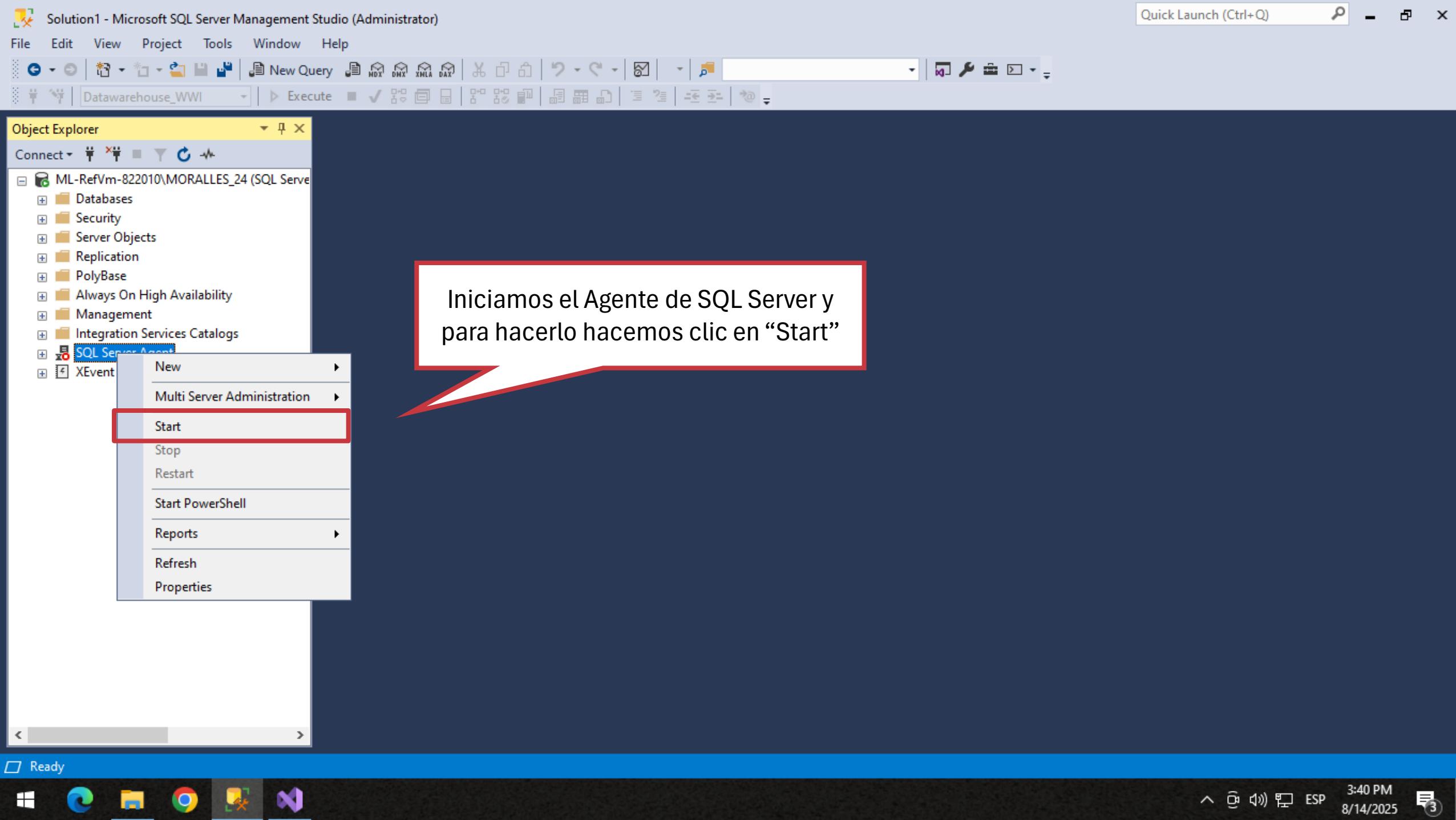
Query executed successfully.

Ln 1 Col 1 Ch 1 INS

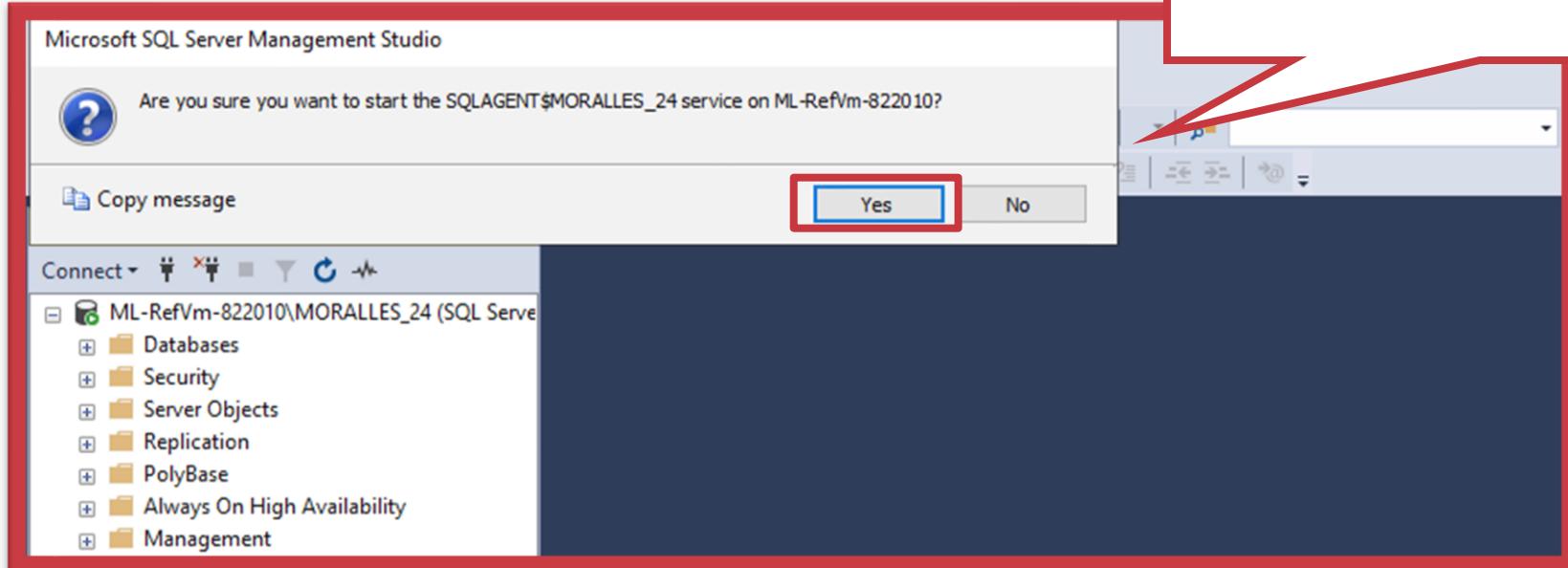
3:35 PM 8/14/2025

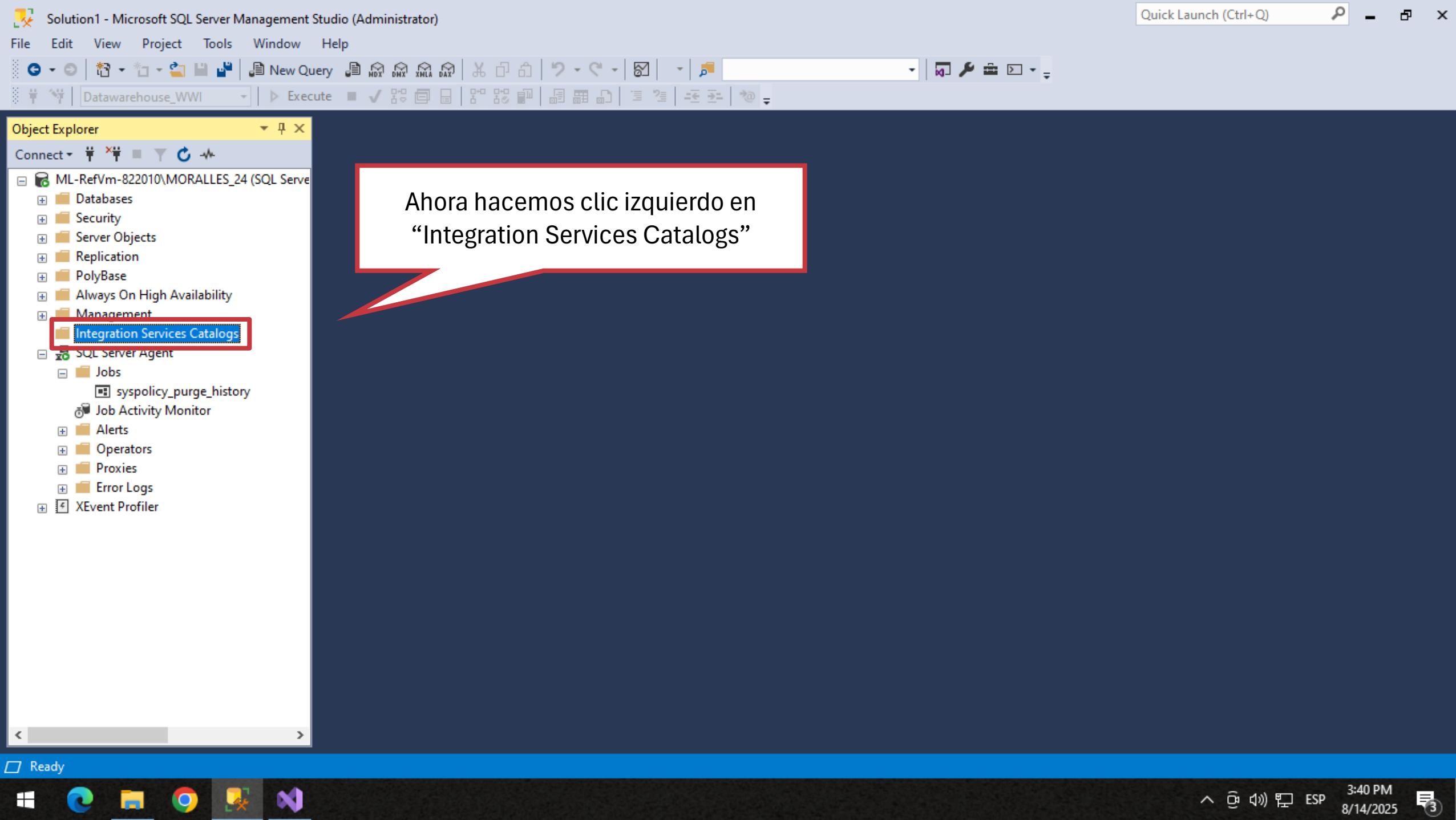
# Paso 3: Creación de SSISDB, despliegue y ejecución de paquetes ETL mediante SQL Server Agent

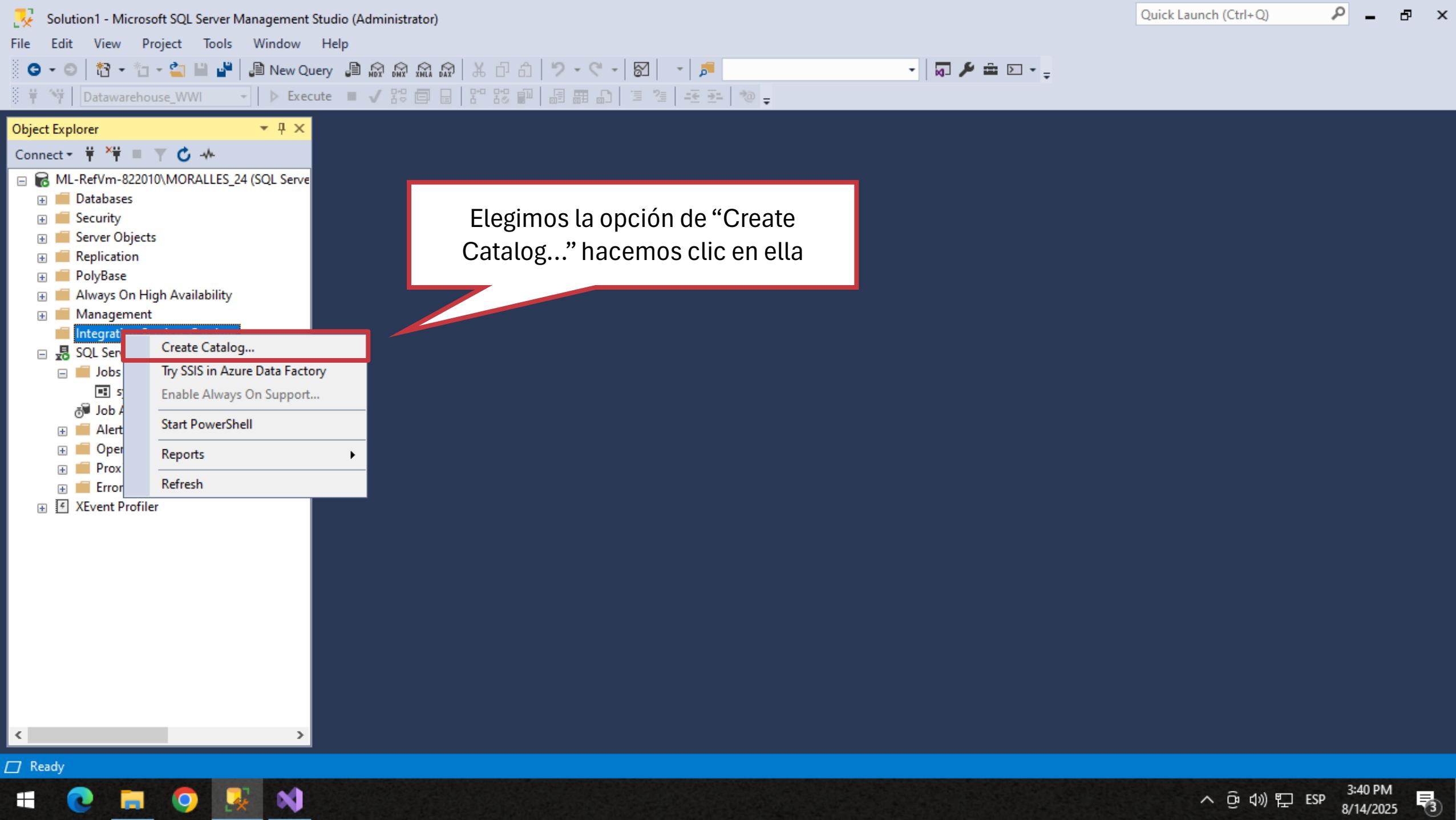




Hacemos clic en “Yes”







Solution1 - Microsoft SQL Server Management Studio (Administrator)

File Edit View Project Tools Window

Quick Launch (Ctrl+Q) X

Datawarehouse\_WWI

Object Explorer

ML-RefVm-822010\MORALLES\_24 (SQL Server 2019) ...

- Databases
- Security
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
- SQL Server Agent
  - Jobs
    - syspolicy\_purge\_history
    - Job Activity Monitor
  - Alerts
  - Operators
  - Proxies
  - Error Logs
- XEvent Profiler

Catalog Creation Wizard

Ready

Select a page: General Script Help

To create and use the catalog, CLR integration must be enabled on the current SQL Server instance.

Enable CLR Integration Habilitamos esta casilla

Enable automatic execution of Integration Services stored procedure at SQL Server startup.

Name of the catalog database:  
SSISDB

The catalog protects data using encryption. A key is needed for this encryption. Enter a password to protect the encryption key, and save the password in a secure location.

Password:

Retype Password:

You can manage the encryption key by creating a backup. If you migrate or move the Integration Services catalog to another SQL Server instance, you can restore the key to regain access to encrypted content.

Enable this server as SSIS scale out master  
Cannot enable Scale Out in this server, please check whether Scale Out Master is installed or you have enough permission.

**Lift & Shift Your ETL Workload with SSIS in ADF**

If you have not created an SSIS Integration Runtime (IR) in Azure Data Factory (ADF) before, you can create one to lift & shift your ETL workload.

You can then deploy existing SSIS projects into SSISDB hosted by your Azure SQL Database server/Managed Instance and run the deployed SSIS packages on your SSIS IR.

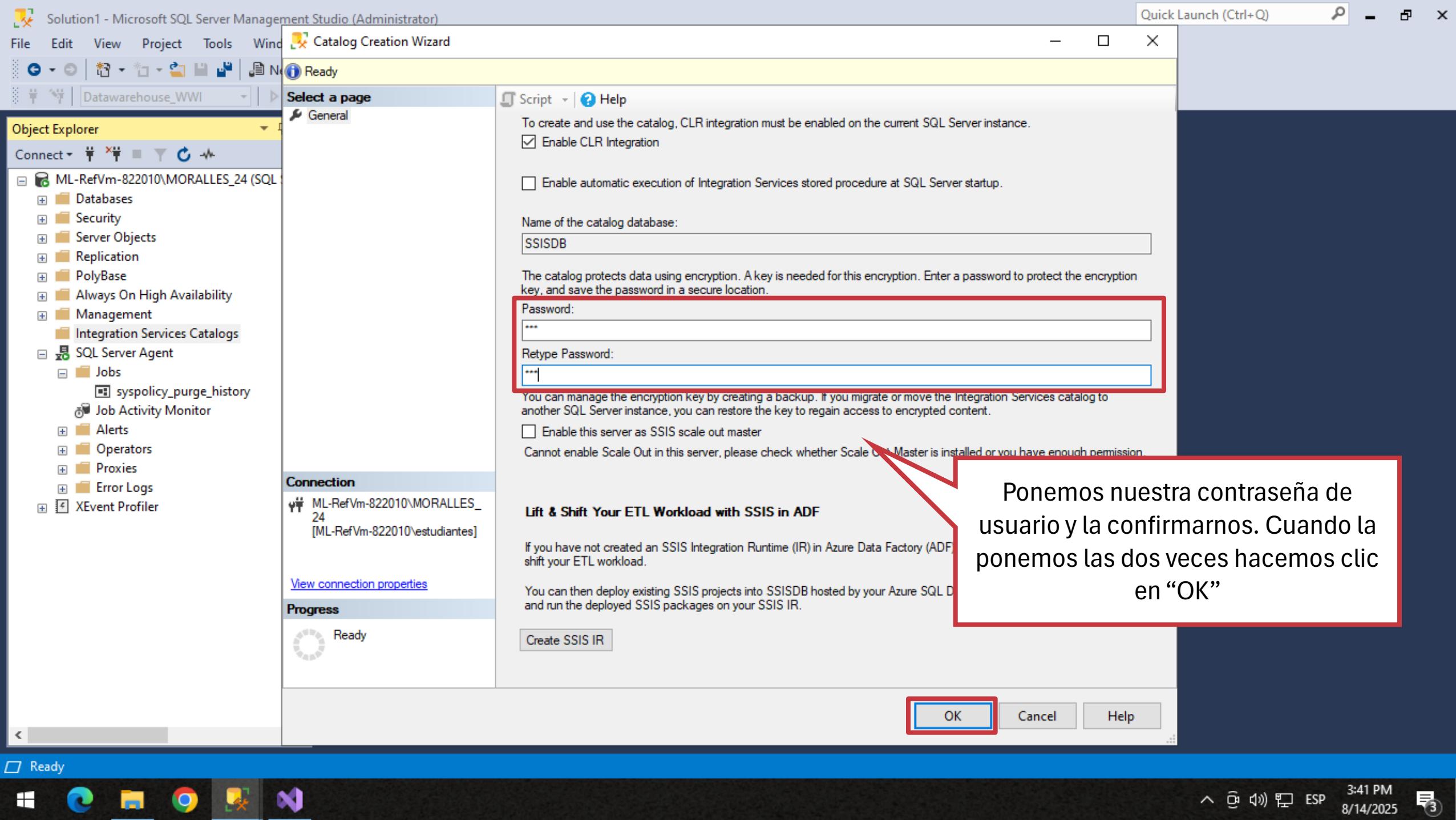
Create SSIS IR

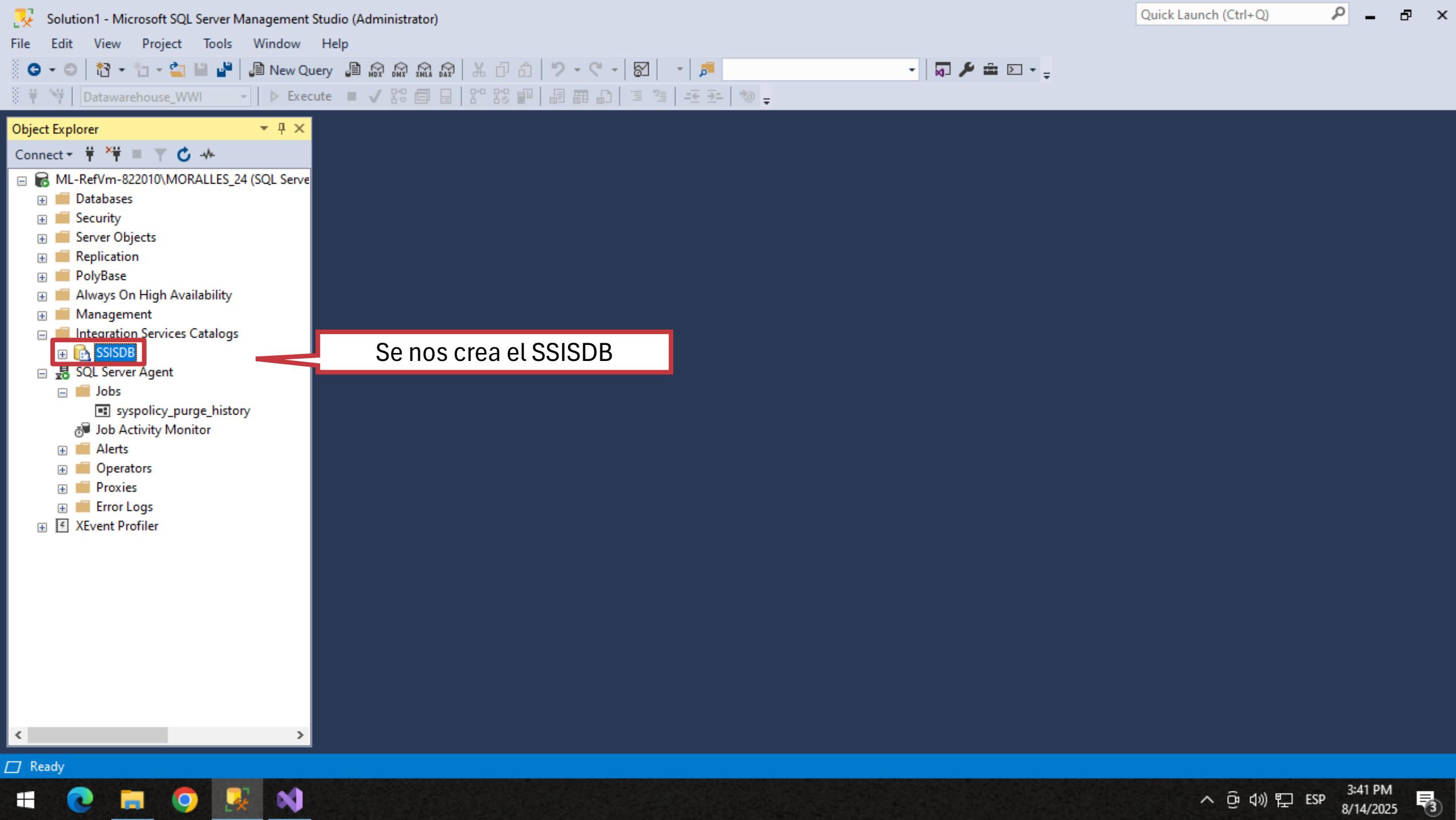
OK Cancel Help

Ready

3:41 PM 8/14/2025

The screenshot shows the 'Catalog Creation Wizard' dialog box in Microsoft SQL Server Management Studio. The 'General' page is selected. A red box highlights the 'Enable CLR Integration' checkbox, which is currently unchecked. A red callout points to this checkbox with the text 'Habilitamos esta casilla'. The 'Name of the catalog database' field contains 'SSISDB'. The 'Password' and 'Retype Password' fields are empty. The 'Enable this server as SSIS scale out master' checkbox is also unchecked. At the bottom, there are 'OK', 'Cancel', and 'Help' buttons.





File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Package.dtsx [Design] | Control Flow | Data Flow | Parameters | Event Handlers | Package Expl... | Execution Re... | Default | Select Perspective | Search | GitHub Copilot | ADMIN

Search SSIS Toolbox

- Back Up Database Task
- CDC Control Task
- Check Database Integrity Task
- Execute SQL Server Agent Job Task
- Execute T-SQL Statement Task
- History Cleanup Task
- Maintenance Cleanup Task
- Message Queue Task
- Notify Operator Task
- Rebuild Index Task
- Reorganize Index Task
- Shrink Database Task
- Transfer Database Task
- Transfer Error Messages Task
- Transfer Jobs Task
- Transfer Logins Task
- Transfer Master Stored Procedures Task
- Transfer SQL Server Objects Task
- Update Statistics Task
- WMI Data Reader Task
- WMI Event Watcher Task

Package Parts

Favorites

Provides convenient access to your favorite elements so that they are only a click away.

Control Flow Diagram:

```
graph TD; DWH_LOCATION --> DWH_PRODUCT; DWH_PRODUCT --> DWH_SALES; DWH_SALES --> FACT_TABLE;
```

Connection Managers:

- ML-RefVm-822010|MORALLES\_24.Datawarehouse\_WWI
- (project) ML-RefVm-822010\_MORALLES\_24.WideWorldImporters

Output:

```
Show output from: Debug
Information: 0x402090DF at FACT_TABLE, SSIS.Pipeline: EXECUTE phase is beginning.
Information: 0x402090E0 at FACT_TABLE, OLE DB Destination [2]: The final commit for the OLE DB destination.
Information: 0x40043008 at FACT_TABLE, SSIS.Pipeline: Post Execute phase is beginning.
Information: 0x4004300B at FACT_TABLE, SSIS.Pipeline: "OLE DB Destination" wrote 228265 rows.
Information: 0x40043009 at FACT_TABLE, SSIS.Pipeline: Cleanup phase is beginning.
SSIS package "C:\Users\estudiantes\source\repos\IS_DWH_WWI_2025\Package.dtsx" finished: S
The program '[1724] DtsDebugHost.exe: DTS' has exited with code 0 (0x0).
```

Solution Explorer:

- Solution 'IS DWH WWI 2025' (1 of 1 project)
  - IS\_DWH\_WWI\_2025
    - Project.params
    - Connection Managers
      - ML-RefVm-822010\_MORALLES\_24.WideWorldImporters
    - SSIS Packages
      - Package.dtsx
    - Package Parts
      - Control Flow
      - Miscellaneous
    - Linked Azure Resources
      - Azure-SSIS Integration Runtime
      - Azure Storage

GitHub Copilot Chat | Solution Explorer | Git Changes

Properties

Package	Package
CreatorComputerName	ML-RefVm-822010
CreatorName	ML-RefVm-822010\estudiante
Description	
ID	{96E1B8C4-2000-479A-8773}
Name	Package
PackageType	DTSDesigner100
Name	Specifies the name of the object.

Ready | Add to Source Control | Select Repository | 3:42 PM | 8/14/2025 | 1

Ahora nos dirigimos otra vez a Visual Studio y hacemos clic izquierdo encima del nombre de nuestro proyecto

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Package.dtsx [Design] | Default | Control Flow | Data Flow | Parameters | Event Handlers | Package Expl... | Execution Re... | Select Perspective | Search | GitHub Copilot | ADMIN

Search SSIS Toolbox

- Back Up Database Task
- CDC Control Task
- Check Database Integrity Task
- Execute SQL Server Agent Job Task
- Execute T-SQL Statement Task
- History Cleanup Task
- Maintenance Cleanup Task
- Message Queue Task
- Notify Operator Task
- Rebuild Index Task
- Reorganize Index Task
- Shrink Database Task
- Transfer Database Task
- Transfer Error Messages Task
- Transfer Jobs Task
- Transfer Logins Task
- Transfer Master Stored Procedures Task
- Transfer SQL Server Objects Task
- Update Statistics Task
- WMI Data Reader Task
- WMI Event Watcher Task

Package Parts

Favorites

Provides convenient access to your favorite elements so that they are only a click away.

Control Flow Diagram:

```
graph TD; DWH_LOCATION --> DWH_PRODUCT; DWH_SUPPLIERS --> DWH_CUSTOMERS; DWH_CUSTOMERS --> DWH_SALES; DWH_SALES --> FACT_TABLE;
```

Solution Explorer:

- Deploy (highlighted with a red box)
- Build
- Rebuild
- SSIS in Azure
- Collapse All Descendants Ctrl+Left Arrow
- Scope to This
- New Solution Explorer View
- Add
- Manage NuGet Packages...
- Configure Startup Projects...
- Set as Startup Project
- Debug
- Convert to Package Deployment Model
- Cut Ctrl+X
- Paste Ctrl+V
- Remove Del
- Rename F2
- Unload Project
- Load Direct Dependencies
- Load Entire Dependency Tree
- Open in Terminal
- Properties Alt+Enter

Output:

```
Show output from: Debug
Information: 0x402090DF at FACT_TABLE, SSIS.Pipeline. EXECUTE phase is beginning.
Information: 0x402090E0 at FACT_TABLE, OLE DB Destination [2]: The final commit for the
Information: 0x40043008 at FACT_TABLE, SSIS.Pipeline: Post Execute phase is beginning.
Information: 0x4004300B at FACT_TABLE, SSIS.Pipeline: "OLE DB Destination" wrote 228265
Information: 0x40043009 at FACT_TABLE, SSIS.Pipeline: Cleanup phase is beginning.
SSIS package "C:\Users\estudiantes\source\repos\IS_DWH_WWI_2025\Package.dtsx" finished:
The program '[1724] DtsDebugHost.exe: DTS' has exited with code 0 (0x0).
```

Ready

Windows Taskbar icons: File Explorer, Google Chrome, Visual Studio, etc.

System tray: 3:42 PM, 8/14/2025, battery level 3%

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search IS\_DWH\_WWI\_2025 Sign in GitHub Copilot ADMIN

SSIS Toolbox Search SSIS Toolbox

- Back Up Database Task
- CDC Control Task
- Check Database Integrity Task
- Execute SQL Server Agent Job Task
- Execute T-SQL Statement Task
- History Cleanup Task
- Maintenance Cleanup Task
- Message Queue Task
- Notify Operator Task
- Rebuild Index Task
- Reorganize Index Task
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- Transfer Jobs Task
- Transfer Logins Task
- Transfer Master Stored Procedures Task
- Transfer SQL Server Objects Task
- Update Statistics Task
- WMI Data Reader Task
- WMI Event Watcher Task

Package Parts

Favorites Provides convenient access to your favorite elements they are only a click away.

## Integration Services Deployment Wizard

### Introduction

Deploy Integration Services project or packages.

This wizard deploys Integration Services project or packages to an Integration Services catalog on an instance of SQL Server or an Azure-SSIS integration runtime in Azure Data Factory.

There are five steps to completing this wizard:

1. Select the Deployment Model: Project Deployment or Package Deployment.
2. Select the Integration Services project or packages that you want to deploy.
3. Select the destination.
4. Review your selections.
5. Deploy the project or packages.

Click Next to continue.  
 Do not show this page again

Next > Deploy Cancel

Hacemos clic ahora en “Next”

Solution Explorer (Ctrl+Shift+S) IS\_DWH\_WWI\_2025 (1 of 1 project) WH\_WWI\_2025 project.params connection Managers ML-RefVm-822010\_MORALLES\_24.WideWorldlm SIS Packages , Package.dtsx package Parts ] Control Flow miscellaneous linked Azure Resources ] Azure-SSIS Integration Runtime ] Azure Storage Chat Solution Explorer Git Changes

Screenshot of the Integration Services Deployment Wizard in Visual Studio, showing the "Select Deployment Target" step.

The "SSIS in SQL Server" option is selected and highlighted with a red box. A large red callout points from the text in the main content area to this selection.

**Dejamos seleccionada esta opción y hacemos clic en “Next”, teniendo en cuenta que esta configuración se realiza únicamente por motivos de este proyecto y podría ser diferente en un entorno real.**

The "SSIS in Azure Data Factory" option is also visible but not selected.

At the bottom right of the wizard window, the "Next >" button is highlighted with a red box.

The Visual Studio interface includes:

- SSIS Toolbox** on the left.
- Solution Explorer** on the right, showing the project "IS\_DWH\_WWI\_2025".
- Task List** at the bottom right.
- System Tray** at the bottom right.

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search IS\_DWH\_WWI\_2025 Sign in GitHub Copilot ADMIN

SSIS Toolbox Search SSIS Toolbox Back Up Database Task CDC Control Task Check Database Integrity Task Execute SQL Server Agent Job Task Execute T-SQL Statement Task History Cleanup Task Maintenance Cleanup Task Message Queue Task Notify Operator Task Rebuild Index Task Reorganize Index Task Shrink Database Task Transfer Database Task Transfer Error Messages Task Transfer Jobs Task Transfer Logins Task Transfer Master Stored Procedures Task Transfer SQL Server Objects Task Update Statistics Task WMI Data Reader Task WMI Event Watcher Task Package Parts Favorites Provides convenient access to your favorite elements; they are only a click away.

Integration Services Deployment Wizard Select Destination Introduction Select Source Select Deployment Target Select Destination Review Results Enter the destination server name and where the project will be located in the Integration Services catalog.

Server name: ML-RefVm-822010\MORALLES\_24 Browse... Authentication: Windows Authentication Connect User name: Password: Path: Browse...

Ponemos el nombre del servidor y le damos Conectar; para este proyecto nos vamos a autenticar mediante Windows Authentication, teniendo en cuenta que esta elección es únicamente para fines de este proyecto y podría variar en un entorno real.

< Previous Next > Deploy Cancel

Solution Explorer (Ctrl+Shift+E) IS\_DWH\_WWI\_2025 (1 of 1 project) WH\_WWI\_2025 project.params connection Managers ML-RefVm-822010\_MORALLES\_24.WideWorldlm SIS Packages Package.dtsx package Parts Control Flow Miscellaneous linked Azure Resources Azure-SSIS Integration Runtime Azure Storage Chat Solution Explorer Git Changes IS\_DWH\_WWI\_2025 C:\Users\estudiantes\source\repo IS\_DWH\_WWI\_2025

Ready Add to Source Control Select Repository 3:43 PM 8/14/2025 1

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search IS\_DWH\_WWI\_2025 Sign in GitHub Copilot ADMIN

SSIS Toolbox Search SSIS Toolbox Back Up Database Task CDC Control Task Check Database Integrity Task Execute SQL Server Agent Job Task Execute T-SQL Statement Task History Cleanup Task Maintenance Cleanup Task Message Queue Task Notify Operator Task Rebuild Index Task Reorganize Index Task Shrink Database Task Transfer Database Task Transfer Error Messages Task Transfer Jobs Task Transfer Logins Task Transfer Master Stored Procedures Task Transfer SQL Server Objects Task Update Statistics Task WMI Data Reader Task WMI Event Watcher Task Package Parts Favorites Provides convenient access to your favorite elements they are only a click away.

Integration Services Deployment Wizard Select Destination

Introduction Select Source Select Deployment Target Select Destination Review Results

Enter the destination server name and where the project will be located in the Integration Services catalog.

Server name: ML-RefVm-822010\MORALLES\_24 Browse... Authentication: Windows Authentication Connect User name: Password: Path: Browse...

Hacemos clic en “Browse”

Enter the name of the server instance that contains the Integration Services catalog and the path that specifies the location in the catalog where the project should be deployed.

< Previous Next > Deploy Cancel

Solution Explorer (Ctrl+Shift+S) IS\_DWH\_WWI\_2025 (1 of 1 project) WH\_WWI\_2025 project.params connection Managers ML-RefVm-822010\_MORALLES\_24.WideWorldlm SIS Packages Package.dtsx package Parts Control Flow Miscellaneous linked Azure Resources Azure-SSIS Integration Runtime Azure Storage Chat Solution Explorer Git Changes

C:\Users\estudiantes\source\repo IS\_DWH\_WWI\_2025

Ready Add to Source Control Select Repository 3:43 PM 8/14/2025 1

Screenshot of the Integration Services Deployment Wizard "Select Destination" step.

The main window title is "Integration Services Deployment Wizard" and the sub-step title is "Select Destination".

The "Select Destination" dialog box is open, showing the path "SSISDB" under "Select a folder for the project or replace an existing project in an Integration Services catalog:". The "New folder..." button at the bottom left is highlighted with a red box and a callout annotation pointing to it.

A callout annotation with the text "Hacemos clic en "New Folder"" is placed over the "New folder..." button.

The status bar at the bottom right shows the message "name of the project.".

The Solution Explorer on the right shows the project structure for "IS\_DWH\_WWI\_2025".

Screenshot of the Integration Services Deployment Wizard "Select Destination" step in Visual Studio.

The "Create New Folder" dialog is open, showing the "Name:" field filled with "DWH\_WWI\_2025". A red box highlights the "OK" button at the bottom of the dialog. A red callout box points to the "OK" button with the text: "Le ponemos un nombre al folder y le damos en "OK"" (We give it a name to the folder and click "OK").

The main wizard window shows the deployment target path: "IS\_DWH\_WWI\_2025\WH\_WWI\_2025\project.params\connection Managers\ML-RefVm-822010\_MORALLES\_24.WideWorldlmlsis Packages\Package.dtsx\Package Parts\Control Flow\Miscellaneous".

Bottom status bar: "Ready".

Screenshot of the Integration Services Deployment Wizard "Select Destination" step.

The main window title is "Integration Services Deployment Wizard" and the sub-step title is "Select Destination".

The "Select Destination" dialog box is open, showing a tree view of the "Browse for Folder or Project" catalog:

- SSISDB
- DWH\_WWI\_2025

At the bottom of the dialog are "New folder..." and "OK" (highlighted with a red box) buttons.

A callout bubble with a red border and arrow points to the "OK" button with the text: "Cuando ya creamos el folder, hacemos clic en “OK”".

The status bar at the bottom right shows: "name of the project." and "Ready".

The Solution Explorer on the right shows the project structure:

- IS\_DWH\_WWI\_2025 (1 of 1 project)
- IS\_DWH\_WWI\_2025
- project.params
- connection Managers
- ML-RefVm-822010\_MORALLES\_24.WideWorldIm
- SIS Packages
- Package.dtsx
- Package Parts
- Control Flow
- Miscellaneous

The taskbar at the bottom includes icons for File Explorer, Task View, Start, Taskbar settings, and the system tray.

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search IS\_DWH\_WWI\_2025 Sign in GitHub Copilot ADMIN

SSIS Toolbox Search SSIS Toolbox Back Up Database Task CDC Control Task Check Database Integrity Task Execute SQL Server Agent Job Task Execute T-SQL Statement Task History Cleanup Task Maintenance Cleanup Task Message Queue Task Notify Operator Task Rebuild Index Task Reorganize Index Task Shrink Database Task Transfer Database Task Transfer Error Messages Task Transfer Jobs Task Transfer Logins Task Transfer Master Stored Procedures Task Transfer SQL Server Objects Task Update Statistics Task WMI Data Reader Task WMI Event Watcher Task Package Parts Favorites Provides convenient access to your favorite elements they are only a click away.

Integration Services Deployment Wizard Select Destination

Introduction Select Source Select Deployment Target Select Destination Review Results

Enter the destination server name and where the project will be located in the Integration Services catalog.

Server name: ML-RefVm-822010\MORALLES\_24 Browse... Authentication: Windows Authentication Connect User name: Password: Path: /SSISDB/DWH\_WWI\_2025/IS\_DWH\_WWI\_2025 Browse...

Hacemos clic ahora en “Next”

< Previous Next > Deploy Cancel

Solution Explorer (Ctrl+Shift+S) IS\_DWH\_WWI\_2025 (1 of 1 project) WH\_WWI\_2025 project.params connection Managers ML-RefVm-822010\_MORALLES\_24.WideWorldlm SIS Packages Package.dtsx Package Parts Control Flow Miscellaneous linked Azure Resources Azure-SSIS Integration Runtime Azure Storage Chat Solution Explorer Git Changes

IS\_DWH\_WWI\_2025 C:\Users\estudiantes\source\repo IS\_DWH\_WWI\_2025

Ready Add to Source Control Select Repository 3:44 PM 8/14/2025 1

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search IS\_DWH\_WWI\_2025 Sign in GitHub Copilot ADMIN

SSIS Toolbox Search SSIS Toolbox

- Back Up Database Task
- CDC Control Task
- Check Database Integrity Task
- Execute SQL Server Agent Job Task
- Execute T-SQL Statement Task
- History Cleanup Task
- Maintenance Cleanup Task
- Message Queue Task
- Notify Operator Task
- Rebuild Index Task
- Reorganize Index Task
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- Transfer Error Messages Task
- Transfer Jobs Task
- Transfer Logins Task
- Transfer Master Stored Procedures Task
- Transfer SQL Server Objects Task
- Update Statistics Task
- WMI Data Reader Task
- WMI Event Watcher Task

Package Parts

Favorites Provides convenient access to your favorite elements they are only a click away.

Integration Services Deployment Wizard Review

Introduction Select Source Select Deployment Target Select Destination Review Results

Review your selections.

Summary:

- Use the following arguments to perform this deployment from the command line:
  - Command line: /Silent /ModelType:Project /SourcePath:"C:\Users\estudiantes\source\repos\IS\_DWH\_WWI\_2025\bin\Development\IS\_DWH\_WWI\_2025.ispac"
- Source
  - Path: C:\Users\estudiantes\source\repos\IS\_DWH\_WWI\_2025\bin\Development\IS\_DWH\_WWI\_2025.ispac
- Destination
  - Server name: ML-RefVm-822010\MORALLES\_24
  - Path: /SSISDB/DWH\_WWI\_2025/IS\_DWH\_WWI\_2025

Ahora en “Deploy”

< Previous Next > Deploy Cancel

Solution Explorer (Ctrl+Shift+S) IS\_DWH\_WWI\_2025 (1 of 1 project) WH\_WWI\_2025 project.params connection Managers ML-RefVm-822010\_MORALLES\_24.WideWorldlm SIS Packages Package.dtsx Package Parts Control Flow Miscellaneous Azure Resources Azure-SSIS Integration Runtime Azure Storage Chat Solution Explorer Git Changes

IS\_DWH\_WWI\_2025 C:\Users\estudiantes\source\repos\IS\_DWH\_WWI\_2025

Ready Add to Source Control Select Repository 3:44 PM 8/14/2025 1

File Edit View Git Project Build Debug Format Test Analyze Tools Extensions Window Help | Search | IS\_DWH\_WWI\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox | Search SSIS Toolbox

Back Up Database Task  
CDC Control Task  
Check Database Integrity Task  
Execute SQL Server Agent Job Task  
Execute T-SQL Statement Task  
History Cleanup Task  
Maintenance Cleanup Task  
Message Queue Task  
Notify Operator Task  
Rebuild Index Task  
Reorganize Index Task  
Shrink Database Task  
Transfer Database Task  
Transfer Error Messages Task  
Transfer Jobs Task  
Transfer Logins Task  
Transfer Master Stored Procedures Task  
Transfer SQL Server Objects Task  
Update Statistics Task  
WMI Data Reader Task  
WMI Event Watcher Task

Package Parts

Favorites

Provides convenient access to your favorite elements. They are only a click away.

Integration Services Deployment Wizard | Results

Introduction  
Select Source  
Select Deployment Target  
Select Destination  
Review  
Results

Help

Results

Action	Result
Loading project	Passed
Connecting to destination server	Passed
Changing protection level	Passed
Deploying project	Passed

Después en “Close”

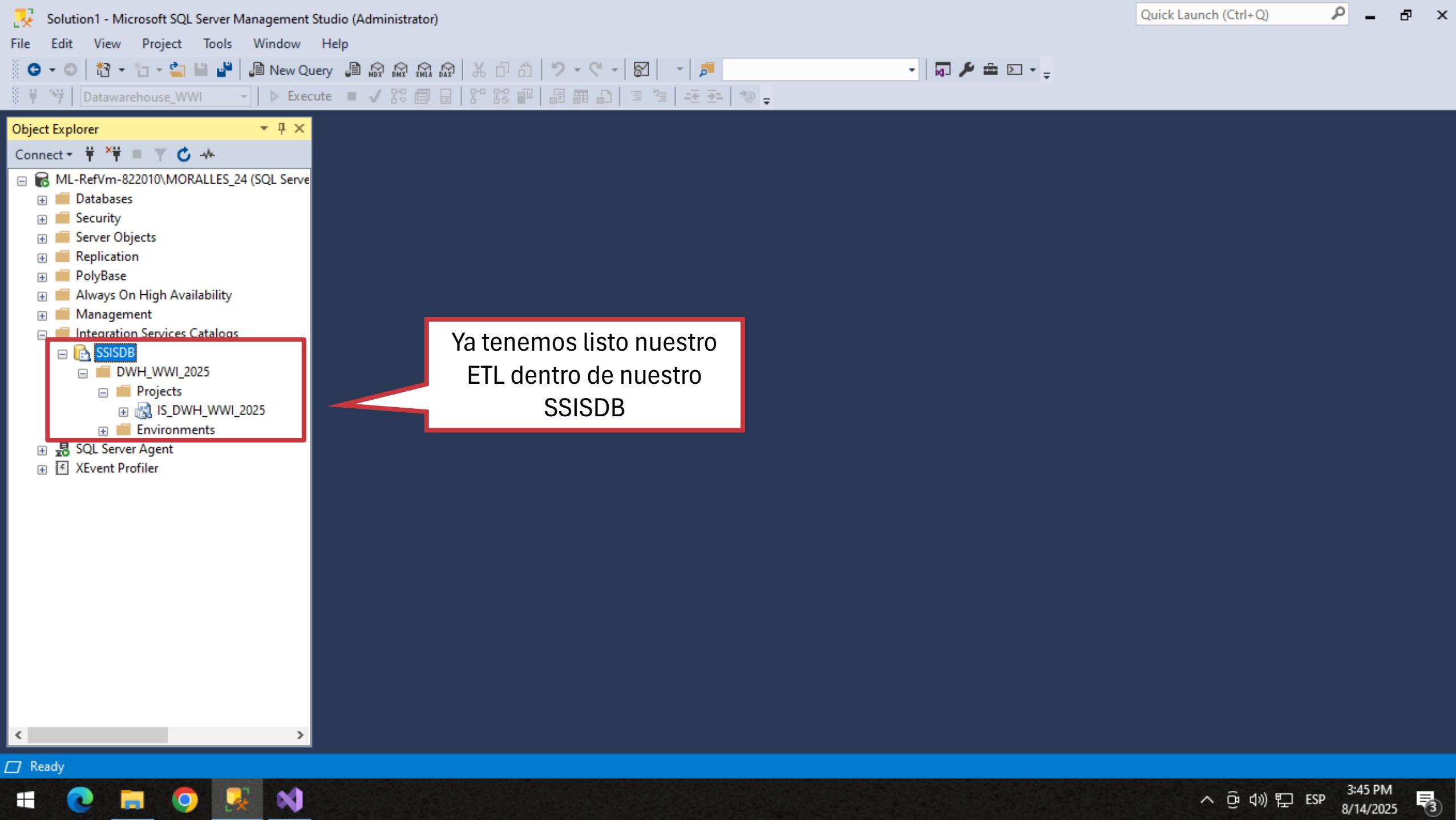
Save Report... | Close | < Previous | Next > | Cancel

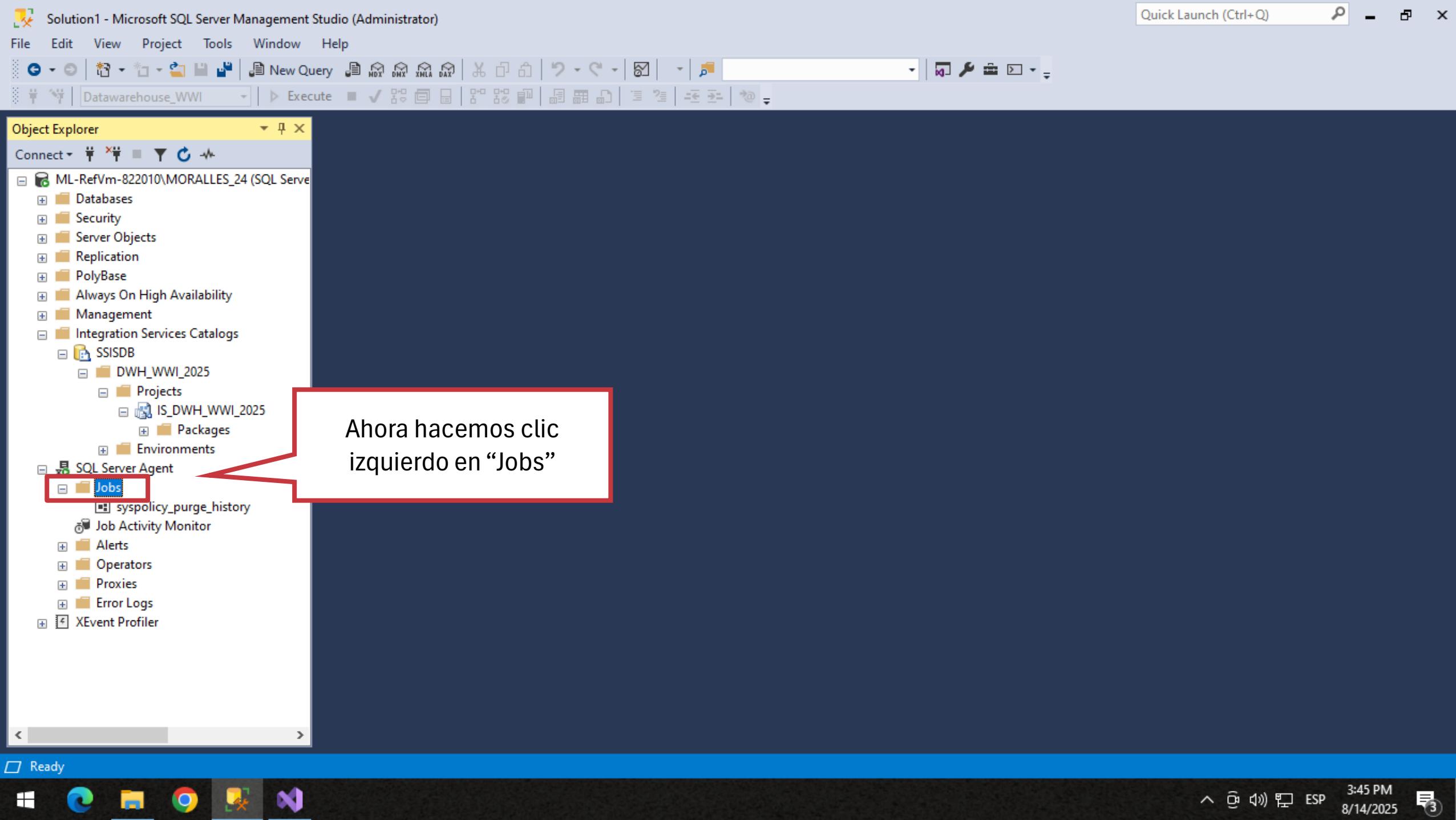
Solution Explorer | Chat | Git Changes

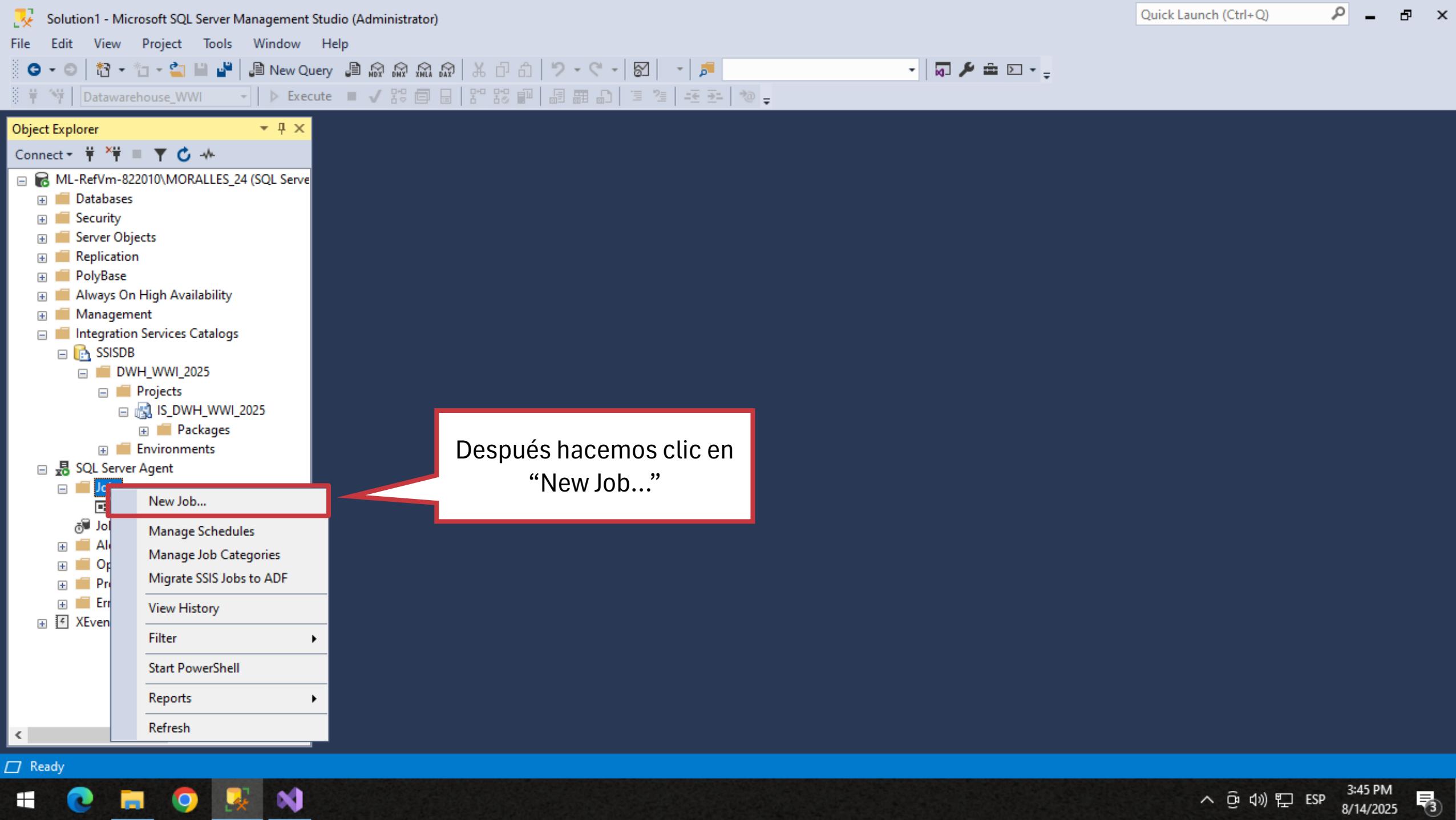
IS\_DWH\_WWI\_2025

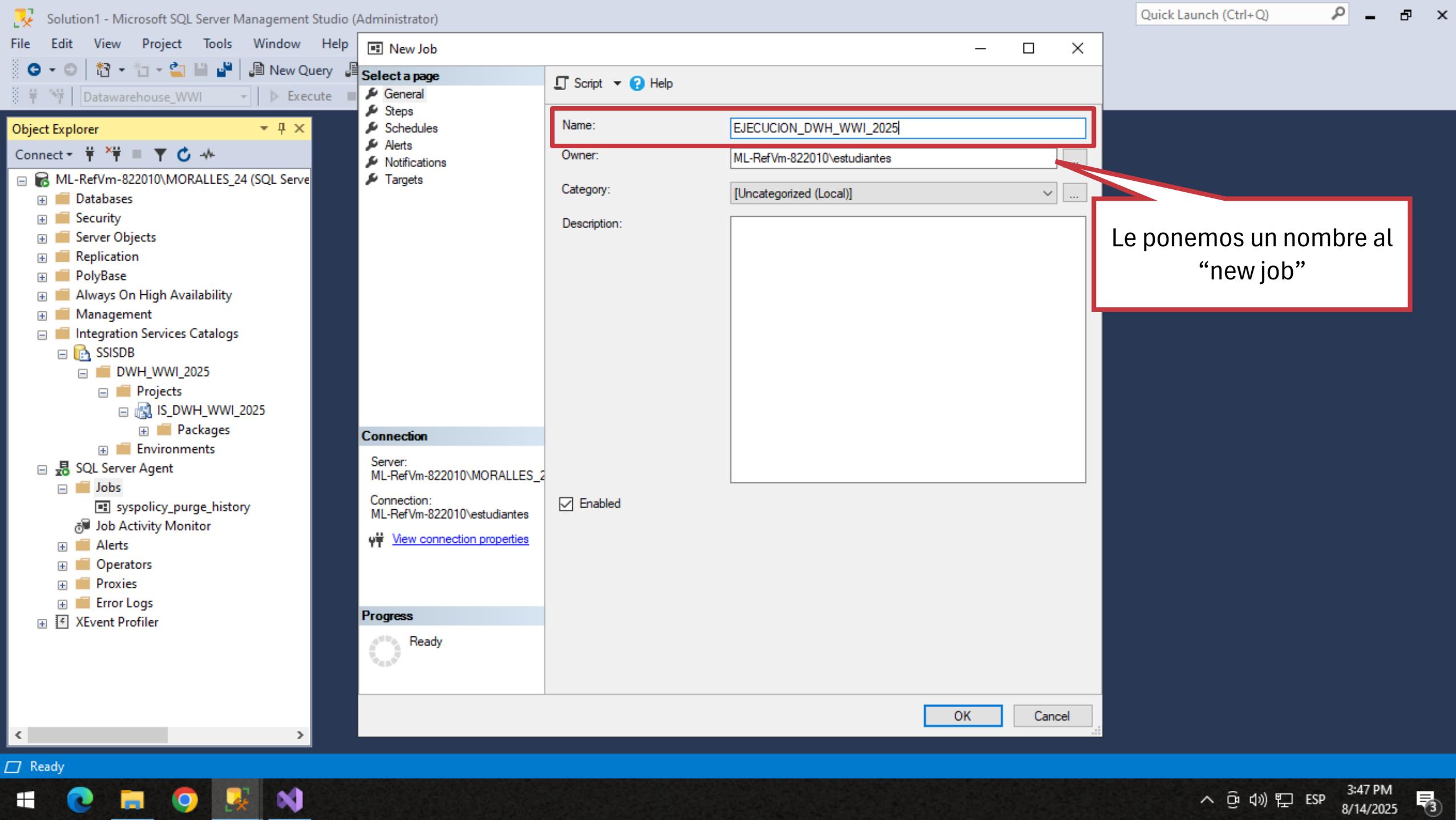
C:\Users\estudiantes\source\repos\IS\_DWH\_WWI\_2025

Add to Source Control | Select Repository | 3:44 PM | ESP | 8/14/2025 | 1

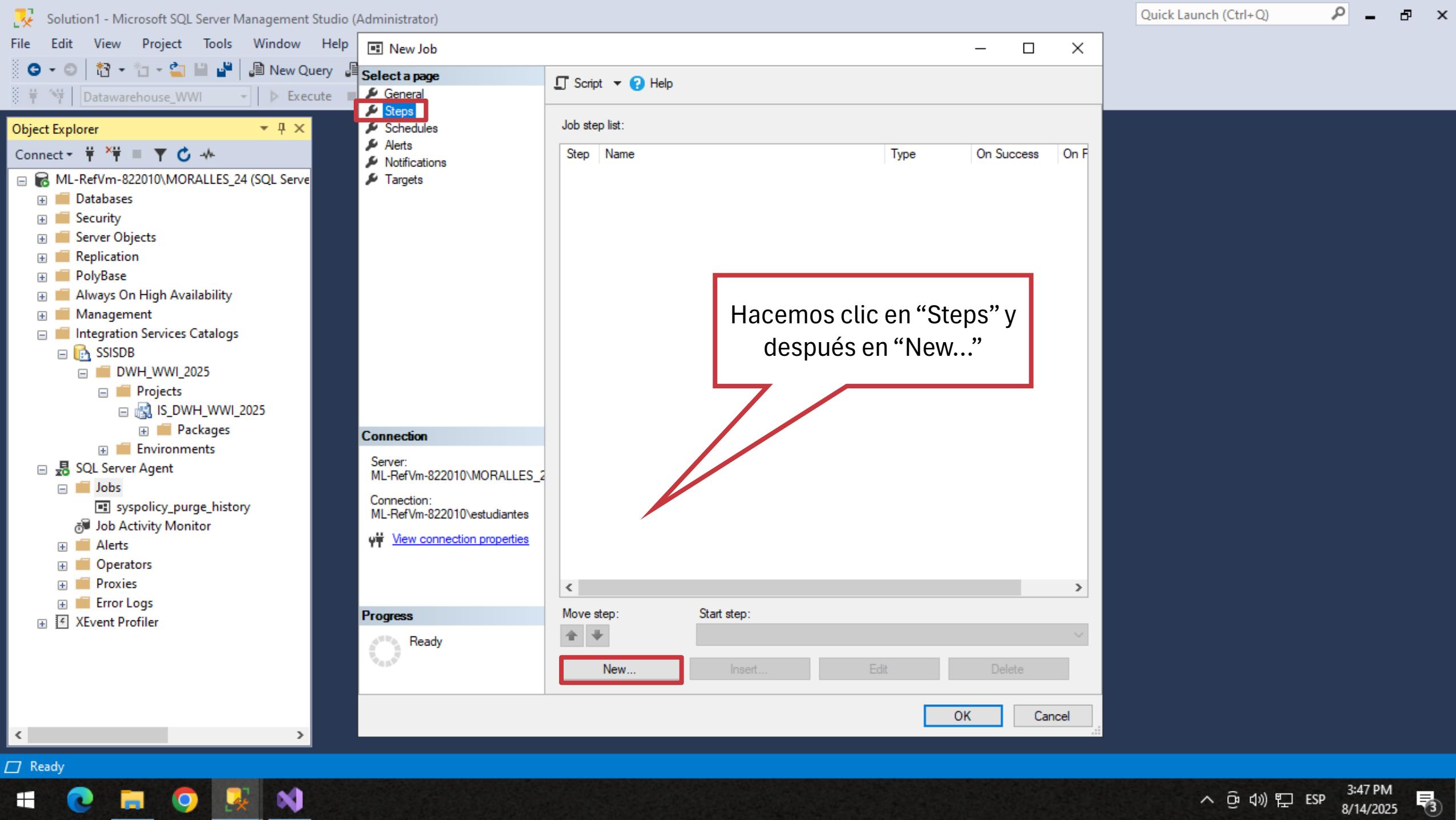


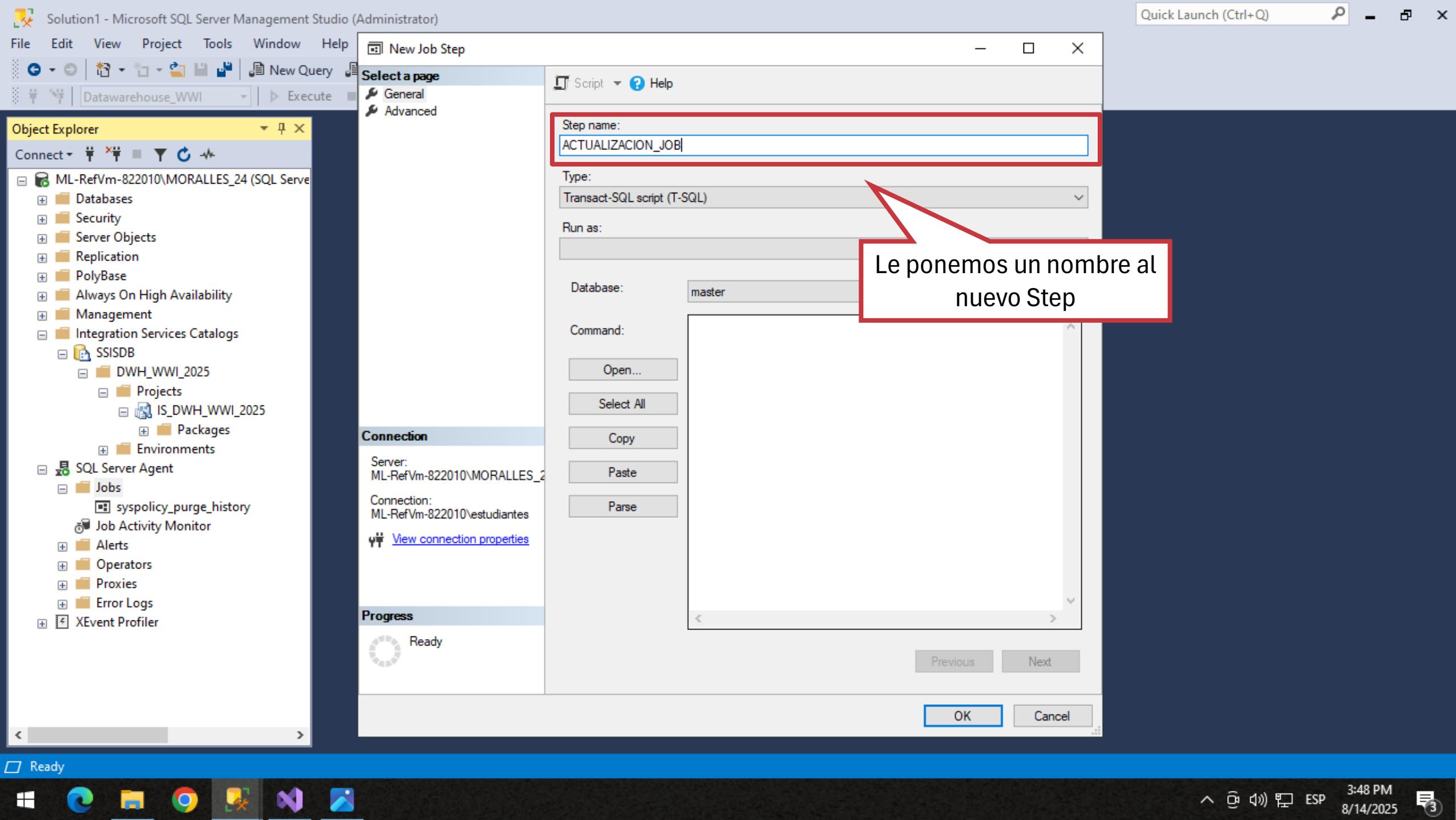




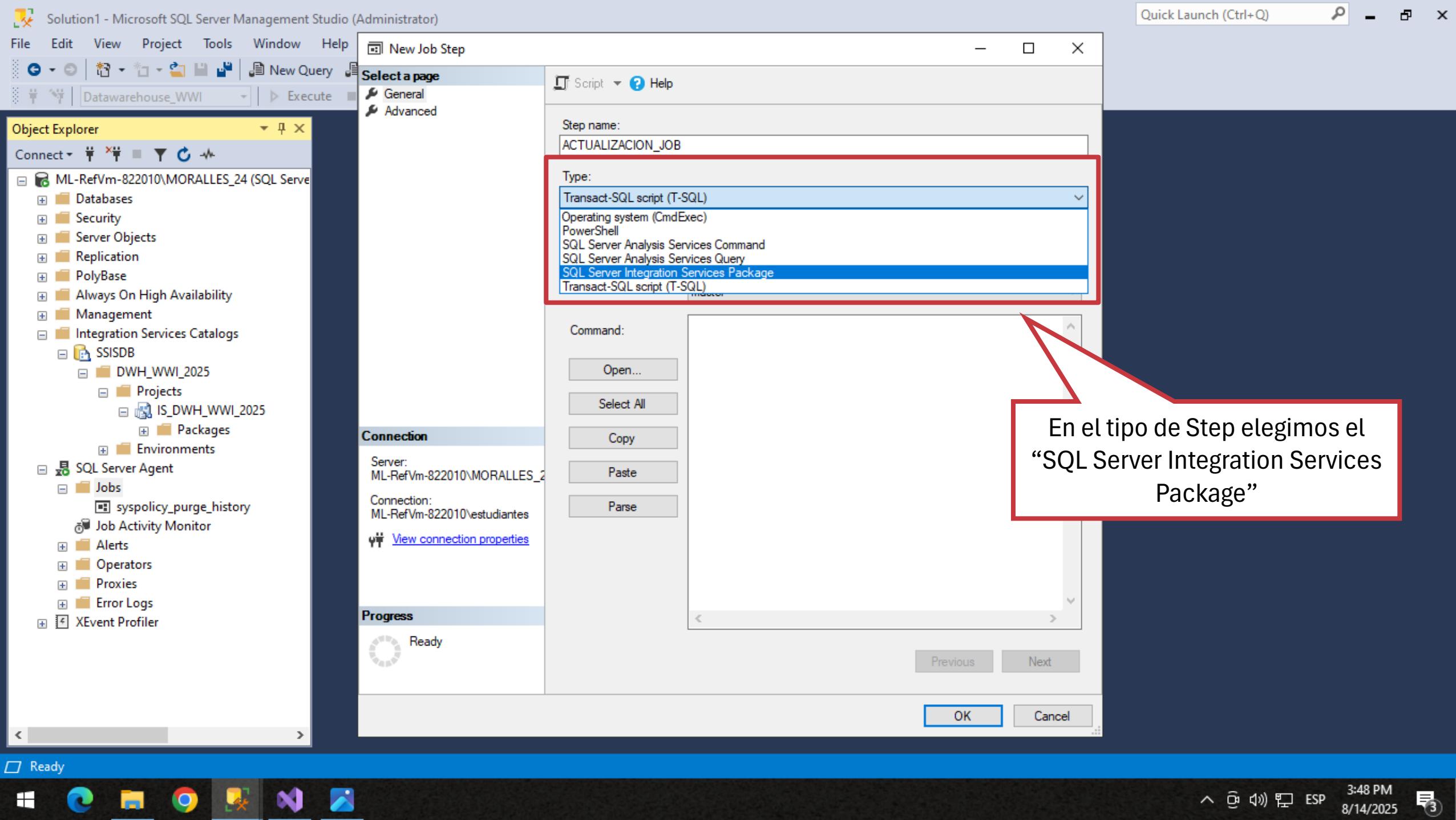


Le ponemos un nombre al  
“new job”





Le ponemos un nombre al  
nuevo Step



Solution1 - Microsoft SQL Server Management Studio (Administrator)

File Edit View Project Tools Window Help

New Query

Datawarehouse\_WWI

Execute

Object Explorer

ML-RefVm-822010\MORALLES\_24 (SQL Server)

- Databases
- Security
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
  - SSISDB
    - DWH\_WWI\_2025
    - Projects
      - IS\_DWH\_WWI\_2025
    - Packages

New Job Step

Select a page

General Advanced

Script Help

Step name: ACTUALIZACION\_JOB

Type: SQL Server Integration Services Package

Run as: SQL Server Agent Service Account

Package Configuration

Package source: SSIS Catalog

Server: ML-RefVm-822010\MORALLES\_24

Log on to the server

Use Windows Authentication

Use SQL Server Authentication

User name:

Password:

Package: ...

Previous Next

OK Cancel

Ponemos el nombre de nuestro Servidor y para este proyecto seguiremos usando la Windows Authentication, después vamos a hacer clic en los puntitos en el apartado de "Package" para elegir nuestro paquete

Ready

3:49 PM  
8/14/2025

Solution1 - Microsoft SQL Server Management Studio (Administrator)

File Edit View Project Tools Window Help

New Query

Datawarehouse\_WWI Execute

Object Explorer

ML-RefVm-822010\MORALLES\_24 (SQL Server)

- Databases
- Security
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
  - SSISDB
    - DWH\_WWI
      - Projects
        - IS\_D
      - Environ
- SQL Server Agent
  - Jobs
    - syspolicy\_purge\_history
    - Job Activity Monitor
  - Alerts
  - Operators
  - Proxies
  - Error Logs
- XEvent Profiler

Quick Launch (Ctrl+Q) - X

New Job Step

Select a page

General Advanced

Script Help

Step name: ACTUALIZACION\_JOB

Type: SQL Server Integration Services Package

Select an SSIS Package

Integration Services Catalogs  
SSISDB  
DWH\_WWI\_2025  
IS\_DWH\_WWI\_2025  
Package.dtsx

OK Cancel

Elegimos nuestro paquete y hacemos clic en “OK”

Server: ML-RefVm-822010\MORALLES\_24

Connection: ML-RefVm-822010\estudiantes

[View connection properties](#)

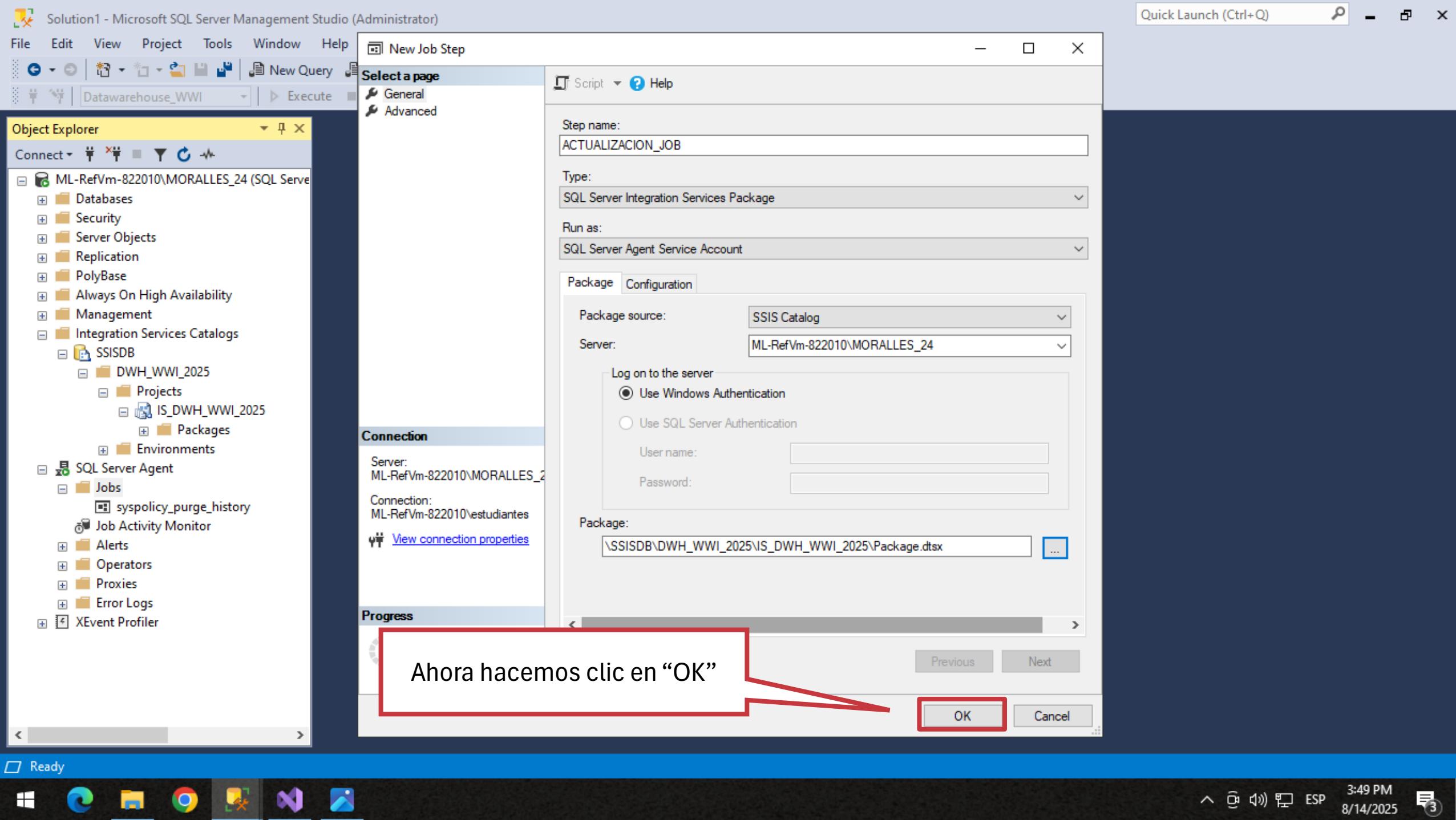
Progress Ready

OK Cancel

Ready

3:49 PM ESP 8/14/2025 3

The screenshot shows the Microsoft SQL Server Management Studio interface. In the center, a 'New Job Step' dialog is open. On the left, the Object Explorer shows a tree view of database objects. A red callout box points from the text 'Elegimos nuestro paquete y hacemos clic en “OK”' to the 'Select an SSIS Package' dialog. This dialog lists several SSIS packages under 'Integration Services Catalogs' and highlights 'Package.dtsx'. The 'OK' button in this dialog is also highlighted with a red box. The main 'New Job Step' dialog has its 'Step name' set to 'ACTUALIZACION\_JOB' and 'Type' set to 'SQL Server Integration Services Package'. The status bar at the bottom indicates 'Ready'.



Solution1 - Microsoft SQL Server Management Studio (Administrator)

File Edit View Project Tools Window Help

New Query

Datawarehouse\_WWI Execute

Object Explorer

ML-RefVm-822010\MORALLES\_24 (SQL Server)

- Databases
- Security
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
  - SSISDB
    - DWH\_WWI\_2025
      - Projects
      - IS\_DWH\_WWI\_2025
        - Packages
      - Environments
- SQL Server Agent
  - Jobs
    - syspolicy\_purge\_history
    - Job Activity Monitor
  - Alerts
  - Operators
  - Proxies
  - Error Logs
- XEvent Profiler

New Job

Select a page

- General
- Steps
- Schedules
- Alerts
- Notifications
- Targets

Script Help

Job step list:

Step	Name	Type	On Success	On Failure
1	ACTUALIZACION_JOB	SQL Server... Go to the next step	Quit	

Connection

Server: ML-RefVm-822010\MORALLES\_24

Connection: ML-RefVm-822010\estudiantes

[View connection properties](#)

Progress

Ready

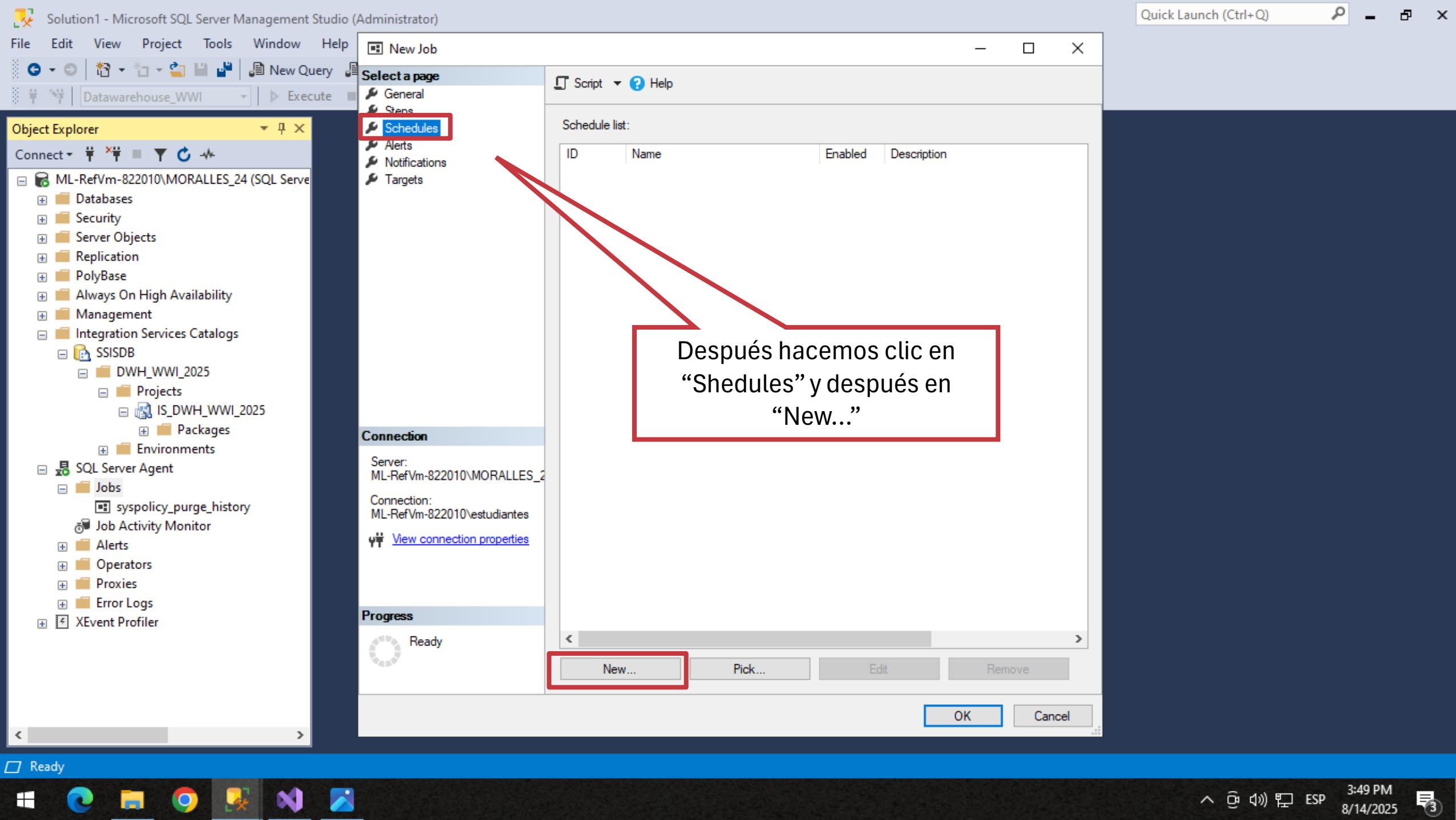
Move step: Start step: 1:ACTUALIZACION\_JOB

New... Insert... Edit Delete

OK Cancel

Ready

3:49 PM ESP 8/14/2025



Después hacemos clic en  
"Schedules" y después en  
"New..."

Solution1 - Microsoft SQL Server Management Studio (Administrator)

File Edit View Project Tools Window Help

New Query Execute

Datawarehouse\_WWI

Object Explorer

ML-RefVm-822010\MORALLES\_24 (SQL Server)

- Databases
- Security
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
  - SSISDB
    - DWH\_WWI\_2025
      - Projects
      - IS\_DWH\_WWI\_2025
        - Packages
      - Environments
- SQL Server Agent
  - Jobs
    - syspolicy\_purge\_history
    - Job Activity Monitor
    - Alerts
    - Operators
    - Proxies
    - Error Logs
  - XEvent Profiler

New Job

New Job Schedule

Name: ACTUALIZACIÓN CALENDARIO

Schedule type: Recuring

Enabled

Date: 8/14/2025 Time: 3:49:40 PM

Frequency

Occurs: Weekly

Recurs every: 1 week(s) on

Monday  Wednesday  Friday  Saturday  
 Tuesday  Thursday  Sunday

Daily frequency

Occurs once at: 3:56:00 PM

Occurs every: 1 hour(s)

Starting at: 12:00:00 AM Ending at: 11:59:59 PM

Duration

Start date: 8/14/2025 End date: 8/14/2025

No end date:

Summary

Description: Occurs every week on Thursday at 3:56:00 PM. Schedule will be used between 8/14/2025 and 8/14/2025.

OK Cancel Help

OK Cancel

Quick Launch (Ctrl+Q)

Ready

3:53 PM 8/14/2025

Primero le ponemos un nombre, después ajustamos los días de la semana, la hora que se ejecutara y la fecha de inicio. Para medios de este proyecto no va configurarse para que sea recurrente, después de terminar hacemos clic en “OK”

Solution1 - Microsoft SQL Server Management Studio (Administrator)

File Edit View Project Tools Window Help

New Query

Datawarehouse\_WWI

Execute

Object Explorer

ML-RefVm-822010\MORALLES\_24 (SQL Server)

- Databases
- Security
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
  - SSISDB
    - DWH\_WWI\_2025
    - Projects
      - IS\_DWH\_WWI\_2025
      - Packages
    - Environments
- SQL Server Agent
  - Jobs
    - syspolicy\_purge\_history
    - Job Activity Monitor
  - Alerts
  - Operators
  - Proxies
  - Error Logs
- XEvent Profiler

New Job

Select a page

- General
- Steps
- Schedules
- Alerts
- Notifications
- Targets

Script Help

Schedule list:

ID	Name	Enabled	Description
New	ACTUALIZACIÓN CALENDARIO	Yes	Occurs every week on Thursday at 3:5

Connection

Server: ML-RefVm-822010\MORALLES\_2

Connection: ML-RefVm-822010\estudiantes

[View connection properties](#)

Progress

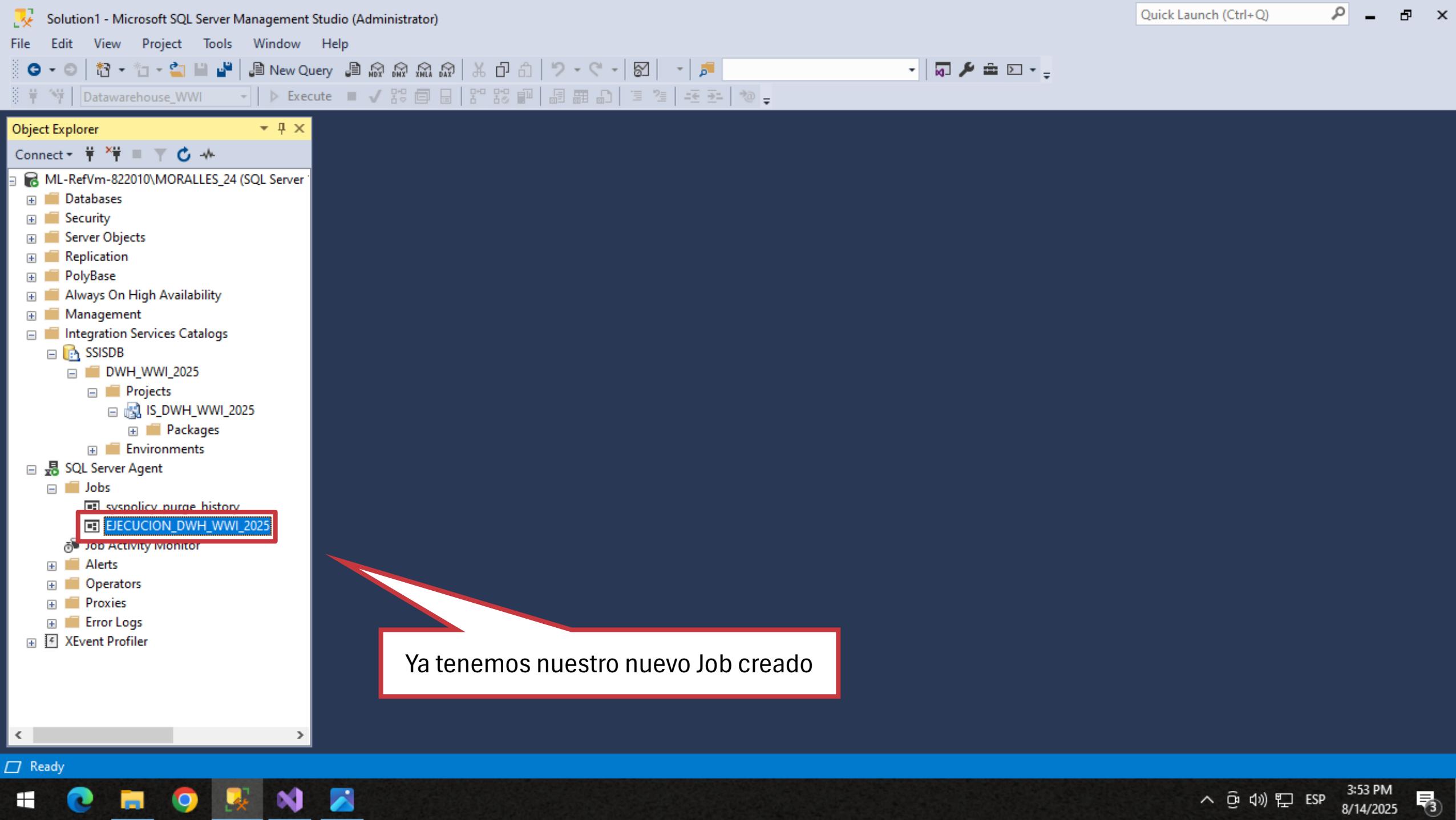
Ahora hacemos clic en “OK”

OK Cancel

Para este proyecto no se configuraron alertas ni notificaciones en los Jobs de SQL Server Agent, ya que el objetivo principal es demostrar la ejecución y monitoreo de los paquetes ETL.

Quick Launch (Ctrl+Q)

3:53 PM 8/14/2025



Datawarehouse\_WWI | 00:00:03 228,265 rows



Después de cumplirse el tiempo programado, verificamos que el paquete desplegado en **SSISDB** se ejecutó correctamente y que el **Job** configurado en **SQL Server Agent** también se completó sin errores. Esto nos permite confirmar que la ejecución automatizada del flujo ETL funciona según lo previsto, que los datos se cargaron correctamente en el Data Warehouse, y que la programación de tareas automatizadas se encuentra operativa, asegurando la continuidad del proceso sin necesidad de intervención manual.

Datawarehouse\_WWI | 00:00:06 456,530 rows



# **Paso 4:**

# **Implementación del Modelo Tabular en Analysis Services (SSAS)**



Recycle Bin

Microsoft Edge

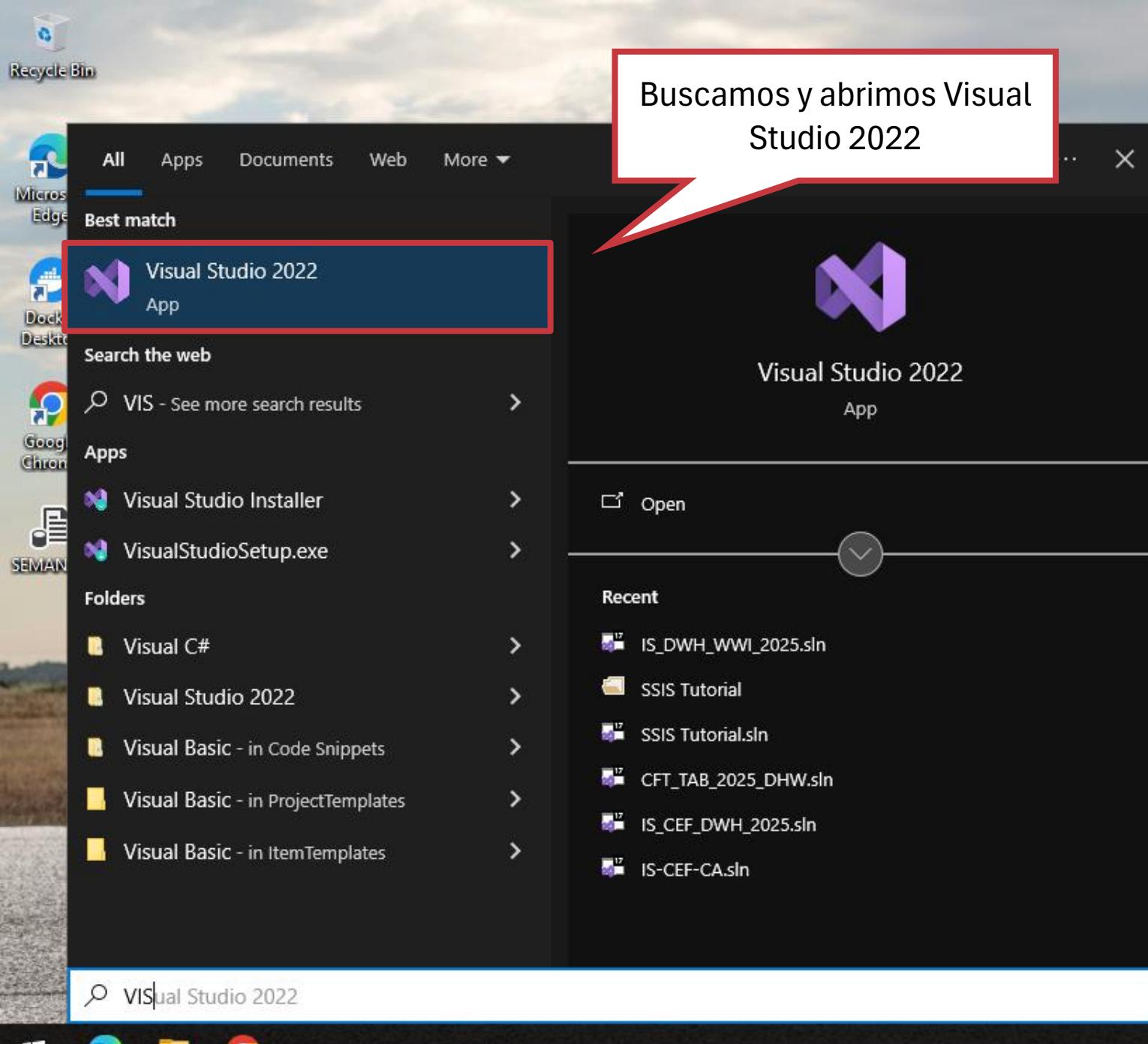
Docker Desktop

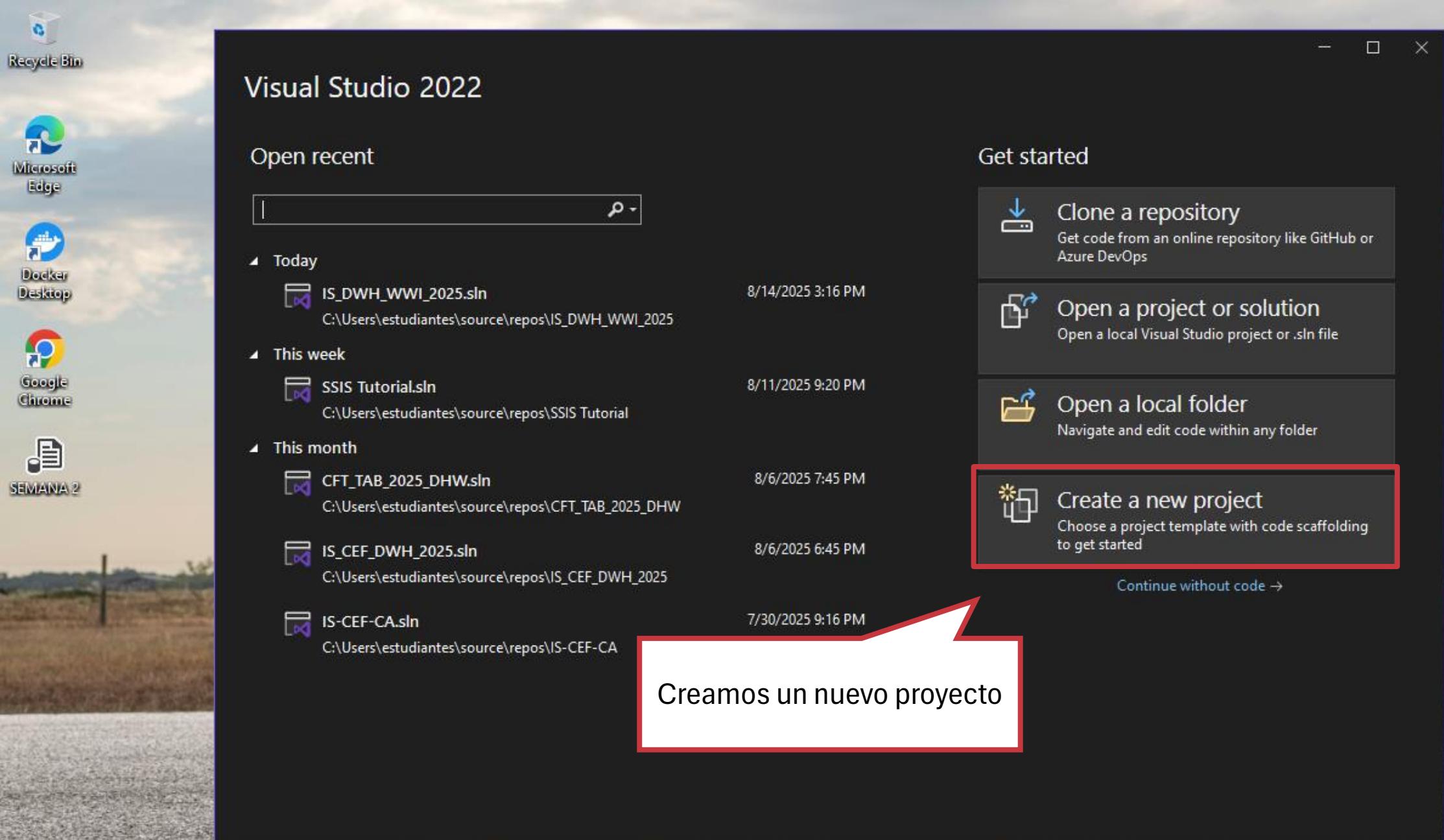
Google Chrome

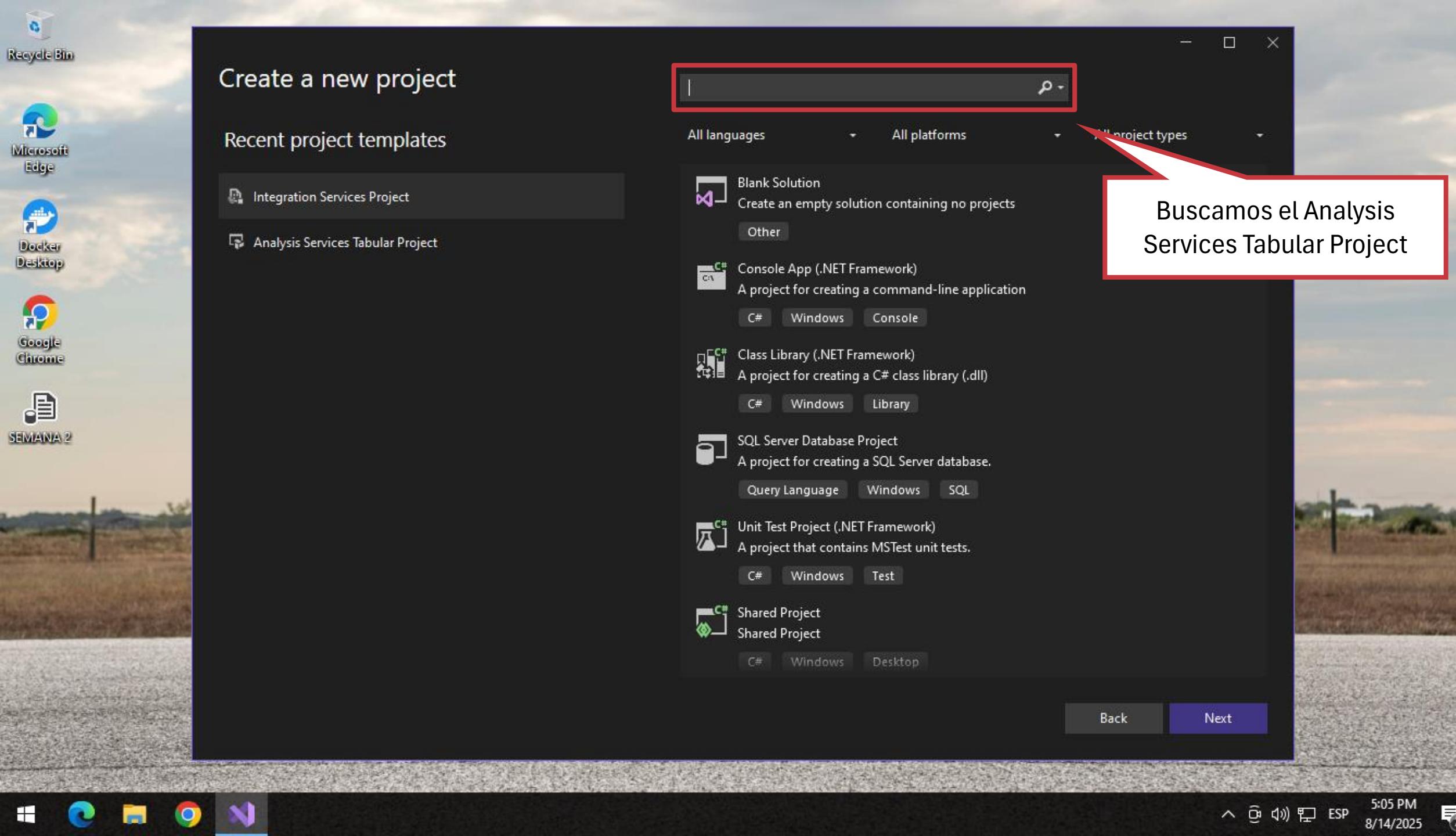
SEMANA 2

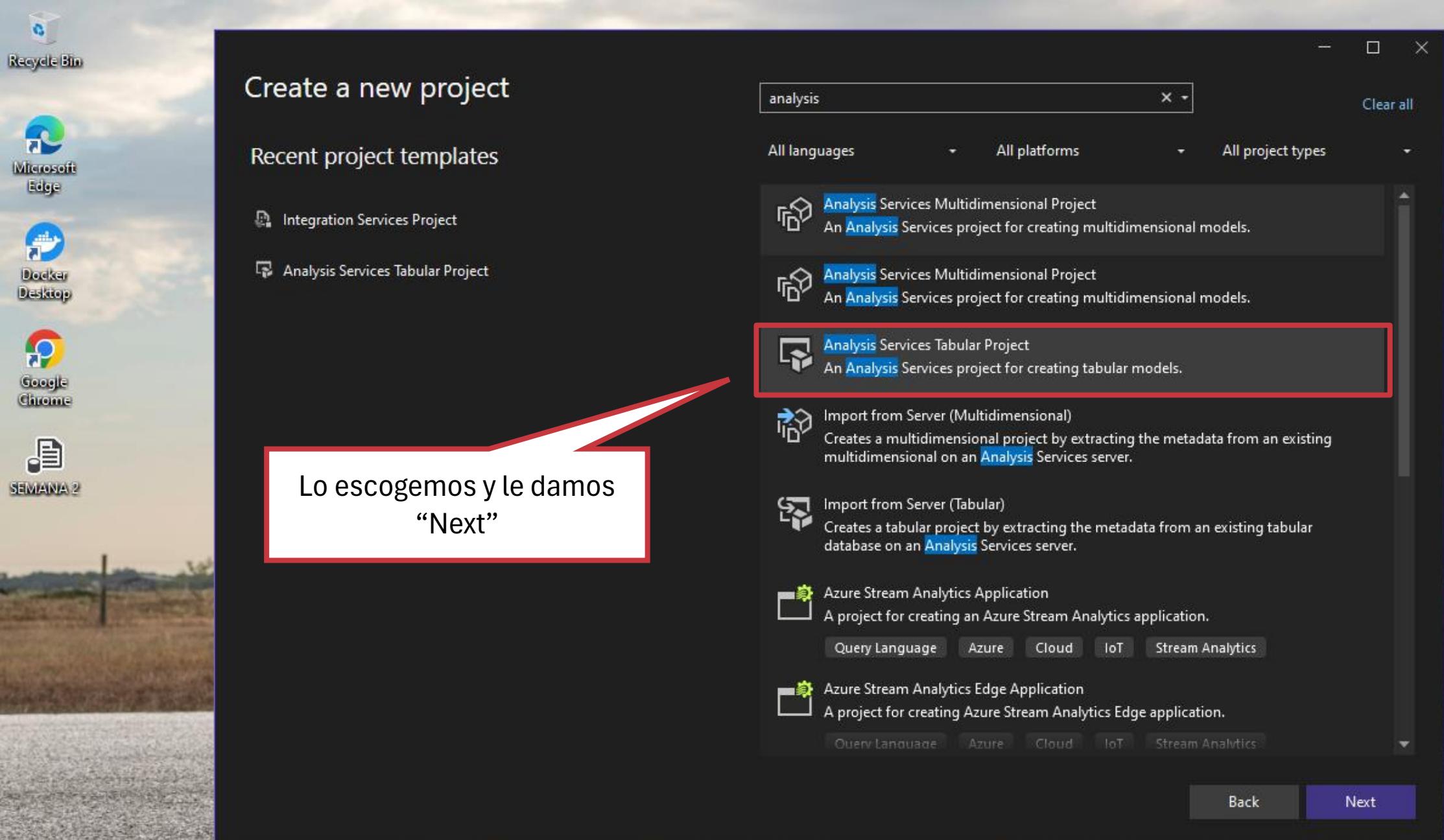


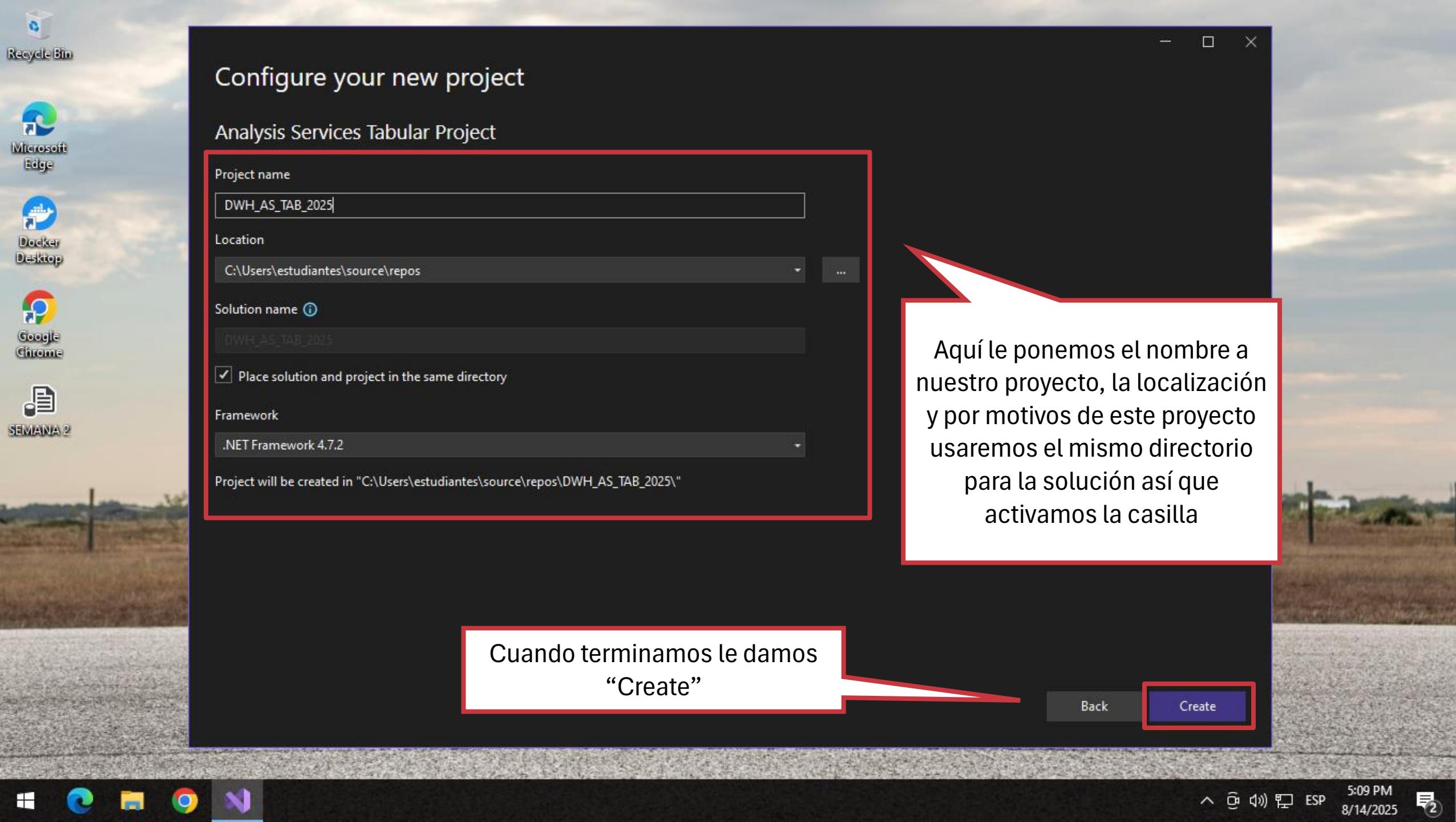
5:05 PM  
ESP  
8/14/2025











## Configure your new project

### Analysis Services Tabular Project

Project name

DWH\_AS\_TAB\_2025

Location

C:\Users\estudiantes\source\repos

Solution name ⓘ

DWH\_AS\_TAB\_2025

Place solution and project in the same directory

Framework

.NET Framework 4.7.2

Project will be created in "C:\Users\estudiantes\source\repos\DWH\_AS\_TAB\_2025\"

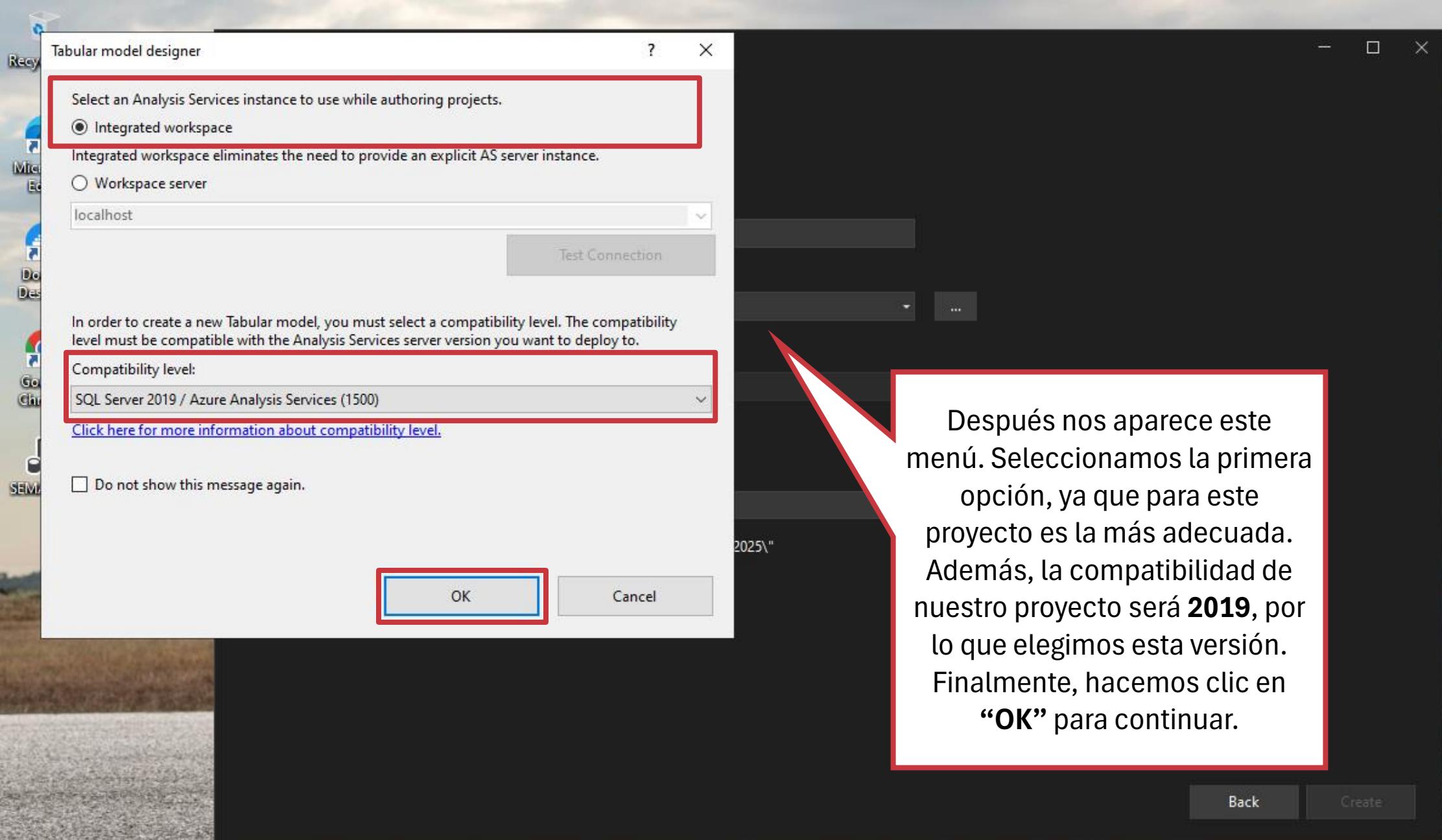
Aquí le ponemos el nombre a nuestro proyecto, la localización y por motivos de este proyecto usaremos el mismo directorio para la solución así que activamos la casilla

Cuando terminamos le damos "Create"

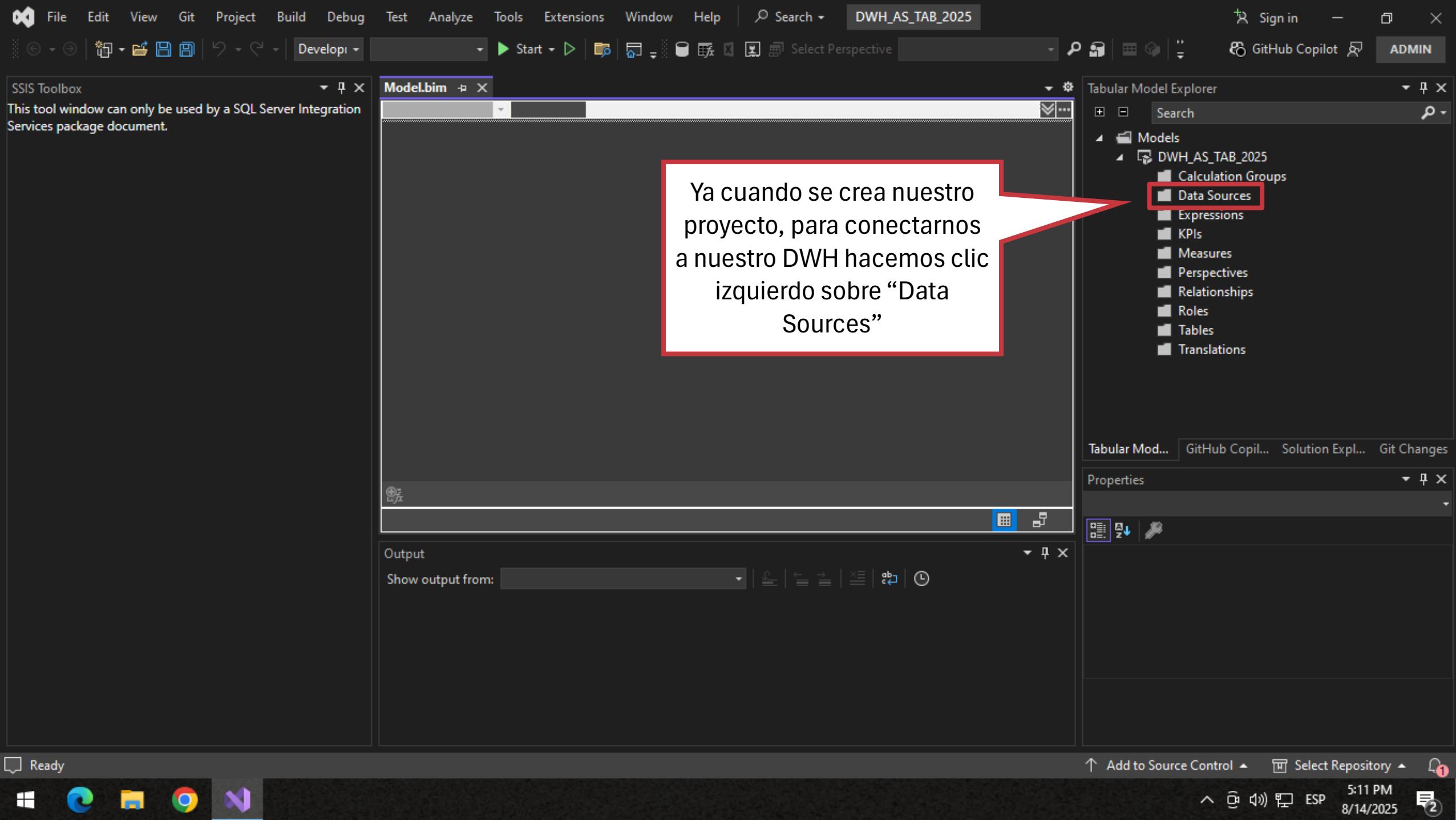
Back

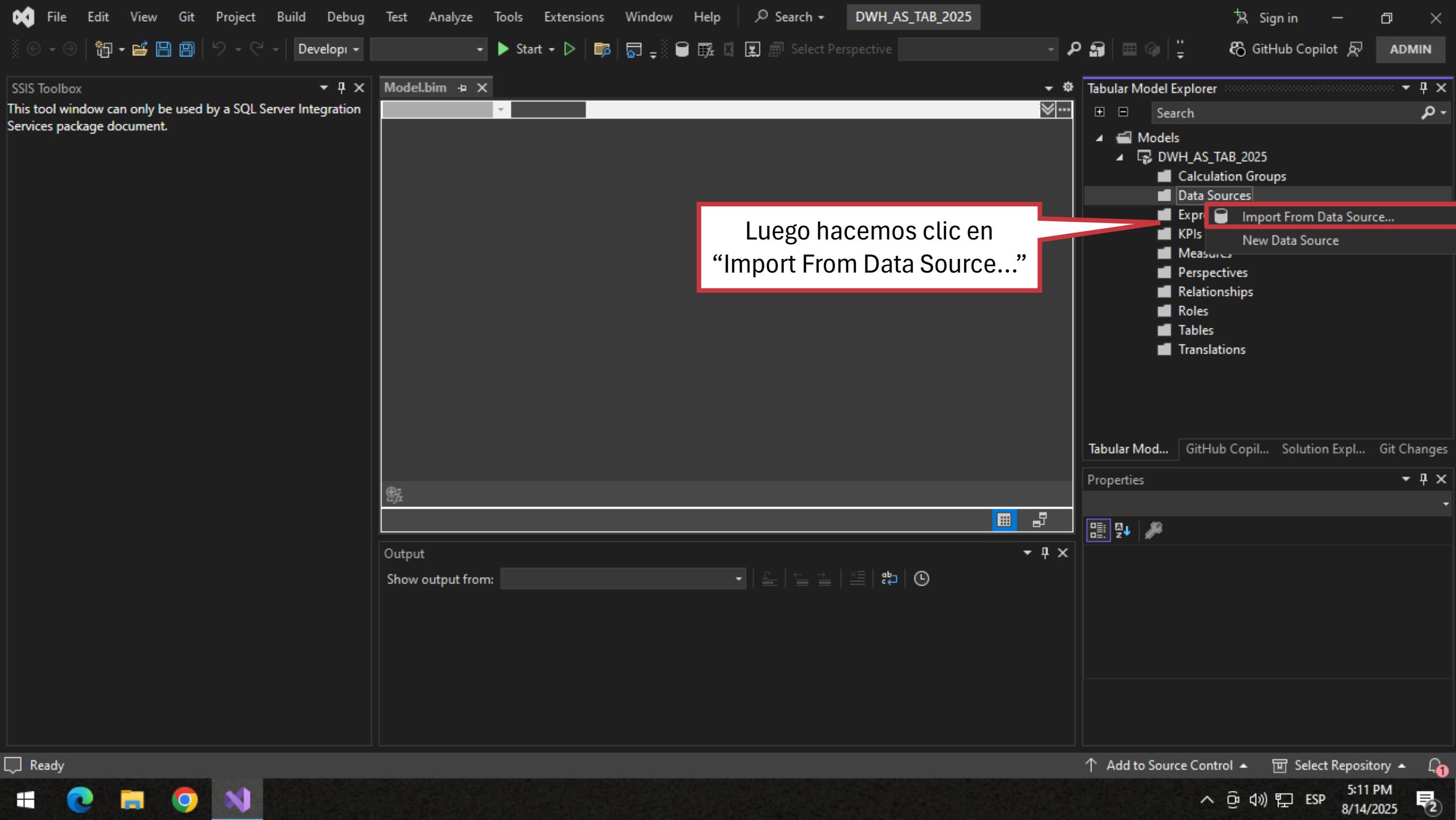
Create



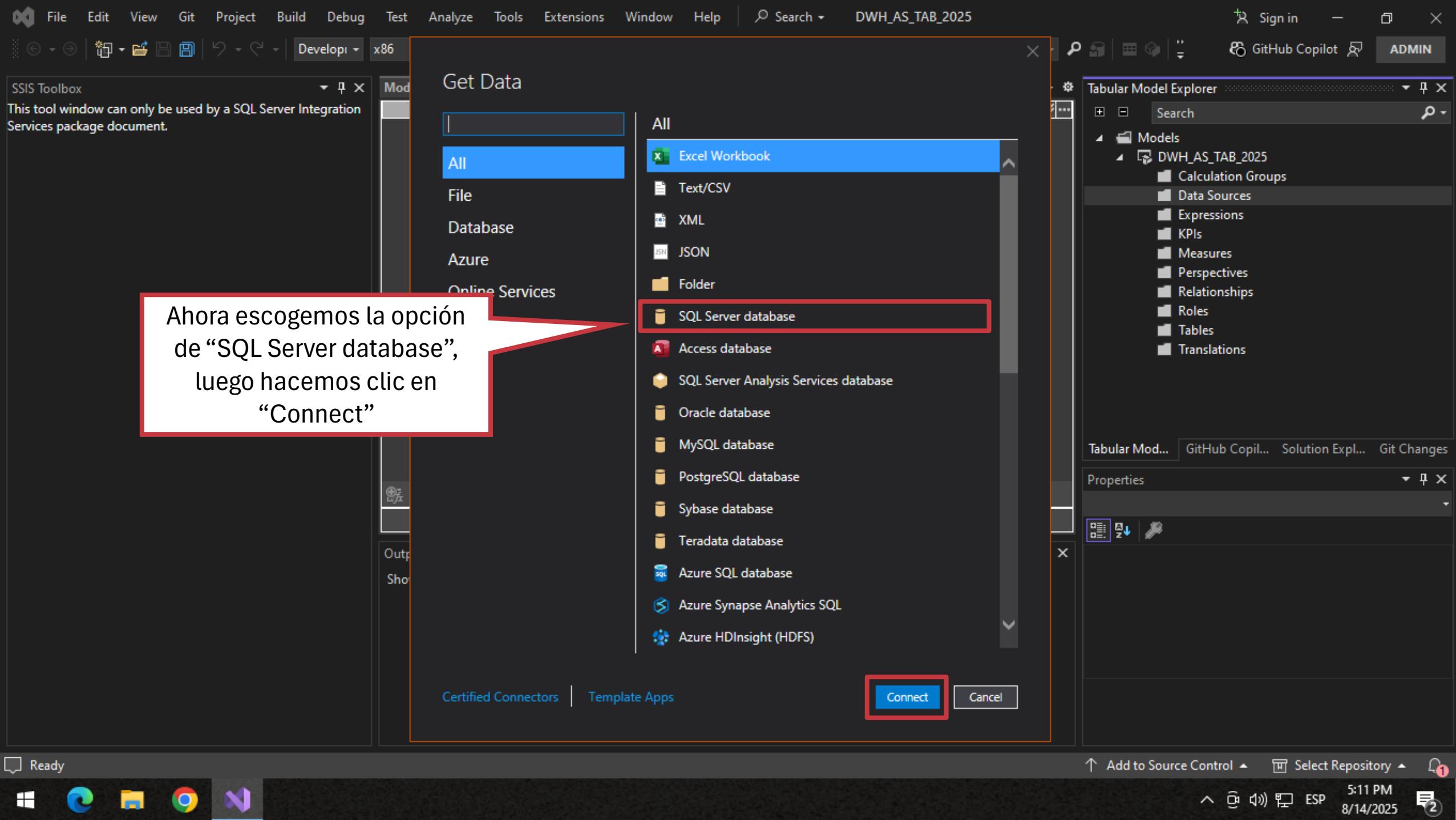


Después nos aparece este menú. Seleccionamos la primera opción, ya que para este proyecto es la más adecuada. Además, la compatibilidad de nuestro proyecto será **2019**, por lo que elegimos esta versión. Finalmente, hacemos clic en “**OK**” para continuar.





Luego hacemos clic en  
“Import From Data Source...”



SSIS Toolbox  
This tool window can only be used by a SQL Server Integration Services package document.

Model.bim

SQL Server database

Server  Database (optional)

Advanced options

Output

Show output from:

OK Cancel

Ahora ponemos el nombre del servidor donde esta nuestro Data Warehouse, después hacemos clic en "OK"

Tabular Model Explorer

- + Search
- Models
- DWH\_AS\_TAB\_2025
  - Calculation Groups
  - Data Sources
  - Expressions
  - KPIs
  - Measures
  - Perspectives
  - Relationships
  - Roles
  - Tables
  - Translations

This tool window can only be used by a SQL Server Integration Services package document.

Model.bim

SQL Server database

ml-refvm-822010\moralles\_24

Use your Windows credentials to access this database.

Impersonation Mode: Impersonate Account

User name

Password

Back Connect Cancel

SSIS Toolbox

Tabular Model Explorer

Search

Models

DWH\_AS\_TAB\_2025

Calculation Groups

Data Sources

Expressions

KPIs

Measures

Perspectives

Relationships

Roles

Tables

Translations

Az GitHub Copil... Solution Expl... Git Changes

Properties

Ahora vamos a iniciar sesión en este proyecto por medio de la “Database” así que hacemos clic en esta opción

Show output from: | Back | Connect | Cancel |

SSIS Toolbox This tool window can only be used by a SQL Server Integration Services package document.

Model.bim x86 Develop! x86 Start Select Perspective GitHub Copilot ADMIN

SQL Server database ml-refvm-822010\moralles\_24

User name sa Password  Connect Cancel

Windows Database Microsoft account

Tabular Model Explorer Search Models DWH\_AS\_TAB\_2025 Calculation Groups Data Sources Expressions KPIs Measures Perspectives Relationships Roles Tables Translations

Ahora metemos el nombre de usuario y nuestra contraseña, después cuando ingresamos estos datos hacemos clic en “Connect”

Properties GitHub Copil... Solution Expl... Git Changes

SSIS Toolbox | Model.bim | x86 | Develop | Start | Select Perspective | GitHub Copilot | ADMIN

This tool window can only be used by a SQL Server Integration Services package document.

SQL Server database  
ml-refvm-822010\moralles\_24

Encryption Support  
We were unable to connect to the data source using an encrypted connection. To access this data source using an unencrypted connection, click OK.

OK Cancel Connect Cancel

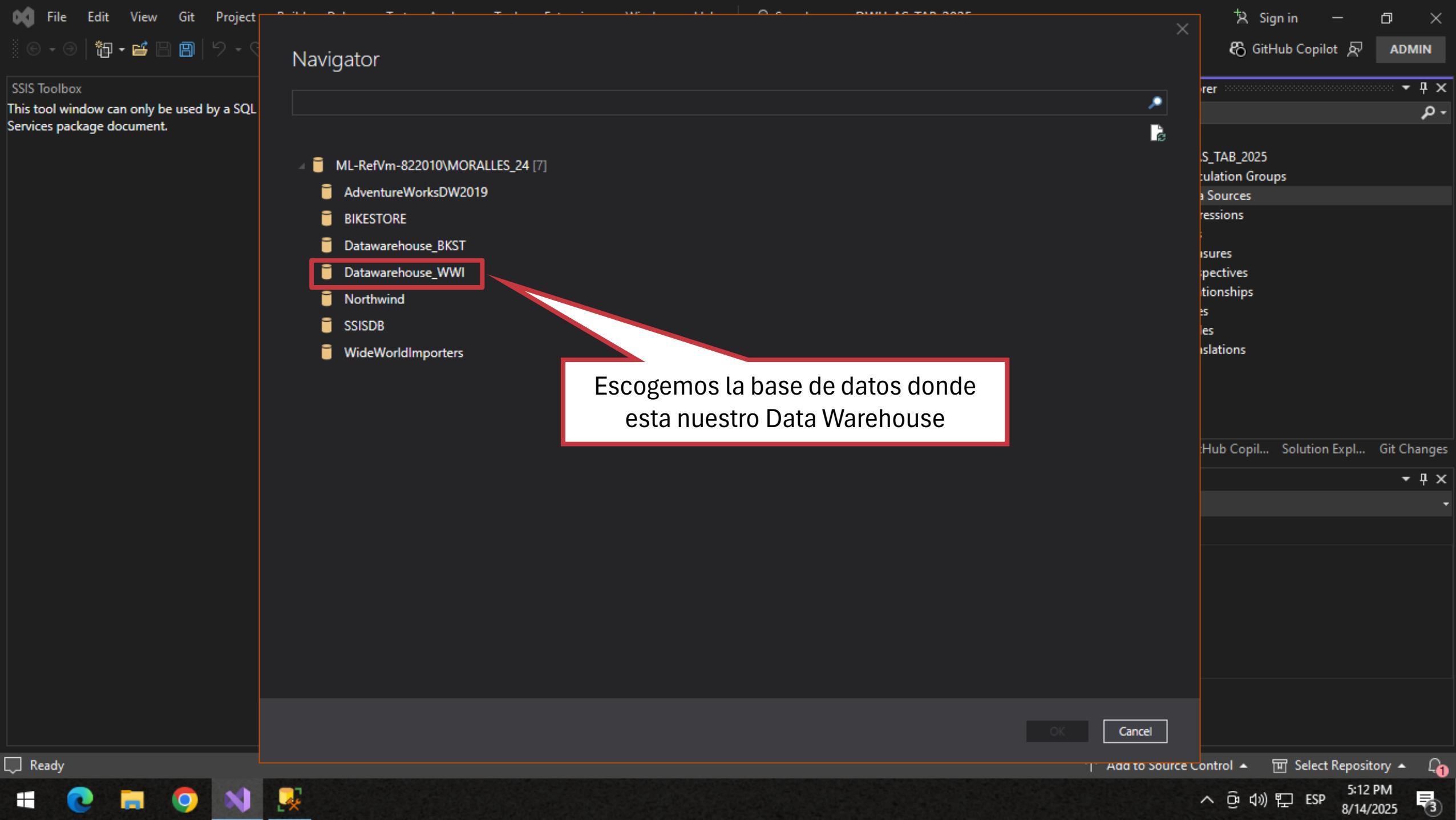
Hacemos clic en “OK”

Tabular Model Explorer

- Search
- Models
- DWH\_AS\_TAB\_2025
- Calculation Groups
- Data Sources
- Expressions
- KPIs
- Measures
- Perspectives
- Relationships
- Roles
- Tables
- Translations

Properties GitHub Copil... Solution Expl... Git Changes

Show output from: | | | | | | | | | | |



File Edit View Git Project SSIS Toolbox This tool window can only be used by a SQL Services package document.

Navigator

Display Options

ML-RefVm-822010\MORALLES\_24: Datawarehouse

- DIM\_SUPPLIERS
- DIM\_CUSTOMERS
- DIM\_LOCATION
- DIM\_PEOPLE
- DIM\_PRODUCT
- DIM\_SALES
- FACT\_TABLE\_ORDERS

FACT\_TABLE\_ORDERS

OrderID	InvoiceID	OrderDate	InvoiceDate	CustomerID	CustomerName
29363	28284	6/21/2014	6/21/2014	196	Tailspin
29363	28284	6/21/2014	6/21/2014	196	Tailspin
29364	28285	6/21/2014	6/21/2014	406	Wingtip
29364	28285	6/21/2014	6/21/2014	406	Wingtip
29364	28285	6/21/2014	6/21/2014	406	Wingtip
29364	28285	6/21/2014	6/21/2014	406	Wingtip
29364	28285	6/21/2014	6/21/2014	406	Wingtip
29364	28285	6/21/2014	6/21/2014	406	Wingtip
29365	28286	6/21/2014	6/21/2014	471	Wingtip
29365	28286	6/21/2014	6/21/2014	471	Wingtip
29365	28286	6/21/2014	6/21/2014	471	Wingtip
29365	28286	6/21/2014	6/21/2014	471	Wingtip
29365	28286	6/21/2014	6/21/2014	471	Wingtip
29366	28287	6/21/2014	6/21/2014	124	Tailspin
29366	28287	6/21/2014	6/21/2014	124	Tailspin
29366	28287	6/21/2014	6/21/2014	124	Tailspin
29367	28288	6/21/2014	6/21/2014	573	Wingtip
29367	28288	6/21/2014	6/21/2014	573	Wingtip
29368	28289	6/21/2014	6/21/2014	507	Wingtip
29368	28289	6/21/2014	6/21/2014	507	Wingtip
29368	28289	6/21/2014	6/21/2014	507	Wingtip
29368	28289	6/21/2014	6/21/2014	507	Wingtip
29369	28290	6/21/2014	6/21/2014	472	Wingtip
29369	28290	6/21/2014	6/21/2014	472	Wingtip

Select Related Tables Load Transform Data Cancel

Ready Add to Source Control Select Repository 5:12 PM 8/14/2025

Sign in GitHub Copilot ADMIN

S\_TAB\_2025 Population Groups Sources SQL/ML-RefVm-822010\MORALLES\_24;Data... Measures Perspectives Relationships Es Islations Hub Copil... Solution Expl... Git Changes

This tool window can only be used by a SQL Server Integration Services package document.

Model.bim

Data Processing

Processing gets updated data from the original data sources.

Success

Work Item	Status	Message
DIM_SUPPLIERS	Success.	454 rows transferred.
DIM_CUSTOMERS	Success.	804 rows transferred.
DIM_LOCATION	Success.	75,880 rows transferred.
DIM_PEOPLE	Success.	2,222 rows transferred.
DIM_PRODUCT	Success.	594 rows transferred.
DIM_SALES	Success.	269,330 rows transferred.
FACT_TABLE_ORDERS	Success.	456,530 rows transferred.

Stop Processing Close

Tabular Model Explorer

Search

Data Sources

- SQL/ML-RefVm-822010\ MORALES\_24; Data
- Expressions
- KPIs
- Measures
- Perspectives
- Relationships
- Roles

Tables

- DIM\_SUPPLIERS
- DIM\_CUSTOMERS
- DIM\_LOCATION
- DIM\_PEOPLE
- DIM\_PRODUCT
- DIM\_SALES

Properties

Add to Source Control Select Repository 5:13 PM 8/14/2025

Esperamos que se procesen las tablas y cuando terminen de procesarse hacemos clic en “Close”

The screenshot shows the Microsoft Data Processing window in the SSIS Toolbox. The window displays a success message with a green checkmark icon. Below the message, a table lists the work items processed, their status, and the number of rows transferred. The table includes entries for DIM\_SUPPLIERS, DIM\_CUSTOMERS, DIM\_LOCATION, DIM\_PEOPLE, DIM\_PRODUCT, DIM\_SALES, and FACT\_TABLE\_ORDERS. All entries show a 'Success.' status with varying row counts. At the bottom of the window, there are 'Stop Processing' and 'Close' buttons. A red box highlights the 'Close' button. A red box also highlights the 'Success' message area. A callout bubble with a red border contains the Spanish text: 'Esperamos que se procesen las tablas y cuando terminen de procesarse hacemos clic en “Close”'. The background shows the SSIS Toolbox with various components and the Tabular Model Explorer on the right.

SSIS Toolbox  
This tool window can only be used by a SQL Server Integration Services package document.

Model.bim\* Model

CityID	CityName	CityPopulation	StateProvinceID	StateProvinceName	StateProvinceCode	Sta
1	28293	Randado		45	Texas	TX
2	28310	Randolph		45	Texas	TX
3	28355	Ratcliff		45	Texas	TX
4	28399	Rayburn		45	Texas	TX
5	28450	Reagan		45	Texas	TX
6	28485	Red Gate		45	Texas	TX
7	28518	Red Rock		45	Texas	TX
8	28520	Red Springs		45	Texas	TX
9	28525	Redbank		45	Texas	TX
10	28554	Redland		45	Texas	TX

DIM\_SUPPLIERS DIM\_CUSTOMERS DIM\_LOCATION DIM

Record: 1 ← → 1 of 75,880 → →|

Output  
Show output from:

Tabular Model Explorer

- + Models
  - DWH\_AS\_TAB\_2025
    - Calculation Groups
    - Data Sources
      - SQL/ML-RefVm-822010\MORALLES\_24;Data
    - Expressions
    - KPIs
    - Measures
    - Perspectives
    - Relationships
    - Roles... (Clicked)
    - Translations

Solution Expl... Git Changes

Ahora que tenemos las tablas procesadas, vamos a empezar por hacer unos Roles, para hacerlo hacemos clic izquierdo sobre “Roles” y elegimos la opción “Roles...”

Screenshot of the Microsoft Analysis Services Tabular Model Editor interface.

The main window shows the "Role Manager" dialog for the "Model.bim" project. The dialog title is "Role Manager" and it says: "Specify the roles for the tabular project. Roles define a group of users with a set of permissions on the Analysis Services database." It contains a table with columns "Name", "Permissions", and "Description". Below the table are buttons for "New", "Copy", and "Delete". A red box highlights the "New" button. A callout bubble points to this button with the text: "Para empezar a crearlos hacemos clic en ‘New’".

The "Tabular Model Explorer" sidebar on the right lists the project structure:

- Models
  - DWH\_AS\_TAB\_2025
    - Calculation Groups
    - Data Sources
      - SQL/ML-RefVm-822010\MORALLES\_24;Data
    - Expressions
    - KPIs
    - Measures
    - Perspectives
    - Relationships
    - Roles
  - Tables
  - Translations

The status bar at the bottom shows: Ready, Add to Source Control, Select Repository, 5:13 PM, ESP, 8/14/2025, and a notifications icon with 3 messages.

SSIS Toolbox This tool window can only be used by a SQL Server Integration Services package document.

Model.bim\* Role Manager

Specify the roles for the tabular project. Roles define a group of users with a set of permissions on the Analysis Services database.

Name	Permissions	Description
VENTAS	None	

ROW Filters Members Tables and Columns

Specify DAX expressions that return Boolean values. Only rows that match the specified filters are visible to users in this role. Calculation groups are currently not supported.

Table	DAX Filter
DIM_SUPPLIERS	
DIM_CUSTOMERS	

No data is visible to users in this role. Any RLS/OLS definitions do not apply and will be removed.

OK Cancel

Tabular Model Explorer

- Search
- Models
  - DWH\_AS\_TAB\_2025
    - Calculation Groups
    - Data Sources
      - SQL/ML-RefVm-822010\MORALLES\_24;Data
      - Expressions
      - KPIs
      - Measures
      - Perspectives
      - Relationships
      - Roles
    - Tables
    - Translations

Tabular Mod... GitHub Copil... Solution Expl... Git Changes

Properties

SSIS Toolbox  
This tool window can only be used by a SQL Server Integration Services package document.

Model.bim\* -> X

Role Manager

Specify the roles for the tabular project. Roles define a group of users with a set of permissions on the Analysis Services database.

Name	Permissions	Description
VENTAS	None	
	None	
	Read	
	Read and Process	
	Process	
	Administrator	

New Copy Delete

Details - VENTAS

Row Filters Members Tables and Columns

Specify DAX expressions that return Boolean values. Only rows that return TRUE in this role. Calculation groups are currently not supported.

Table	DAX Filter
DIM_SUPPLIERS	
DIM_CUSTOMERS	

No data is visible to users in this role. Any RLS/OLS definitions do not apply and will be removed.

OK Cancel

Tabular Model Explorer

Search

Models

DWH\_AS\_TAB\_2025

Calculation Groups

Data Sources

SQL/ML-RefVm-822010\MORALLES\_24;Data

Expressions

KPIs

Measures

Perspectives

Relationships

Roles

Tables

Translations

Tabular Mod... GitHub Copil... Solution Expl... Git Changes

Properties

Add to Source Control Select Repository

En la sección de “Permissions” vamos a seleccionar la opción de “Read” para que solo lo puedan leer los datos

Screenshot of the Microsoft Analysis Services Tabular Model Designer interface.

The main window shows the "Role Manager" dialog for the "VENTAS" role. The table lists:

Name	Permissions	Description
VENTAS	Read	

Buttons at the bottom: New, Copy, Delete.

A tooltip box with a red border contains the following text:

Hacemos clic en “Tables and Columns” y elegimos las tablas que el Rol de Ventas no podrá ver. Cuando terminamos de crear nuestro Rol hacemos clic en “OK”

The "Tables and Columns" tab is selected in the dialog.

On the left, the SSIS Toolbox is visible, stating: "This tool window can only be used by a SQL Server Integration Services package document".

On the right, the "Tabular Model Explorer" shows the project structure:

- Models
  - DWH\_AS\_TAB\_2025
    - Calculation Groups
    - Data Sources
      - SQL/ML-RefVm-822010\MORALLES\_24;Data
    - Expressions
    - KPIs
    - Measures
    - Perspectives
    - Relationships
    - Roles
    - Tables
    - Translations

Bottom status bar: Ready, Add to Source Control, Select Repository, 5:14 PM, 8/14/2025, GitHub Copilot, ADMIN.

SSIS Toolbox  
This tool window can only be used by a SQL Server Integration Services package document.

Model.bim\* -> X

Role Manager

Specify the roles for the tabular project. Roles define a group of users with a set of permissions on the Analysis Services database.

Name	Permissions	Description
VENTAS	Read	
GERENCIA	Read and Process	

New Copy Delete

Only rows that match the specified filters are visible to users reported.

DAX Filter

OK Cancel

Tabular Model Explorer

Search

Models

- DWH\_AS\_TAB\_2025
  - Calculation Groups
  - Data Sources
    - SQL/ML-RefVm-822010\MORALLES\_24;Data
    - Expressions
    - KPIs
    - Measures
    - Perspectives
    - Relationships
  - Tables
  - Translations

Properties

Ready Add to Source Control Select Repository 5:15 PM 8/14/2025

Creamos un rol demostrativo denominado **Gerencia**, al cual se le asignaron permisos de lectura y edición sobre los datos del modelo tabular. Este rol ejemplifica cómo podrían gestionarse los accesos diferenciados en un entorno real de negocio, permitiendo que ciertos perfiles tengan privilegios avanzados según sus responsabilidades

File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help | Search | DWH\_AS\_TAB\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox This tool window can only be used by a SQL Server Integration Services package document.

Model.bim\* [Total\_with\_Tax] 104.65

Quantity	UnitPrice	Total	TaxRate	TaxAmount	Total_with_Tax	LineProfit
1	7	13	91	15	13.65	104.65
2	7	13	91	15	13.65	104.65
3	7	13	91	15	13.65	104.65
4	7	13	91	15	13.65	104.65
5	7	13	91	15	13.65	104.65
6	7	13	91	15	13.65	104.65
7	7	13	91	15	13.65	104.65
8	7	13	91	15	13.65	104.65
9	7	13	91	15	13.65	104.65
10	7	13	91	15	13.65	104.65

Tabular Model Explorer

- Models
- DWH\_AS\_TAB\_2025
  - Calculation Groups
  - Data Sources
    - SQL/ML-RefVm-822010\MORALLES\_24;Data
  - Expressions
  - KPIs
  - Measures
  - Perspectives
  - Relationships
- Roles
  - GERENCIA
  - VENTAS
- Tables
- Translations

Ahora procedemos a cambiar el formato de los campos de la **Fact Table**, dado que corresponden a valores monetarios. Para ello, ingresamos a las **propiedades de la tabla**, ubicamos la opción “**Data Format**” y seleccionamos el formato adecuado desde el menú desplegable.

Properties

Total\_with\_Tax Column

Data Format General

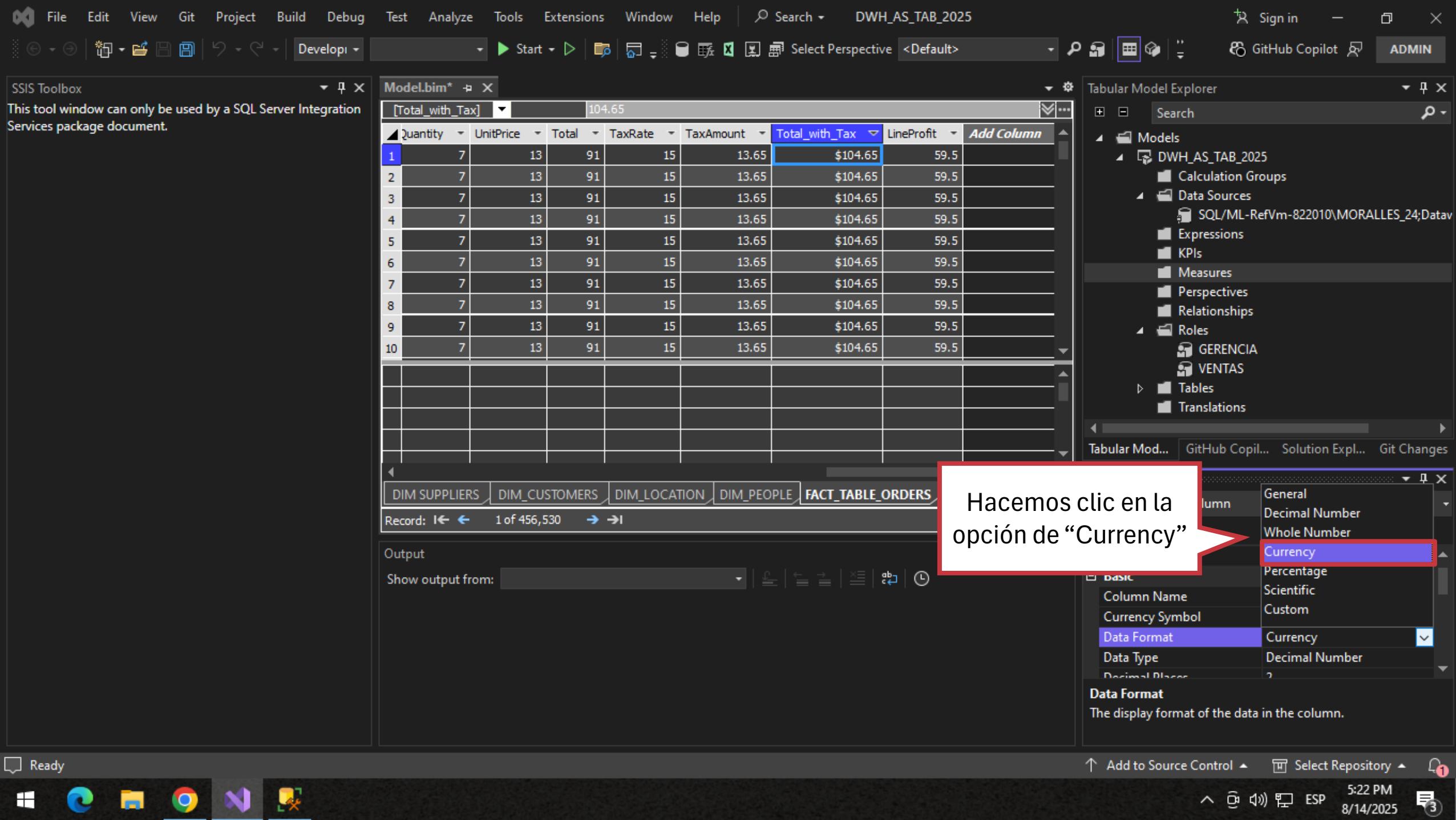
Data Type Decimal Number

Description

Data Format

The display format of the data in the column.

Ready Add to Source Control Select Repository 5:20 PM 8/14/2025



Screenshot of the Microsoft Data Studio interface showing a Tabular Model Explorer and an SSIS Toolbox.

The Tabular Model Explorer on the right shows the structure of the DWH\_AS\_TAB\_2025 model, including Models, Calculation Groups, Data Sources, Expressions, KPIs, Measures, Perspectives, Relationships, Roles, and Tables like GERENCIA and VENTAS.

The SSIS Toolbox on the left indicates this tool window can only be used by a SQL Server Integration Services package document.

The main workspace displays a data grid titled "Model.bim\*" showing data from the FACT\_TABLE\_ORDERS fact table. The columns are UnitPrice, Total, TaxRate, TaxAmount, Total\_with\_Tax, and LineProfit. A red box highlights the first 10 rows of the UnitPrice column.

UnitPrice	Total	TaxRate	TaxAmount	Total_with_Tax	LineProfit
\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50
\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50
\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50
\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50
\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50
\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50
\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50
\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50
\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50

The Properties pane on the right shows the UnitPrice Column properties:

- Basic:
  - Column Name: UnitPrice
  - Currency Symbol: \$ English (United States)
  - Data Format: Currency
  - Data Type: Decimal Number
  - Decimal Places: 2
- Data Format:

The display format of the data in the column.

Bottom navigation bar:

- Ready
- Add to Source Control
- Select Repository
- 5:24 PM
- 8/14/2025
- 3

This tool window can only be used by a SQL Server Integration Services package document.

Model.bim\* [UnitPrice] 13

Name	Quantity	UnitPrice	Total	TaxRate	TaxAmount	Total_with_Tax	LineProfit
1	7	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50
2	7	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50
3	7						
4	7						
5	7						
6	7						
7	7						
8	7						
9	7						
10	7						

DIM\_SUPPLIERS DIM\_CUSTOMERS DIM\_LOCATION DIM\_PEOPLE FACT\_TABLE\_ORDERS ... Record: 1 ← → 1 of 456,530 → → |

A continuación, crearemos algunas columnas calculadas y realizaremos operaciones utilizando fórmulas en **DAX (Data Analysis Expressions)**. Para abrir el **DAX Editor**, hacemos clic en los tres puntos (...) ubicados junto a la opción correspondiente.

Tabular Model Explorer

- Models
  - DWH\_AS\_TAB\_2025
    - Calculation Groups
    - Data Sources
      - SQL/ML-RefVm-822010\MORALLES\_24;Data
      - Expressions
      - KPIs
      - Measures
      - Perspectives
      - Relationships
    - Roles
      - GERENCIA
      - VENTAS
    - Tables
    - Translations

Properties

UnitPrice Column

Display Folder

Basic

Column Name	UnitPrice
Currency Symbol	\$ English (United States)
Data Format	Currency
Data Type	Decimal Number
Decimal Places	2

Data Format

The display format of the data in the column.

SSIS Toolbox  
This tool window can only be used by a SQL Server Integration Services package document.

Model.bim\* [Unit\_Tax] fx=FACT\_TABLE\_ORDERS[TaxAmount] / FACT\_TABLE\_ORDERS[Quantity]

	UnitPrice	Total	TaxRate	TaxAmount	Total_with_Tax	LineProfit	Unit_Tax	Add Column
1	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	1.95	
2	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	1.95	
3	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	1.95	
4	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	1.95	
5	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	1.95	
6	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	1.95	
7	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	1.95	
8	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	1.95	
9	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	1.95	
10	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	1.95	

DIM\_SUPPLIERS DIM\_CUSTOMERS DIM\_LOCATIONS

Record: 1 ← 2 of 456,530 → 1

Output  
Show output from:

Con la siguiente fórmula de ejemplo calculamos el “Unit\_Tax” correspondiente a cada venta. Este cálculo se realiza en **DAX (Data Analysis Expressions)**, un lenguaje que permite crear columnas calculadas, medidas y expresiones avanzadas dentro del modelo tabular. Gracias a DAX, es posible definir una amplia variedad de fórmulas para análisis financieros, de ventas, inventario, entre otros escenarios de negocio.

Tabular Model Explorer

- Models
  - DWH\_AS\_TAB\_2025
    - Calculation Groups
    - Data Sources
      - SQL/ML-RefVm-822010\MORALLES\_24;DataView
    - Expressions
    - KPIs
    - Measures
    - Perspectives
    - Relationships
  - Roles
    - GERENCIA
    - VENTAS
  - Tables
  - Translations

Tabular Model Explorer GitHub Copilot Solution Explorer Git Changes

Ready

5:36 PM 8/14/2025

File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help | Search DWH\_AS\_TAB\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox This tool window can only be used by a SQL Server Integration Services package document.

Model.bim\* [Unit\_Tax] f<sub>x</sub>=FACT\_TABLE\_ORDERS[TaxAmount] / FACT\_TABLE\_ORDERS[Quantity]

	UnitPrice	Total	TaxRate	TaxAmount	Total_with_Tax	LineProfit	Unit_Tax	Add Column
1	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	1.95	
2	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	1.95	
3	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	1.95	
4	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	1.95	
5	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	1.95	
6	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	1.95	
7	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	1.95	
8	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	1.95	
9	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	1.95	
10	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	1.95	

DIM SUPPLIERS Record: 1 2 of 2 Output Show output from:

Modificamos el formato de la columna en la tabla, ya que corresponde a un valor monetario. Para ello, accedemos a las propiedades de la columna y cambiamos el **Data Format** al tipo de dato de moneda (**Currency**).

Tabular Model Explorer

- Models
  - DWH\_AS\_TAB\_2025
    - Calculation Groups
    - Data Sources
      - SQL/ML-RefVm-822010\MORALLES\_24;Data
    - Expressions
    - KPIs
    - Measures
    - Perspectives
    - Relationships
  - Roles
    - GERENCIA
    - VENTAS
  - Tables
  - Translations

Properties Unit\_Tax Calculated Column General Decimal Number Whole Number Currency Advanced Display Folder Percentage Basic Column Name Scientific Custom Data Format General Data Type Auto (Decimal Number) Description Data Format The display format of the data in the column.

Ready Add to Source Control Select Repository 5:36 PM 8/14/2025

SSIS Toolbox

This tool window can only be used by a SQL Server Integration Services package document.

Model.bim\* [Margen]

	ice	Total	TaxRate	TaxAmount	Total_with_Tax	LineProfit	Unit_Tax	Margen	Add
1	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95		
2	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95		
3	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95		
4	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95		
5	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95		
6	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95		
7	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95		
8	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95		
9	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95		
10	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95		

DIM\_SUPPLIERS DIM\_CUSTOMERS DIM\_LOCATION DIM\_PEOPLE FACT\_TABLE\_ORDERS ...

Record: 1 of 456,530

Output

Show output from:

Tabular Model Explorer

- Models
  - DWH\_AS\_TAB\_2025
    - Calculation Groups
    - Data Sources
      - SQL/ML-RefVm-822010\MORALLES\_24;Data
    - Expressions
    - KPIs
    - Measures
    - Perspectives
    - Relationships
  - Roles
    - GERENCIA
    - VENTAS
  - Tables
  - Translations

Properties

**Margen** Calculated Column

Advanced

- Display Folder

Basic

- Column Name: Margen
- Data Format: General
- Data Type: Auto (Whole Number)
- Description:

**Column Name**

The name of the column, as it is stored in the model

This tool window can only be used by a SQL Server Integration Services package document.

	TaxRate	TaxAmount	Total_with_Tax	LineProfit	Unit_Tax	Margen
1	1.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95 56.86%
2	1.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95 56.86%
3	1.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95 56.86%
4	1.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95 56.86%
5	1.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95 56.86%
6	1.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95 56.86%
7	1.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95 56.86%
8	1.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95 56.86%
9	1.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95 56.86%
10	1.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95 56.86%

Creamos una nueva columna calculada utilizando una fórmula en **DAX**, la cual representa el **%Per\_Tax** aplicado a cada producto. Dado que el resultado corresponde a un valor porcentual, ajustamos el **tipo de dato** de la columna a **porcentaje**, lo que facilita su interpretación en reportes y visualizaciones.

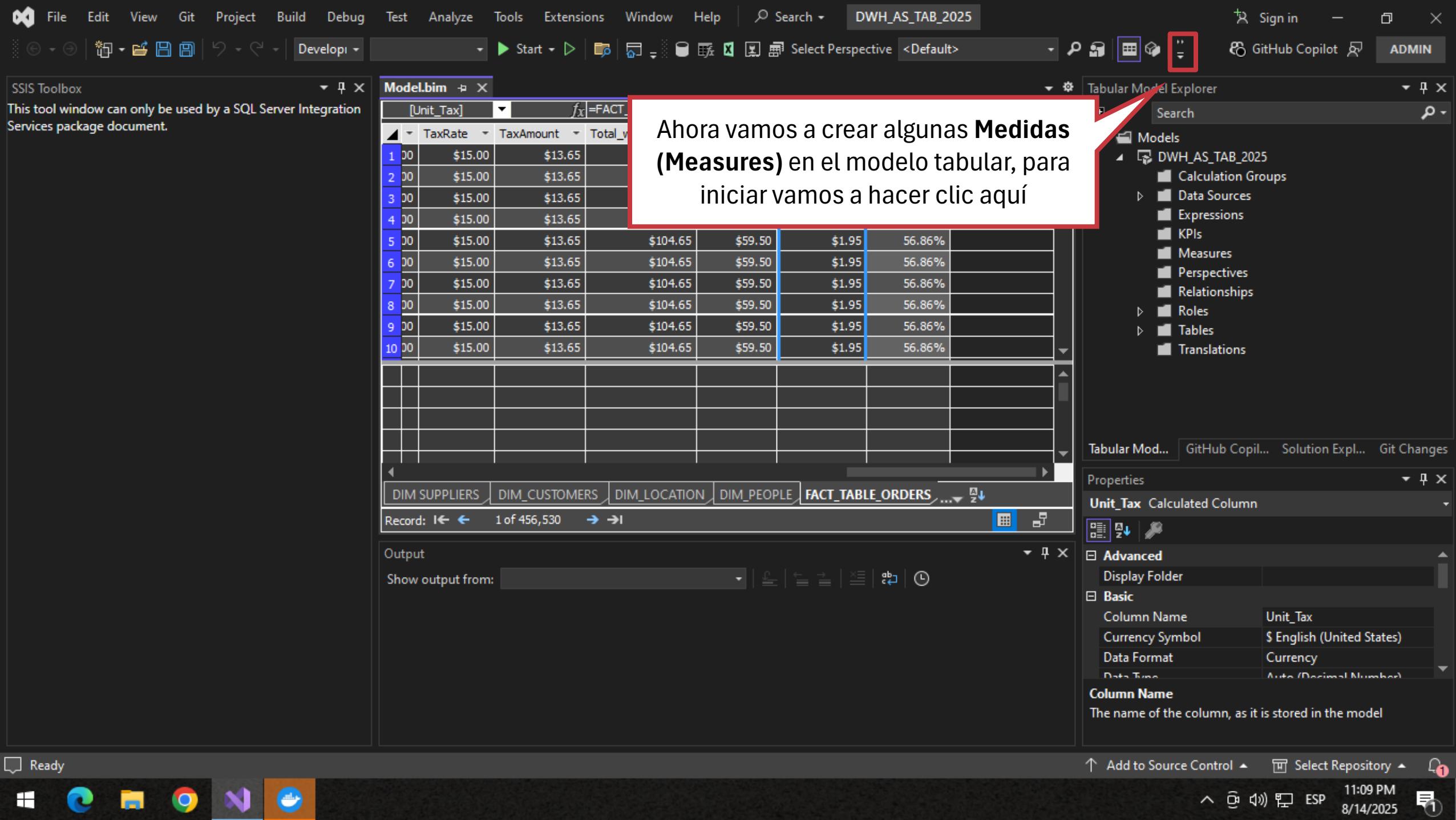
Tabular Model Explorer

- Models
  - DWH\_AS\_TAB\_2025
    - Calculation Groups
    - Data Sources
      - SQL/ML-RefVm-822010\MORALLES\_24;Data
    - Expressions
    - KPIs
    - Measures
    - Perspectives
    - Relationships
  - Roles
    - GERENCIA
    - VENTAS
  - Tables
  - Translations

Properties

Margen Calculated Column

- General
  - Decimal Number
  - Whole Number
  - Currency
  - Percentage
- Basic
  - Display Folder
  - Column Name
  - Data Format Percentage
  - Data Type Auto (Decimal Number)
  - Decimal Places
- Data Format
  - The display format of the data in the column.



File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help | Search | DWH\_AS\_TAB\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox  
This tool window can only be used by a SQL Server Integration Services package document.

Model.bim

[Unit\_Tax]  $f_x = \text{FACT\_TABLE\_ORDERS}[\text{TaxAmount}] / \text{FACT\_TABLE\_ORDERS}[\text{Quantity}]$

	TaxRate	TaxAmount	Total_with_Tax	LineProfit	Unit_Tax	Percentage
1	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95 56.86%
2	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95 56.86%
3	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95 56.86%
4	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95 56.86%
5	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95 56.86%
6	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95 56.86%
7	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95 56.86%
8	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95 56.86%
9	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95 56.86%
10	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95 56.86%

DIM\_SUPPLIERS DIM\_CUSTOMERS DIM\_LOCATION DIM\_PEOPLE FACT\_TABLE\_ORDERS ... Record: 1 of 456,530

Output  
Show output from: |  $\leq$   $\geq$   $\approx$   $\equiv$   $\approx\equiv$  |  $\odot$  |  $\odot$  |  $\odot$

Tabular Model | GitHub Copilot | Solution Expl... | Git Changes

Add or Remove Buttons | DWH\_AS\_TAB\_2025 | Calculation Groups | Data Sources | Expressions | KPIs | Measures | Perspectives | Relationships | Roles | Tables | Translations

Properties

**Unit\_Tax** Calculated Column

Advanced  
Display Folder

Basic  
Column Name: Unit\_Tax  
Currency Symbol: \$ English (United States)  
Data Format: Currency  
Data Type: Auto (Decimal Number)

Column Name  
The name of the column, as it is stored in the model

Ready | Add to Source Control | Select Repository | 11:09 PM | ESP | 8/14/2025

A red box highlights the  $\Sigma$  button in the toolbar, and a red callout bubble points to it with the text "Después hacemos clic aquí".

Screenshot of the Microsoft Data Studio (DWH\_AS\_TAB\_2025) interface showing the creation of a calculated column.

The SSIS Toolbox window displays the message: "This tool window can only be used by a SQL Server Integration Services package document".

The Model.bim window shows a table named [Unit\_Tax] with the following data:

	TaxRate	TaxAmount	Total_with_Tax	LineProfit	Unit_Tax	%Per_s...
1	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95
2	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95
3	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95
4	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95
5	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95
6	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95
7	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95
8	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95
9	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95
10	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95

The Properties window shows the settings for the Unit\_Tax Calculated Column:

- Advanced:
  - Display Folder
- Basic:
  - Column Name: Unit\_Tax
  - Currency Symbol: \$ English (United States)
  - Data Format: Currency
  - Data Type: Auto (Decimal Number)
- Column Name:

The name of the column, as it is stored in the model

A callout box with a red border points to the "Sum" option in the Tabular Model context menu, which is highlighted in red. The context menu also lists other options like Average, Count, Distinct Count, Max, and Min.

A large red box highlights the "Sum" option in the context menu.

A callout box with a red border contains the following text:

Después escogiendo la tabla que vamos a usar, escogemos la opción de “Sum” para hacer una suma de todos los datos de esta columna (Unit\_Tax)

Bottom navigation bar icons include Ready, Add to Source Control, Select Repository, GitHub Copilot, and Admin.

System tray icons show battery level, signal strength, and system status.

Screenshot of the Microsoft Data Studio (Tabular Model) interface showing a data preview and the Tabular Model Explorer.

**SSIS Toolbox**: This tool window can only be used by a SQL Server Integration Services package document.

**Model.bim\***: Preview of the data in the FACT\_TABLE\_ORDERS table. The table has columns: Unit\_Tax, TaxRate, TaxAmount, Total\_with\_Tax, LineProfit, Unit\_Tax, %Per\_s..., and Add Column. A calculated column formula is shown:  $\text{Sum of Unit_Tax} := \text{SUM}([\text{Unit_Tax}])$ . The preview shows 10 rows of data with the last row highlighted, displaying the sum of Unit\_Tax: \$3,121,133.79.

	TaxRate	TaxAmount	Total_with_Tax	LineProfit	Unit_Tax	%Per_s...	Add Column
1	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
2	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
3	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
4	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
5	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
6	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
7	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
8	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
9	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
10	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%

**Tabular Model Explorer**: Shows the structure of the DWH\_AS\_TAB\_2025 model. The Measures node is expanded, showing the Sum of Unit\_Tax measure.

**Properties**: Properties panel for the selected measure.

**Bottom Bar**: Ready, Add to Source Control, Select Repository, Notifications (1).

**System Icons**: Taskbar icons for File Explorer, Edge, Google Chrome, Visual Studio, Docker, and Task View.

**System Status**: Date (8/14/2025), Time (11:09 PM), and Battery level (ESP).

File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help | Search | DWH\_AS\_TAB\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox  
This tool window can only be used by a SQL Server Integration Services package document.

Model.bim\* | f<sub>x</sub> = DIVIDE(

	TaxRate	TaxAmount	Total_with_Tax	LineProfit	Unit_Tax	%Per_s...
1	00	\$15.00	\$13.65	\$104.65	\$59.50	56.86%
2	00	\$15.00	\$13.65	\$104.65	\$59.50	56.86%
3	00	\$15.00	\$13.65	\$104.65	\$59.50	56.86%
4	00	\$15.00	\$13.65	\$104.65	\$59.50	56.86%
5	00	\$15.00	\$13.65	\$104.65	\$59.50	56.86%
6	00	\$15.00	\$13.65	\$104.65	\$59.50	56.86%
7	00	\$15.00	\$13.65	\$104.65	\$59.50	56.86%
8	00	\$15.00	\$13.65	\$104.65	\$59.50	56.86%
9	00	\$15.00	\$13.65	\$104.65	\$59.50	56.86%
10	00	\$15.00	\$13.65	\$104.65	\$59.50	56.86%

Add Column

Sum | Average | Count | DistinctCount | Max | Min

Ahora vamos a hacer esta otra medida, pero usando “Average” de la columna (%Per\_sale)

DIM\_SUPPLIERS | DIM\_CUSTOMERS | DIM\_LOCATION | DIM\_PEOPLE | FACT\_TABLE\_ORDERS | ... | Record: 1 of 456,530

Output | Show output from: | Advanced | Basic | Column Name

Properties | %Per\_sale Calculated Column | Advanced | Basic | Column Name | The name of the column, as it is stored in the model

Ready | Add to Source Control | Select Repository | 11:10 PM | ESP | 8/14/2025 | 1

SSIS Toolbox  
This tool window can only be used by a SQL Server Integration Services package document.

Model.bim\* □ X

	TaxRate	TaxAmount	Total_with_Tax	LineProfit	Unit_Tax	%Per_s...	Add Column
1	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
2	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
3	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
4	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
5	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
6	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
7	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
8	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
9	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
10	00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
					Sum of Unit_Tax: \$3,121,133.79	Average of %Per_sale: 46.77%	

DIM\_SUPPLIERS DIM\_CUSTOMERS DIM\_LOCATION DIM\_PEOPLE FACT\_TABLE\_ORDERS ...

Record: 1 ← → 1 of 456,530

Output  
Show output from: □ X

Tabular Model Explorer

- + Models
  - DWH\_AS\_TAB\_2025
    - Calculation Groups
    - Data Sources
    - Expressions
    - KPIs
  - Measures
    - Average of %Per\_sale
    - Sum of Unit\_Tax
  - Perspectives
  - Relationships
  - Roles
  - Tables
  - Translations

Properties

Average of %Per\_sale Measure

Basic	Decimal places	2
	Description	
	Format	Percentage
	Formula	AVERAGE([%Per_sale])
	Measure Name	Average of %Per_sale
	Show Thousand Separator	False

Measure Name  
The name of the measure, as it is stored in the model

The screenshot shows the Microsoft Power BI Data Studio interface. On the left, the SSIS Toolbox indicates it's a SQL Server Integration Services package document. The main area displays a DAX table named 'Model.bim\*' with columns: Total, TaxRate, TaxAmount, Total\_with\_Tax, LineProfit, Unit\_Tax, %Per\_sale, and Add Col. Below the table is a summary row with measures: Average of TaxAmount (\$112.95), Sum of Total\_with\_Tax (\$396,086,878.90), Sum of LineProfit (\$171,458,361.80), Sum of Unit\_Tax (\$3,121,133.79), and Average of %Per\_sale (46.77%). The bottom navigation bar shows tables: DIM\_SUPPLIERS, DIM\_CUSTOMERS, DIM\_LOCATION, DIM\_PEOPLE, FACT\_TAX, and a record count of 1 of 456,530. The right side features the Tabular Model Explorer with a red box highlighting the 'Measures' section under 'Models'. The Properties panel shows a measure named 'Sum of Total\_with\_Tax' with its formula as SUM([Total\_with\_Tax]).

En total, implementamos varias **medidas (Measures)** en DAX con el objetivo de demostrar la utilidad de esta herramienta dentro del modelo tabular.

Estas medidas permiten obtener indicadores clave de negocio y validar el correcto funcionamiento del Data Warehouse

**Measure Name**  
The name of the measure, as it is stored in the model

SSIS Toolbox

This tool window can only be used by a SQL Server Integration Services package document.

Model.bim\* □ x

[Total\_with\_Tax] □ fx

tal	TaxRate	TaxAmount	Total_with_Tax	LineProfit	Unit_Tax	%Per_s...	Add Col...
1	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
2	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
3	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
4	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
5	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
6	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
7	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
8	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
9	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
10	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%

Average of TaxAmount: \$112.95 Sum of Total\_with\_Tax: \$396,086,878.90 Sum of LineProfit: \$171,458,361.80 Sum of Unit\_Tax: \$3,121,133.79 Average of %Per\_sale: 46.77%

DIM\_SUPPLIERS DIM\_CUSTOMERS DIM\_LOCATION DIM\_PEOPLE FACT\_TABLE\_ORDERS ...

Record: ← → 1 of 456,530

Output

Show output from: □

Tabular Model Explorer

+ Search

DWH\_AS\_TAB\_2025

- Calculation Groups
- Data Sources
- Expressions
- KPIs
- Measures
  - Average of %Per\_sale
  - Average of TaxAmount
  - Sum of LineProfit
  - Sum of Total\_with\_Tax
  - Sum of Unit\_Tax
- Perspectives
  - Create and Manage
- Relationships
- Roles
- Select
- Tables
- Translations

Properties

Ahora vamos a crear unas cuantas perspectivas, para empezar, hacemos clic izquierdo encima de “Perspectives”

SSIS Toolbox This tool window can only be used by a SQL Server Integration Services package document.

Perspectives

Use perspectives to define views of the data. Perspectives are typically defined for a particular user group or business scenario and make it easier to navigate large data sets.

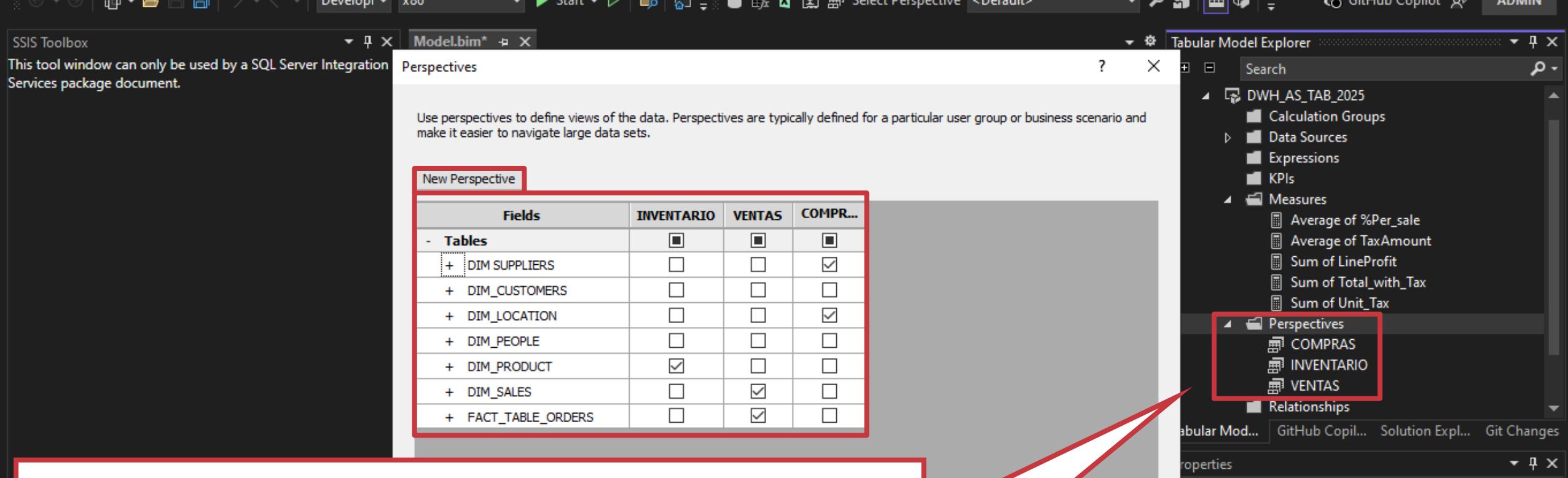
New Perspective

Fields	INVENTARIO	VENTAS	COMPR...
- Tables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
+ DIM_SUPPLIERS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
+ DIM_CUSTOMERS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
+ DIM_LOCATION	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
+ DIM_PEOPLE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
+ DIM_PRODUCT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
+ DIM_SALES	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
+ FACT_TABLE_ORDERS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Tabular Model Explorer

- DWH\_AS\_TAB\_2025
  - Calculation Groups
  - Data Sources
  - Expressions
  - KPIs
  - Measures
    - Average of %Per\_sale
    - Average of TaxAmount
    - Sum of LineProfit
    - Sum of Total\_with\_Tax
    - Sum of Unit\_Tax
  - Perspectives
    - COMPRAS
    - INVENTARIO
    - VENTAS
  - Relationships

Properties



A continuación, hacemos clic en “**New Perspective**”.

Asignamos un nombre a la nueva perspectiva y seleccionamos las tablas que estarán visibles en ella.

Finalmente, confirmamos haciendo clic en “**OK**”.

En este proyecto se crearon tres perspectivas a modo de demostración:

**Inventario, Ventas y Compras**

Cada perspectiva permite a los usuarios enfocarse únicamente en la información relevante para su área, simplificando el análisis y mejorando la usabilidad del modelo tabular.

File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help | Search | DWH\_AS\_TAB\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox  
This tool window can only be used by a SQL Server Integration Services package document.

Model.bim | Select Perspective | VENTAS

Model.bim

OrderID	TaxRate	TaxAmount	Total_with_Tax	LineProfit	Unit_Tax	%Per_sale
1 00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
2 00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
3 00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
4 00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
5 00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
6 00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
7 00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
8 00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
9 00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
10 00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%

Average of TaxAmount: \$112.95  
Sum of Total\_with\_Tax: \$396,086,878.90  
Sum of LineProfit: \$171,458,361  
Sum of Unit\_Tax: \$3,121,133.79  
Average of %Per\_sale: 46.77%

DIM\_SALES | FACT\_TABLE\_ORDERS

Record: 1 of 456,530

Output

Show output from:

Perspectiva de Ventas

Tabular Model Explorer

- Models
  - DWH\_AS\_TAB\_2025
    - Calculation Groups
    - Data Sources
    - Expressions
    - KPIs
    - Measures
    - Perspectives
    - Relationships
    - Roles
    - Tables
    - Translations

Properties

FACT\_TABLE\_ORDERS Table

Formula	
Hidden	False
Partitions	(Click to edit)
Source Data	(Click to edit)
Table Description	
Table Name	FACT_TABLE_ORDERS
Table Name	The name of the table, as it is stored in the model

Ready | Add to Source Control | Select Repository | 11:30 PM | ESP | 8/14/2025 | 1

Screenshot of the Microsoft Data Studio (DWH\_AS\_TAB\_2025) interface showing the SSIS Toolbox, Model.bim, Tabular Model Explorer, and Properties panes.

**SSIS Toolbox**: This tool window can only be used by a SQL Server Integration Services package document.

**Model.bim**: A data grid showing records from the DIM\_PRODUCT table. The columns are StockItemID, StockItemName, ColorName, ColorID, StockGroupID, StockGroupName, and QuantityOnHand. The data shows various white DBA joke mugs and developer joke mugs across different stock groups.

**Tabular Model Explorer**: Shows the structure of the DWH\_AS\_TAB\_2025 model, including Models, Calculation Groups, Data Sources, Expressions, KPIs, Measures, Perspectives, Relationships, Roles, Tables, and Translations.

**Properties**: Details for the DIM\_PRODUCT Table, including Formula (Hidden: False), Partitions (Click to edit), Source Data (Click to edit), Table Description, Table Name (DIM\_PRODUCT), and Table Name (The name of the table, as it is stored in the model).

**Perspectiva de Inventario**: A red box highlights the perspective name "INVENTARIO" in the top navigation bar.

Ready

Add to Source Control Select Repository 11:30 PM  
8/14/2025

Screenshot of the Microsoft Analysis Services (SSAS) Tabular Model Editor interface.

The title bar shows the project name: DWH\_AS\_TAB\_2025.

The top navigation bar includes File, Edit, View, Git, Project, Build, Debug, Test, Analyze, Tools, Extensions, Window, Help, Search, and GitHub Copilot.

The top right corner shows a Sign in button, a GitHub Copilot icon, and an ADMIN user indicator.

The main workspace displays the Model.bim file, showing a data grid for the DIM\_SUPPLIERS table. The table has columns: SupplierID, SupplierName, SupplierCategoryID, SupplierCategoryName, PrimaryContactPersonID, and FullName. The data shows multiple rows for 'Fabrikam, Inc.' as the supplier name.

A red box highlights the "Select Perspective" dropdown menu, which is currently set to "COMPRAS".

The SSIS Toolbox is visible on the left, indicating the current document type.

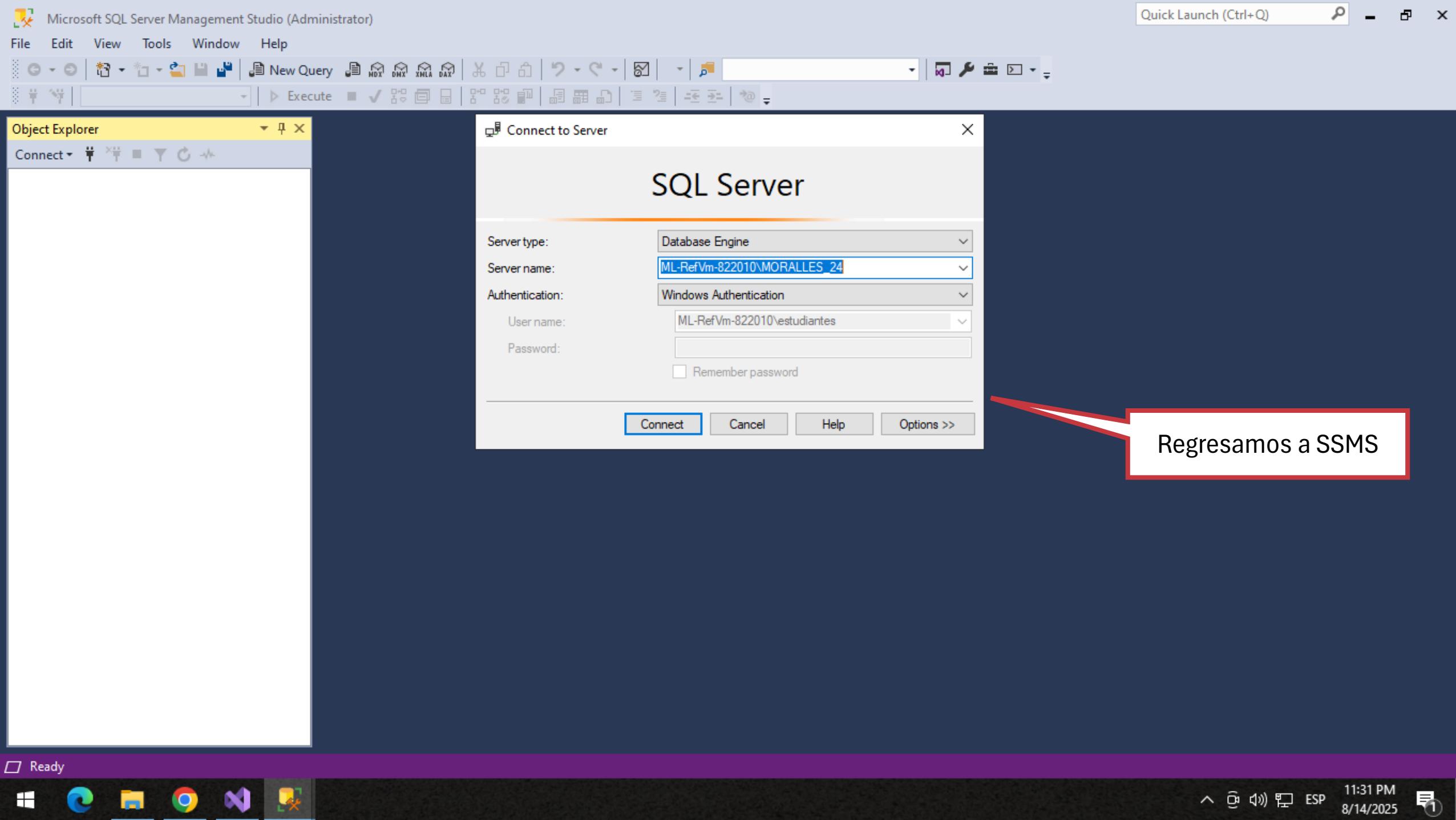
The Tabular Model Explorer sidebar shows the project structure under the "Models" node, including Calculation Groups, Data Sources, Expressions, KPIs, Measures, Perspectives, Relationships, Roles, Tables, and Translations.

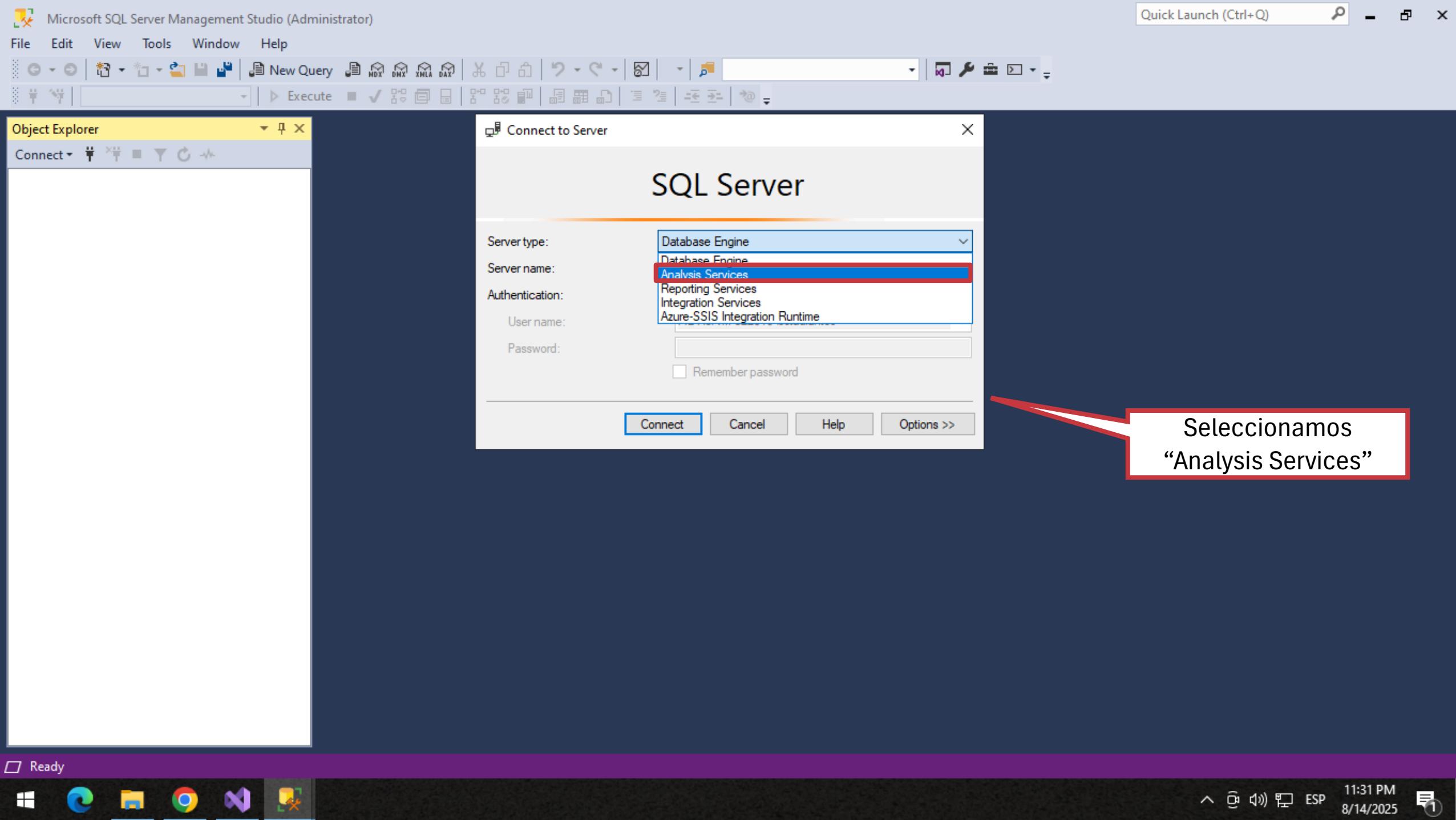
The Properties pane on the right is open for the DIM\_SUPPLIERS Table, displaying the following properties:

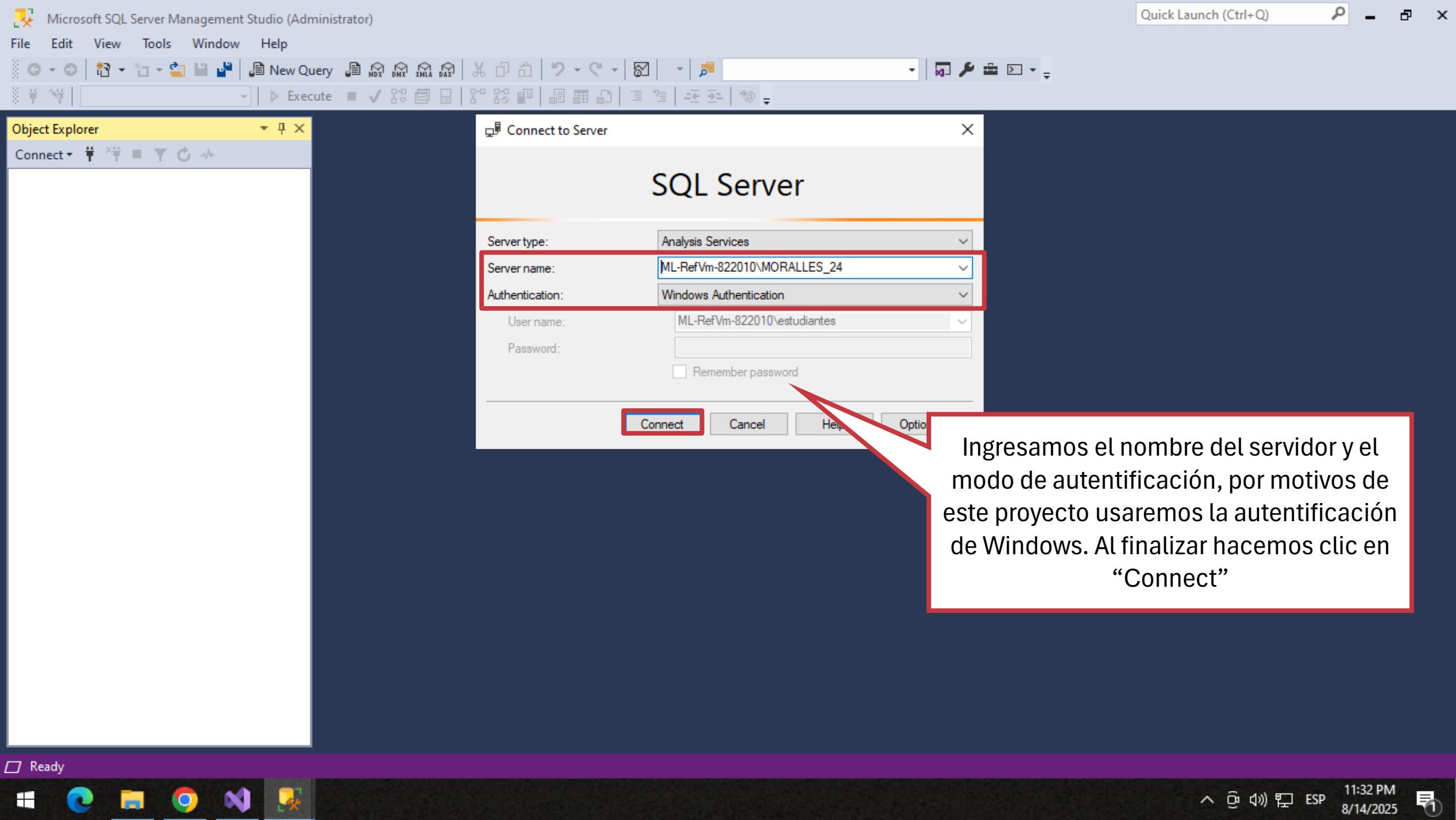
- Table Name: DIM\_SUPPLIERS
- Hidden: False
- Partitions: (Click to edit)
- Source Data: (Click to edit)
- Table Description: (Click to edit)
- Table Name: DIM\_SUPPLIERS
- Misc: The name of the table, as it is stored in the model

A red box highlights the text "Perspectiva de Compras" in the bottom center of the workspace.

The bottom navigation bar includes Ready, Add to Source Control, Select Repository, and a system status bar showing the date and time (11:30 PM, 8/14/2025).







Microsoft SQL Server Management Studio (Administrator)

File Edit View Tools Window Help

New Query NDX DMX XMLA DAX Execute

Object Explorer

Connect ML-RefVm-822010\MORALLES\_24 (Microsoft) Databases Management

ML-RefVm-822010\MORALLES\_24 (SQL Server) Databases Security Server Objects Replication PolyBase Always On High Availability Management Integration Services Catalogs SQL Server Agent (Agent XPs disabled) XEvent Profiler

Ready

Quick Launch (Ctrl+Q)

11:32 PM 8/14/2025

The screenshot shows the Microsoft SQL Server Management Studio (SSMS) interface. The title bar indicates it's running as an administrator. The menu bar includes File, Edit, View, Tools, Window, and Help. The toolbar contains various icons for database management tasks. The Object Explorer pane on the left lists two server connections. The top connection, 'ML-RefVm-822010\MORALLES\_24 (Microsoft)', is expanded, showing Databases and Management. The bottom connection, 'ML-RefVm-822010\MORALLES\_24 (SQL Server)', is also expanded, showing Databases, Security, Server Objects, Replication, PolyBase, Always On High Availability, Management, Integration Services Catalogs, SQL Server Agent (disabled), and XEvent Profiler. A red box highlights the 'Management' folder under the Microsoft connection and the 'Management' and 'Integration Services Catalogs' folders under the SQL Server connection. The status bar at the bottom shows 'Ready' and the system tray includes icons for Task View, Start, File Explorer, Google Chrome, and Visual Studio Code, along with the date and time (11:32 PM, 8/14/2025).

This tool window can only be used by a SQL Server Integration Services package document.

Model.bim

OrderID	UnitPrice	Total	TaxRate	TaxAmount	Total_with_Tax	LineProfit	Unit_Tax	%Per_s...
1	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
2	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
3	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
4	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
5	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
6	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
7	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
8	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
9	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
10	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%

Average of TaxAmount: \$112.95 Sum of Total\_with\_Tax: \$396,086,878.90 Sum of LineProfit: \$171,458,361 Sum of Unit\_Tax: \$3,121,133.79 Average of %Per\_sale: 46.77%

DIM\_SUPPLIERS DIM\_CUSTOMERS DIM\_LOCATION DIM\_PEOPLE FACT\_TABLE\_ORDERS

Record: 1 ← → 1 of 456,530

Output  
Show output from:

Tabular Model Explorer GitHub Copilot Solution Expl... Git Changes Properties

Regresamos a Visual Studio y seleccionamos la opción “Solution Explorer”

SSIS Toolbox

This tool window can only be used by a SQL Server Integration Services package document.

Model.bim

[OrderID]	UnitPrice	Total	TaxRate	TaxAmount	Total_with_Tax	LineProfit	Unit_Tax	%Per_s...
1	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
2	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
3	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
4	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
5	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
6	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
7	\$13.00	\$91.00	\$15.00	\$13.65				
8	\$13.00	\$91.00	\$15.00	\$13.65				
9	\$13.00	\$91.00	\$15.00	\$13.65				
10	\$13.00	\$91.00	\$15.00	\$13.65				

Average of TaxAmount: \$112.95

Sum of Total\_with\_Tax: \$396,086,878.90

Sum of LineProfit: \$171,458,361

Sum of Unit\_Tax: \$3,121,133.79

Average of %Per\_sale: 46.77%

DIM\_SUPPLIERS DIM\_CUSTOMERS DIM\_LOCATION DIM\_PEOPLE FACT\_TABLE\_ORDERS ...

Record: 1 ← → 1 of 456,530

Output

Show output from:

Hacemos clic izquierdo sobre nuestro modelo tabular

Solution Explorer

Search Solution Explorer (Ctrl+)

Solution 'DWH\_AS\_TAB\_2025' (1 of 1 project)

DWH\_AS\_TAB\_2025

References

Model.bim

Properties

DWH\_AS\_TAB\_2025 Project Properties

Misc

Project File DWH\_AS\_TAB\_2025.smproj

Project Folder C:\Users\estudiantes\source\repo

Project File

The name of the file containing build, configuration, and other information about the project.

SSIS Toolbox

This tool window can only be used by a SQL Server Integration Services package document.

Model.bim

[OrderID] fx

UnitPrice	Total	TaxRate	TaxAmount	Total_with_Tax	LineProfit	Unit_Tax	%Per_s...
\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%

Average of TaxAmount: \$112.95 Sum of Total\_with\_Tax: \$396,086,878.90 Sum of LineProfit: \$171,458,361 Sum of Unit\_Tax: \$3,121,133.79 Average of %Per\_sale: 46.77%

DIM\_SUPPLIERS DIM\_CUSTOMERS DIM\_LOCATION DIM\_PEOPLE FACT\_TABLE\_ORDERS ...

Record: 1 of 456,530

Output

Show output from:

Seleccionamos la opción “Build”

Solution Explorer

- Solution 'DWH\_AS\_TAB\_2025' (1 of 1 project)
  - Build
  - Rebuild
  - Deploy
  - Clean
- Collapsible All Descendants
- Scope to This
- New Solution Explorer View
- Add
- Manage NuGet Packages...
- Configure Startup Projects...
- Set as Startup Project
- Debug
- Cut
- Remove
- Rename
- Unload Project
- Load Direct Dependencies
- Load Entire Dependency Tree
- Open Folder in File Explorer
- Open in Terminal
- The Properties information about the project.

This tool window can only be used by a SQL Server Integration Services package document.

Model.bim

[OrderID]	UnitPrice	Total	TaxRate	TaxAmount	Total_with_Tax	LineProfit	Unit_Tax	%Per_s...
1	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
2	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
3	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
4	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
5	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
6	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
7	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
8	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
9	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
10	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%

Average of TaxAmount: \$112.95 Sum of Total\_with\_Tax: \$396,086,878.90 Sum of LineProfit: \$171,458,361 Sum of Unit\_Tax: \$3,121,133.79 Average of %Per\_sale: 46.77%

DIM\_SUPPLIERS DIM\_CUSTOMERS DIM\_LOCATION DIM\_PEOPLE FACT\_TABLE\_ORDERS ...

Record: 1 of 456,530

Output

```
Show output from: Build
Build started at 11:39 PM...
----- Build started: Project: DWH_AS_TAB_2025, Configuration: Development x86 -----
===== Build: 1 succeeded or up-to-date, 0 failed, 0 skipped =====
===== Build completed at 11:39 PM and took 01.105 seconds =====
```

Una vez que el proceso de **Build** se completa correctamente, hacemos clic izquierdo nuevamente sobre nuestro modelo tabular.

Solution Explorer

Search Solution Explorer (Ctrl+)

Solution 'DWH\_AS\_TAB\_2025' (1 of 1 project)

DWH\_AS\_TAB\_2025

References

Model.bim

Properties

DWH\_AS\_TAB\_2025 Project Properties

Misc

Project File DWH\_AS\_TAB\_2025.smproj

Project Folder C:\Users\estudiantes\source\repo

Project File

The name of the file containing build, configuration, and other information about the project.

SSIS Toolbox

This tool window can only be used by a SQL Server Integration Services package document.

Model.bim

[OrderID]	UnitPrice	Total	TaxRate	TaxAmount	Total_with_Tax	LineProfit	Unit_Tax	%Per_s...
1	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
2	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
3	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
4	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
5	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
6	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
7	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
8	\$13.00	\$91.00	\$15.00					
9	\$13.00	\$91.00	\$15.00					
10	\$13.00	\$91.00	\$15.00					

Average of TaxAmount: \$112.95

Sum of Total\_with\_Tax: \$396,086,878.90

Sum of LineProfit: \$171,458,361

Sum of Unit\_Tax: \$3,121,133.79

Average of %Per\_sale: 46.77%

DIM\_SUPPLIERS DIM\_CUSTOMERS DIM\_LOCATION DIM\_PEOPLE FACT\_TABLE\_ORDERS ...

Record: 1 of 456,530

Output

Show output from: Build

```
Build started at 11:39 PM...
----- Build started: Project: DWH_AS_TAB_2025, Configuration: Development x86 -----
===== Build: 1 succeeded or up-to-date, 0 failed, 0 skipped =====
===== Build completed at 11:39 PM and took 01.105 seconds =====
```

Solution Explorer

Search Solution Explorer (Ctrl+Shift+F)

Solution 'DWH\_AS\_TAB\_2025' (1 of 1 project)

DWH\_AS\_TAB\_2025

- Build
- Rebuild
- Deploy**
- Clean
- Collapse All Descendants Ctrl+Left Arrow
- Scope to This
- New Solution Explorer View
- Add
- Manage NuGet Packages...
- Configure Startup Projects...
- Set as Startup Project
- Debug
- Cut Ctrl+X
- Remove Del
- Rename F2
- Unload Project
- Load Direct Dependencies
- Load Entire Dependency Tree
- Open Folder in File Explorer
- Open in Terminal
- Properties Alt+Enter

Seleccionamos la opción “Deploy”

File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help | Search DWH\_AS\_TAB\_2025 Sign in GitHub Copilot ADMIN

SSIS Toolbox This tool window can only be used by a SQL Server Integration Services package document.

Model.bim

OrderID	UnitPrice	Total	TaxRate	TaxAmount	Total_with_Tax	LineProfit	Unit_Tax	%Per_s...
1	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
2	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
3	\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%

SQL Server database ml-refvm-822010\moralles\_24;Datawarehouse\_WWI

Windows Database Microsoft account

Use your Windows credentials to access this database.

Impersonation Mode: Impersonate Account

User name

Connect Cancel

Show output from: Build

Build started at 11:42 PM...  
----- Build started: Project: DWH\_AS\_TAB\_2025, Configuration: Development x86 -----  
----- Deploy started: Project: DWH\_AS\_TAB\_2025, Configuration: Development x86 -----

Error List Output

Solution Explorer Solution 'DWH\_AS\_TAB\_2025' (1 of 1 project) DWH\_AS\_TAB\_2025 References Model.bim

Properties DWH\_AS\_TAB\_2025 Project Properties

Misc Project File DWH\_AS\_TAB\_2025.smproj Project Folder C:\Users\estudiantes\source\repo

Project File The name of the file containing build, configuration, and other information about the project.

Deploy started... Add to Source Control Select Repository 11:42 PM 8/14/2025

Seleccionamos la opción de Database

SSIS Toolbox This tool window can only be used by a SQL Server Integration Services package document.

Model.bim [OrderID] fx

UnitPrice	Total	TaxRate	TaxAmount	Total_with_Tax	LineProfit	Unit_Tax	%Per_s...
\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%
\$13.00	\$91.00	\$15.00	\$13.65	\$104.65	\$59.50	\$1.95	56.86%

SQL Server database ml-refvm-822010\moralles\_24;Datawarehouse\_WWI

Windows Database Microsoft account

User name: sa  
Password:   

Ingresamos nuestro usuario y nuestra contraseña. Cuando lo hacemos, seleccionamos “Connect”

Connect Cancel

----- Build started: Project: DWH\_AS\_TAB\_2025, Configuration: Development x86 -----  
----- Deploy started: Project: DWH\_AS\_TAB\_2025, Configuration: Development x86 -----

Error List Output

Solution Explorer Search Solution Explorer (Ctrl+F) Solution 'DWH\_AS\_TAB\_2025' (1 of 1 project) DWH\_AS\_TAB\_2025 References Model.bim

Properties DWH\_AS\_TAB\_2025 Project Properties

Misc Project File DWH\_AS\_TAB\_2025.smproj Project Folder C:\Users\estudiantes\source\repo

Project File The name of the file containing build, configuration, and other information about the project.

Screenshot of the Microsoft Visual Studio IDE interface showing an SSIS package named "Model.bim".

The SSIS Toolbox is visible on the left, and the Solution Explorer shows a project named "DWH\_AS\_TAB\_2025" with a file "Model.bim".

A modal dialog box titled "Encryption Support" is displayed, stating: "We were unable to connect to the data source using an encrypted connection. To access this data source using an unencrypted connection, click OK." The "OK" button is highlighted with a red box.

A callout bubble with the text "Hacemos clic en “OK”" points to the "OK" button in the dialog box.

The Output window at the bottom shows build logs:

```
Build started at 11:42 PM...
----- Build started: Project: DWH_AS_TAB_2025, Configuration: Development x86 -----
----- Deploy started: Project: DWH_AS_TAB_2025, Configuration: Development x86 -----
```

The status bar at the bottom indicates "Deploy started...".

File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help | Search | DWH\_AS\_TAB\_2025 | Sign in | GitHub Copilot | ADMIN

SSIS Toolbox  
This tool window can only be used by a SQL Server Integration Services package document.

Deploy

Deploying  
The deployment operation may take several minutes to complete.

Success

Work Item	Status	Message
Deploy metadata	Success. Metadata deployed.	
DIM_SUPPLIERS	Success. 454 rows transferred.	
DIM_CUSTOMERS	Success. 804 rows transferred.	
DIM_LOCATION	Success. 75,880 rows transferred.	
DIM_PEOPLE	Success. 2,222 rows transferred.	
DIM_PRODUCT	Success. 594 rows transferred.	
DIM_SALES	Success. 269,330 rows transferred.	
FACT_TABLE_ORDERS	Success. 456,530 rows transferred.	

8 Total 0 Cancelled  
8 Success 0 Error

Details:

Stop Deployment Close

Solution Explorer  
Search Solution Explorer (Ctrl+)  
Solution 'DWH\_AS\_TAB\_2025' (1 of 1 project)  
DWH\_AS\_TAB\_2025  
References  
Model.bim

Properties  
DWH\_AS\_TAB\_2025 Project Properties  
Misc  
Project File DWH\_AS\_TAB\_2025.smproj  
Project Folder C:\Users\estudiantes\source\repo

Project File  
The name of the file containing build, configuration, and other information about the project.

Deploy succeeded

Add to Source Control Select Repository

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Esperamos que termine el proceso de “Deploy”, cuando concluye con éxito seleccionamos “Close”

Close

Microsoft SQL Server Management Studio (Administrator)

File Edit View Tools Window Help

New Query NDX DMX XMLA DAX Execute

Object Explorer

ML-RefVm-822010\MORALLES\_24 (Microsoft Analysis Server)

- Databases
  - DWH\_AS\_TAB\_2025
- Connections
  - SQL/ML-RefVm-822010\MORALLES\_24;Data
- Tables
  - DIM\_SUPPLIERS
  - DIM\_CUSTOMERS
  - DIM\_LOCATION
  - DIM\_PEOPLE
  - DIM\_PRODUCT
  - DIM\_SALES
  - FACT\_TABLE\_ORDERS
- Roles
  - GERENCIA
  - VENTAS
- Management
  - Extended Events

ML-RefVm-822010\MORALLES\_24 (SQL Server 15.0.2000.5 -)

- Databases
- Security
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
- SQL Server Agent (Agent XPs disabled)
- XEvent Profiler

Ready

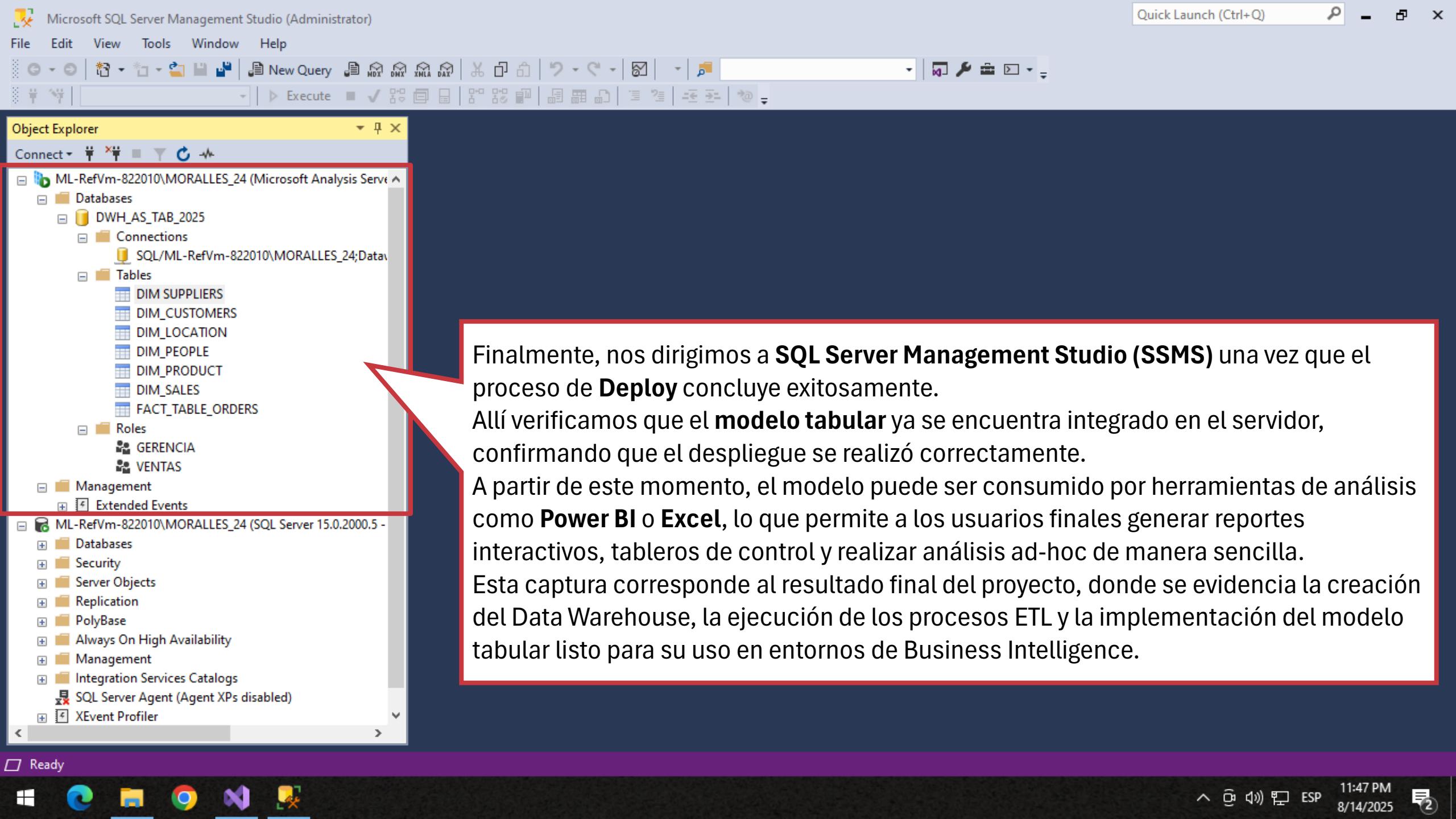
Quick Launch (Ctrl+Q)

Finalmente, nos dirigimos a **SQL Server Management Studio (SSMS)** una vez que el proceso de **Deploy** concluye exitosamente.

Allí verificamos que el **modelo tabular** ya se encuentra integrado en el servidor, confirmando que el despliegue se realizó correctamente.

A partir de este momento, el modelo puede ser consumido por herramientas de análisis como **Power BI** o **Excel**, lo que permite a los usuarios finales generar reportes interactivos, tableros de control y realizar análisis ad-hoc de manera sencilla.

Esta captura corresponde al resultado final del proyecto, donde se evidencia la creación del Data Warehouse, la ejecución de los procesos ETL y la implementación del modelo tabular listo para su uso en entornos de Business Intelligence.



11:47 PM  
8/14/2025

# Conclusiones

## Logros Alcanzados

El desarrollo exitoso del Data Warehouse para Wide World Importers ha demostrado la efectividad de la implementación de una arquitectura dimensional completa utilizando el ecosistema de Microsoft. La centralización de datos transaccionales en un esquema optimizado para análisis ha permitido transformar información dispersa en conocimiento estratégico para la organización.

## Beneficios Obtenidos

La implementación del proceso ETL mediante SSIS ha garantizado la integridad y consistencia de los datos, estableciendo un flujo automatizado y confiable para la carga de información. Esta automatización reduce significativamente los tiempos de procesamiento y minimiza los errores manuales, proporcionando una base sólida para la toma de decisiones.

El modelo tabular desarrollado en SSAS ha demostrado su capacidad para mejorar el rendimiento de las consultas analíticas, reduciendo los tiempos de respuesta y facilitando la exploración de datos a través de dimensiones y jerarquías bien estructuradas. Los usuarios de negocio ahora pueden acceder a información crítica de manera intuitiva y eficiente.

## **Valor Estratégico**

La integración completa desde la extracción de datos hasta la visualización en Power BI ha creado un ecosistema de inteligencia de negocio robusto y escalable. Esta solución permite a Wide World Importers identificar patrones, tendencias y oportunidades de negocio que anteriormente permanecían ocultas en los datos transaccionales. La implementación de un esquema dimensional optimizado facilita la incorporación de nuevas fuentes de datos y métricas de negocio, proporcionando una base extensible para futuras necesidades analíticas de la organización.

## **Lecciones Aprendidas**

El proyecto ha evidenciado la importancia de un diseño dimensional bien planificado como fundamento para el éxito de cualquier iniciativa de Business Intelligence. La correcta identificación de hechos, dimensiones y métricas de negocio resulta crucial para maximizar el valor de la información analítica.

La integración de tecnologías complementarias del stack de Microsoft ha demostrado ser una estrategia efectiva, aprovechando las sinergias entre SSIS, SSAS y Power BI para crear una solución cohesiva y potente.

## **Perspectivas Futuras**

Este proyecto establece las bases para la evolución hacia una arquitectura de datos más avanzada, que podría incorporar tecnologías de Big Data, análisis en tiempo real y capacidades de machine learning. La infraestructura desarrollada es suficientemente flexible para adaptarse a las crecientes necesidades analíticas de Wide World Importers.

La experiencia adquirida en este proyecto proporciona un modelo replicable para futuras implementaciones de Data Warehouse en diferentes contextos organizacionales, contribuyendo al crecimiento de las capacidades de inteligencia de negocio a nivel empresarial.

## **Reflexión Final**

La implementación exitosa de este Data Warehouse confirma que la combinación de metodologías probadas, tecnologías robustas y un enfoque centrado en las necesidades del negocio constituye la fórmula para generar soluciones de Business Intelligence que verdaderamente agreguen valor a la organización y potencien su capacidad competitiva en el mercado.