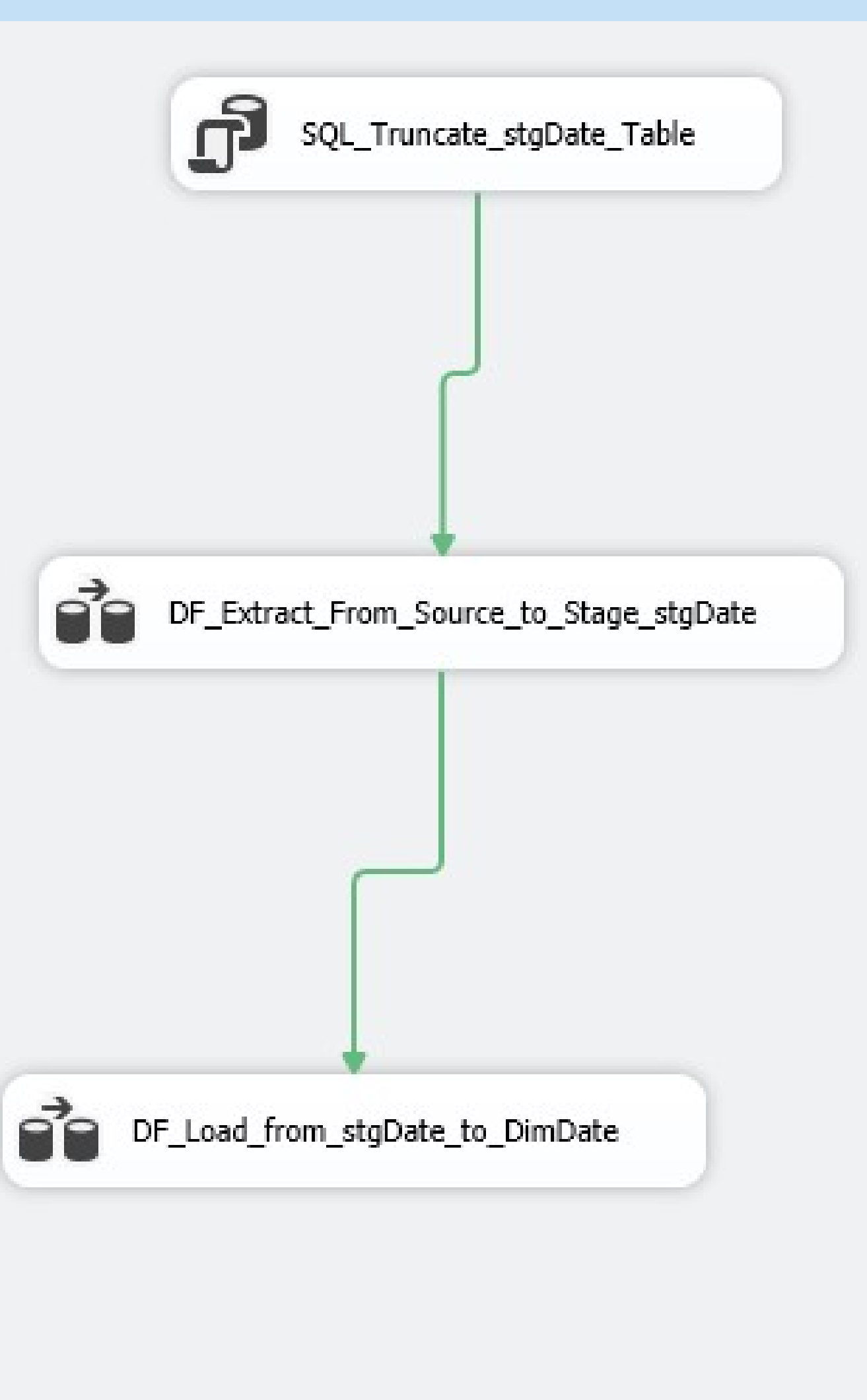


TP Business Intelligence

Construction de l'ETL Northwind

Réalisé par :

Holali David GAVI



Execute SQL Task Editor

Configure the properties required to run SQL statements and stored procedures using the selected connection.

General
Parameter Mapping
Result Set
Expressions

General	
Name	SQL_Truncate_stgDate_Table
Description	Execute SQL Task
Options	
TimeOut	0
CodePage	1252
TypeConversionMode	Allowed
Result Set	
ResultSet	None
SQL Statement	
ConnectionType	OLE DB
Connection	LocalHost.NORTHWIND_stage
SQLSourceType	Direct input
SQLStatement	truncate table [dbo].[DimDate]
IsQueryStoredProcedure	False
BypassPrepare	True

Name
Specifies the name of the task.

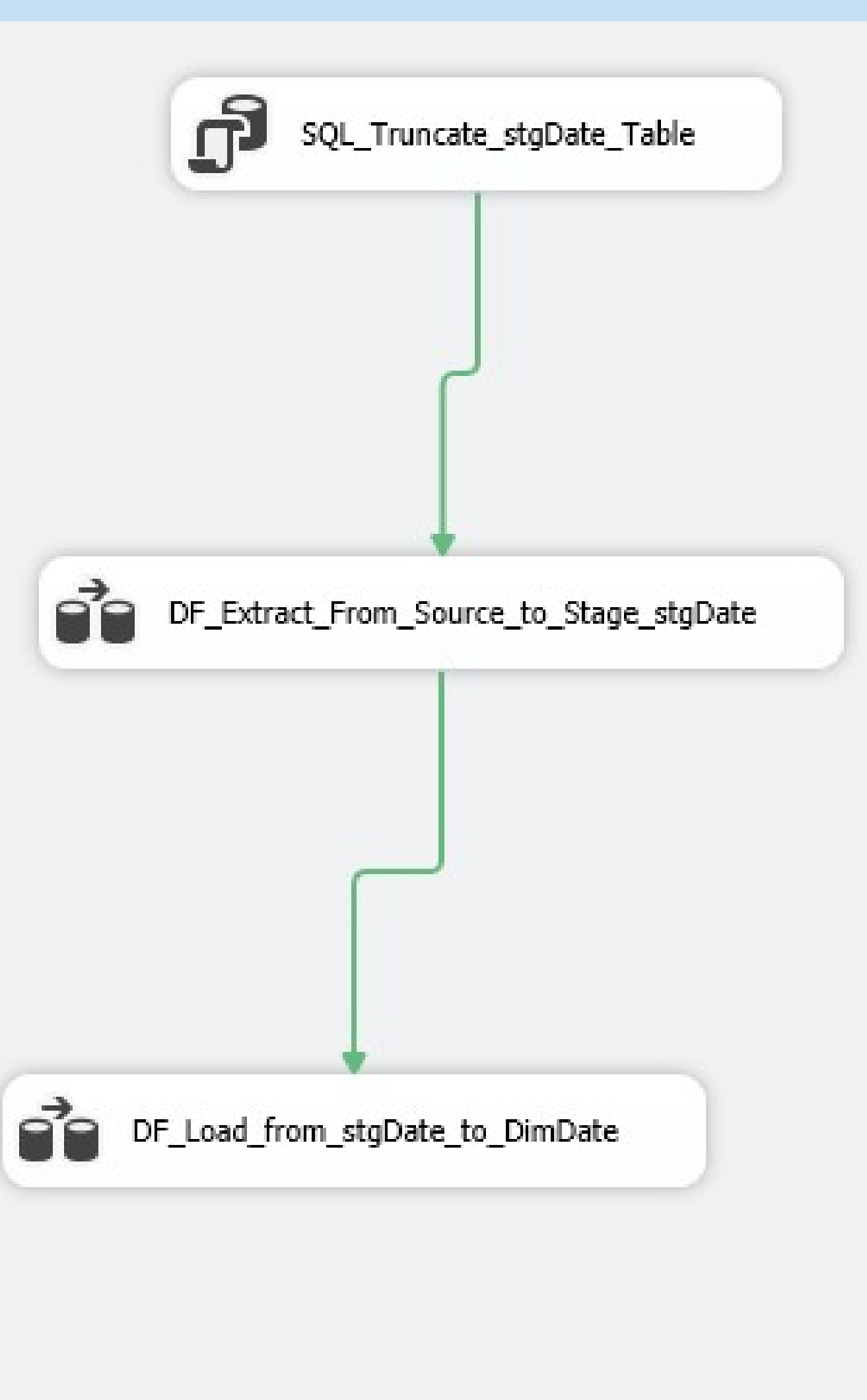
Browse... Build Query... Parse Query

OK Cancel Help

Le SQL_Truncate_stgDate_Table sert à définir une règle SQL qui va consister à vider la table DimDate dans notre stage avant chaque rechargement pour éviter des doublons

DimDate

Le premier Data flow tasks sert de stage (extraction des données depuis la source). Du stage on alimentera la DWH de manière incrémentale (ne charger que les données non présentes dans la DWH).



Execute SQL Task Editor

Configure the properties required to run SQL statements and stored procedures using the selected connection.

General
Parameter Mapping
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Name	SQL_Truncate_stgDate_Table
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Options	
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OK Cancel Help

Le SQL_Truncate_stgDate_Table sert à définir une règle SQL qui va consister à vider la table DimDate dans notre stage avant chaque rechargement pour éviter des doublons

DimDate

Le premier Data flow tasks sert de stage (extraction des données depuis la source). Du stage on alimentera la DWH de manière incrémentale (ne charger que les données non présentes dans la DWH).

Staging

La configuration du stage se fait avec un composant source qui permet de sélectionner la table source et un composant de destination qui spécifie la où les données seront stockées.

OLE DB Source

OLE DB 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:
LocalHost.NORTHWND

Data access mode:
Table or view

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

Preview...

OK Cancel Help

Source base

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:
LocalHost.NORTHWIND_stage

Data access mode:
Table or view - fast load

Name of the table or the view:
[DimDate]

☐ Keep identity ☐ Table lock
☐ Keep nulls ☒ Check constraints

Rows per batch:
Maximum insert commit size: 2147483647

View Existing Data...

OK Cancel Help

Staging destination

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

The mapping

Available Input Columns

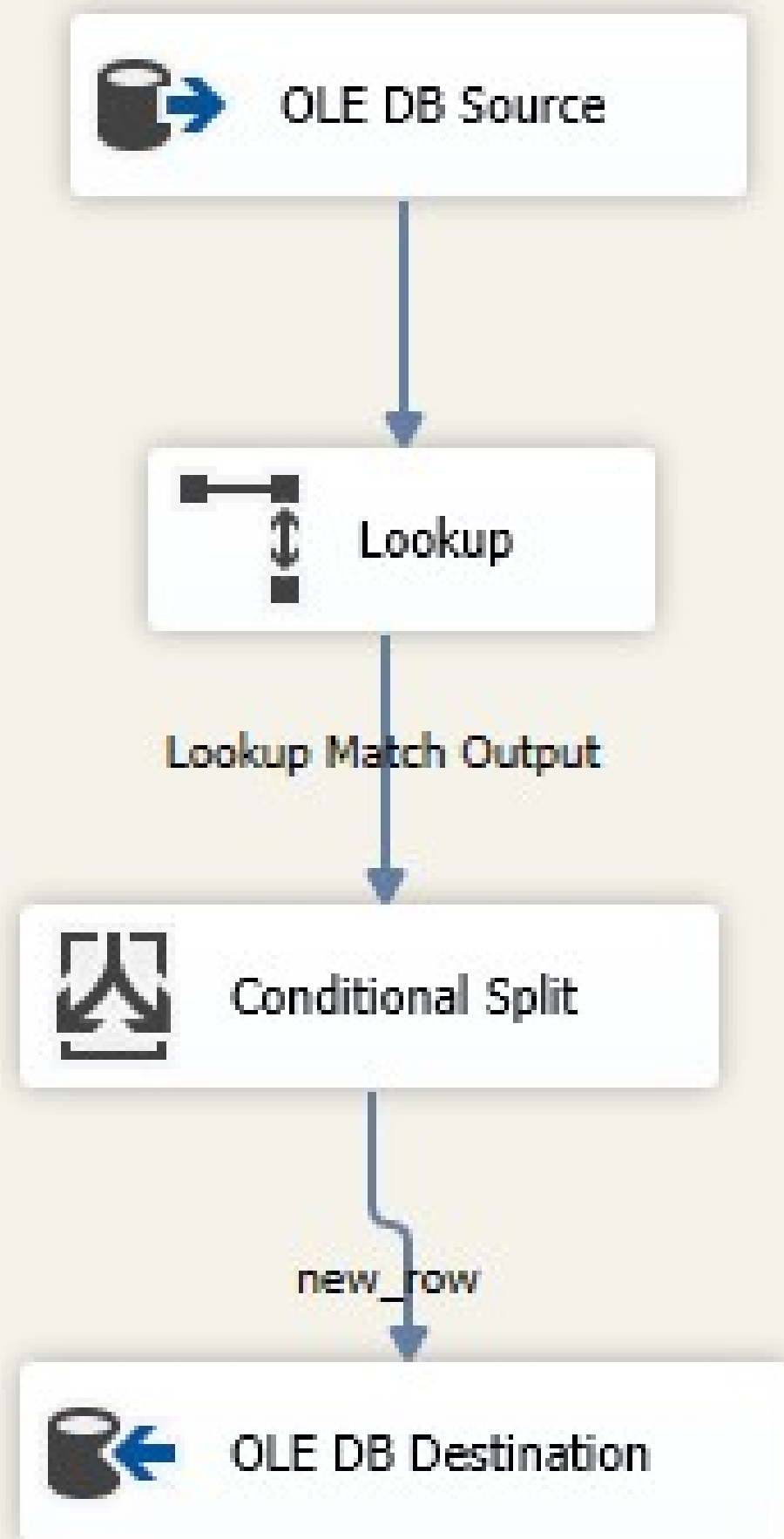
Name
DateKey
Date
FullDateUK
FullDateUSA
DayOfMonth
DaySuffix
DayName
DayOfWeekUSA
DayOfWeekUK
DayOfWeekinMonth

Available Destination Columns

Name
DateKey
Date
FullDateUK
FullDateUSA
DayOfMonth
DaySuffix
DayName
DayOfWeekUSA
DayOfWeekUK
DayOfWeekinMonth

Input Column	Destination Column
DateKey	DateKey
Date	Date
FullDateUK	FullDateUK
FullDateUSA	FullDateUSA
DayOfMonth	DayOfMonth
DaySuffix	DaySuffix
DayName	DayName
DayOfWeekUSA	DayOfWeekUSA
DayOfWeekUK	DayOfWeekUK
DayOfWeekinMonth	DayOfWeekinMonth

OK Cancel Help



OLE DB Destination Editor

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

Extracting from stage

Connection Manager
Mappings
Error Output

OLE DB connection manager:
LocalHost.NorthWindDW

Data access mode:
Table or view - fast load

Name of the table or the view:
[Dim_Date]

☐ Keep identity
☐ Keep nulls
Rows per batch:
Maximum insert commit size: 2147483647

☐ Table lock
☒ Check constraints

View Existing Data...

OK Cancel Help

OLE DB Destination Editor

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

Mapping DWH base

Connection Manager
Mappings
Error Output

Available Input Columns:

Name
DateKey
Date
FullDateUK
FullDateUSA
DayOfMonth
DaySuffix
DayName
DayOfWeekUSA
DayOfWeekUK
DayOfWeekInMonth

Available Destination Columns:

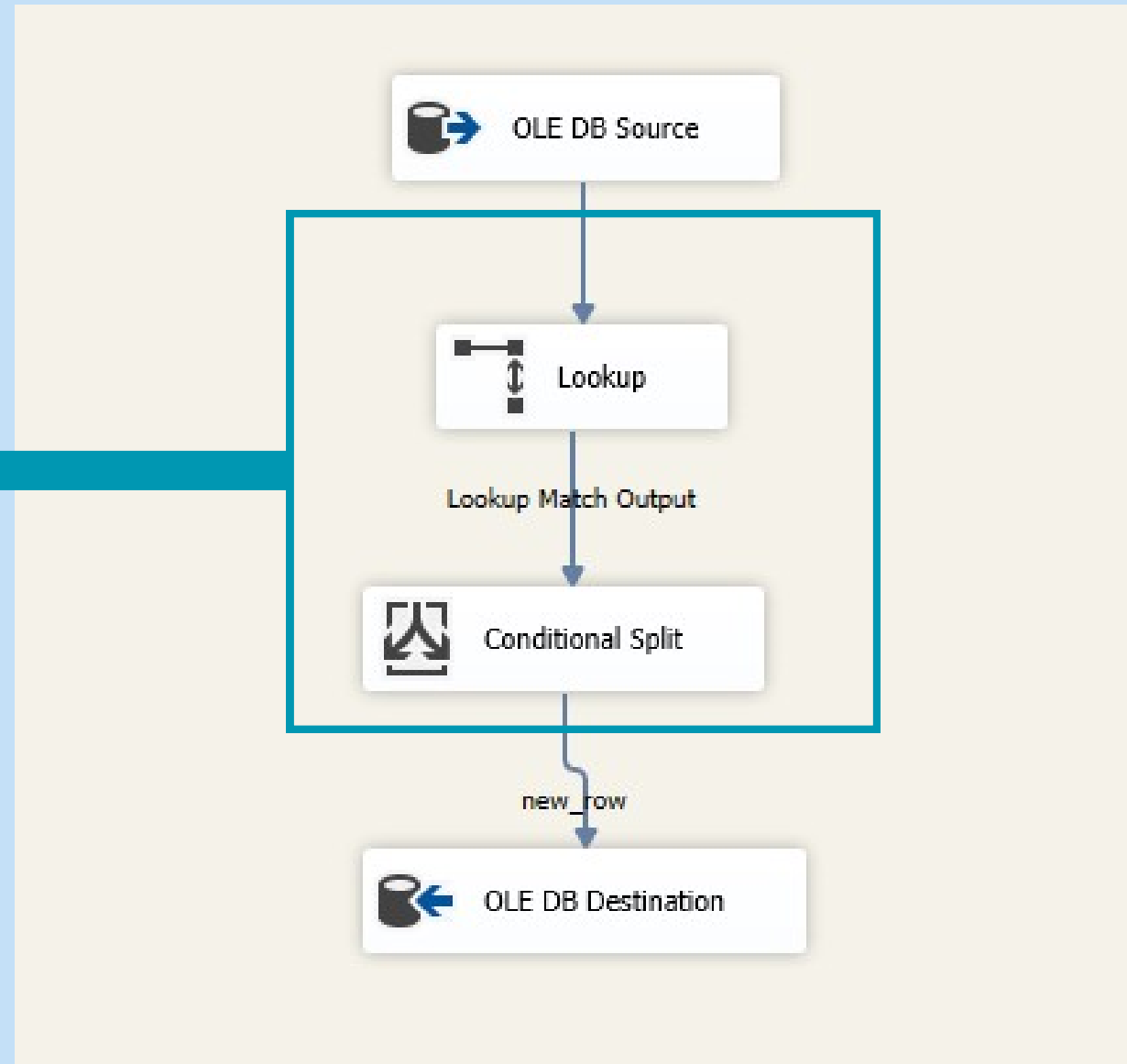
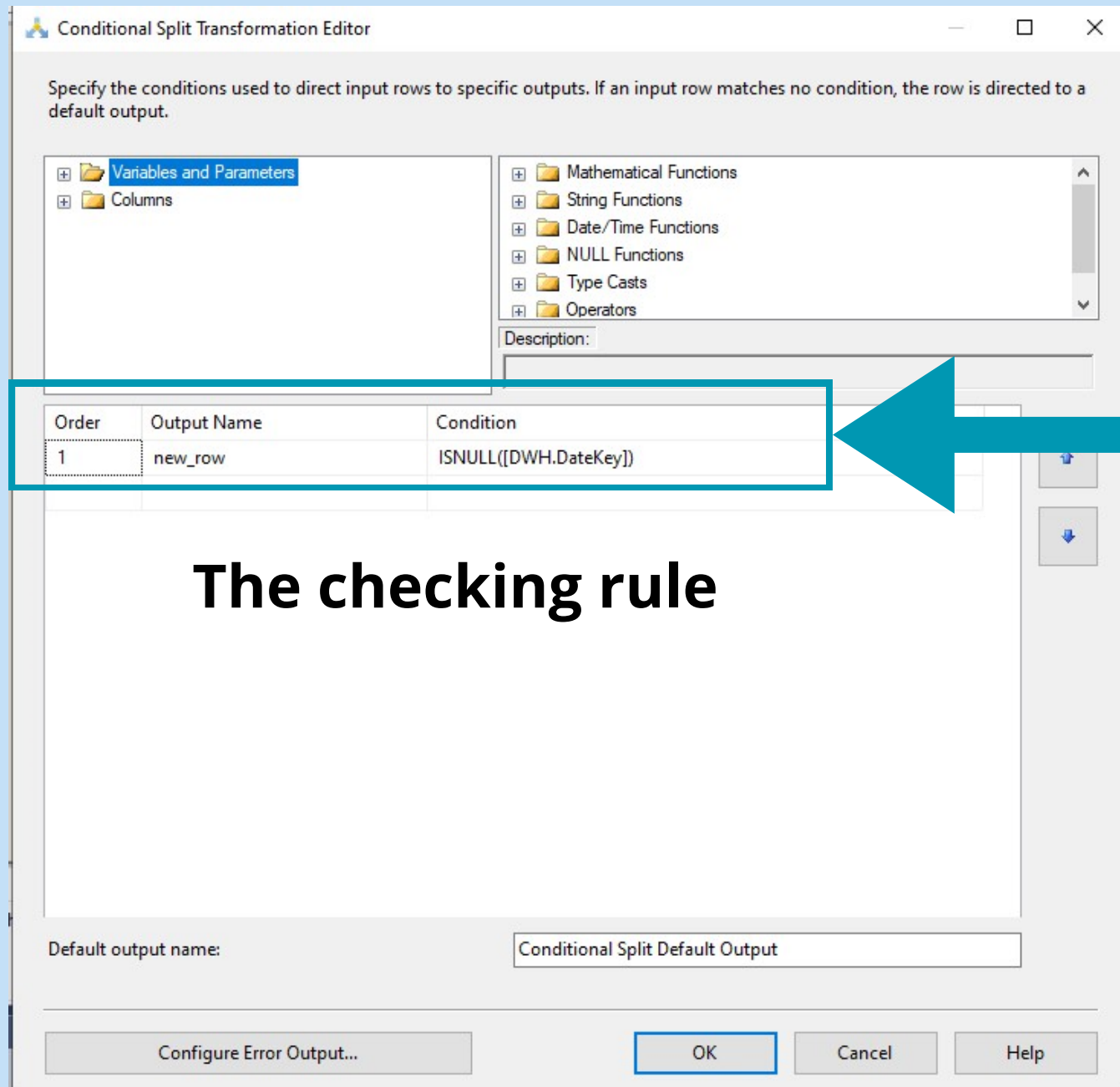
Name
DateKey
Date
FullDateUK
FullDateUSA
DayOfMonth
DaySuffix
DayName
DayOfWeekUSA
DayOfWeekUK
DayOfWeekInMonth

Input Column	Destination Column
DateKey	DateKey
Date	Date
FullDateUK	FullDateUK
FullDateUSA	FullDateUSA
DayOfMonth	DayOfMonth
DaySuffix	DaySuffix
DayName	DayName
DayOfWeekUSA	DayOfWeekUSA
DayOfWeekUK	DayOfWeekUK
DayOfWeekInMonth	DayOfWeekInMonth

OK Cancel Help

La Data Warehouse - DWH

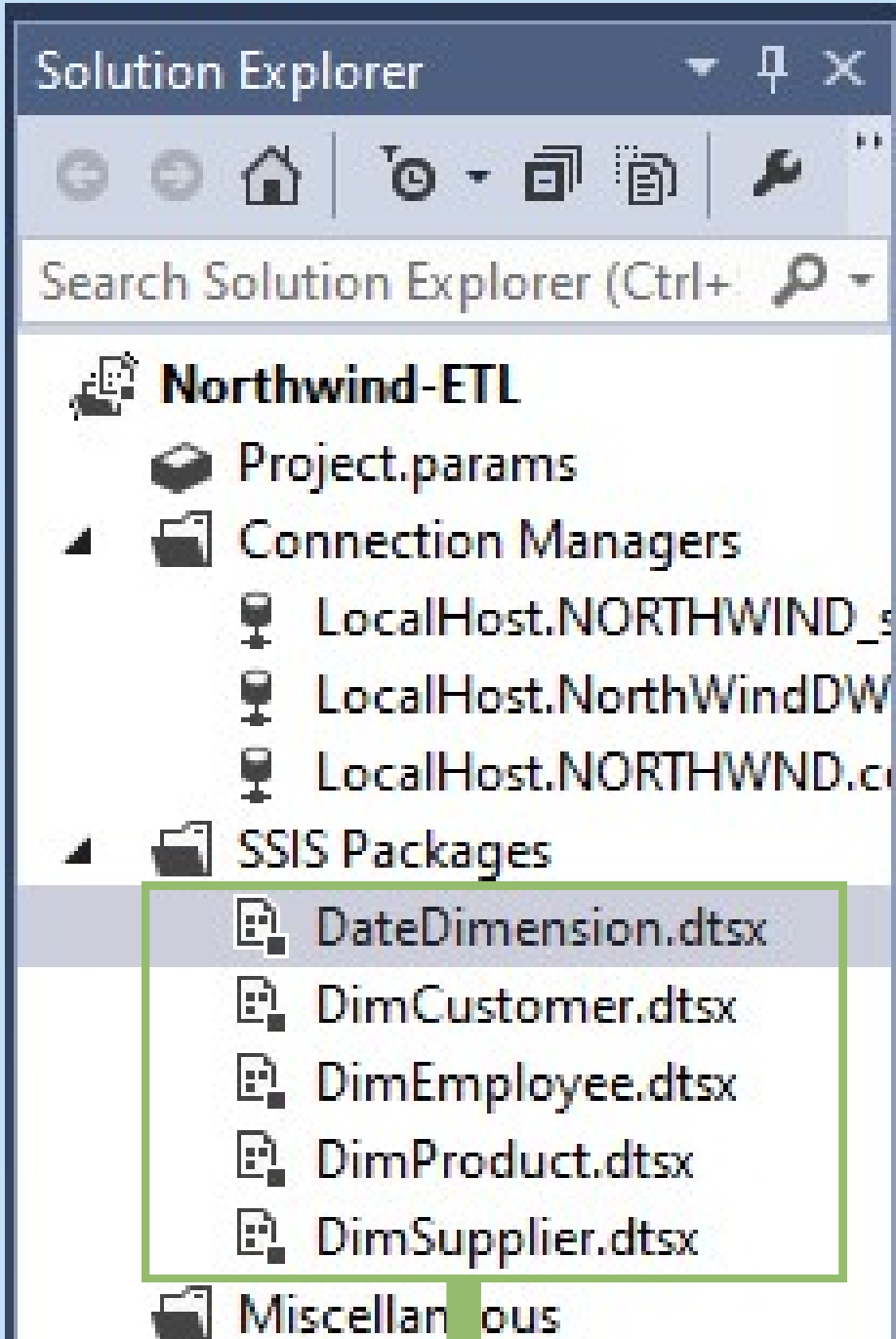
L'extraction des données du stage vers le DWH (from source to destination) doit passer par le composant lookup et le Conditionnal Split. Le but étant de proceder une extraction incrémentale



-DWH- Extraction rules

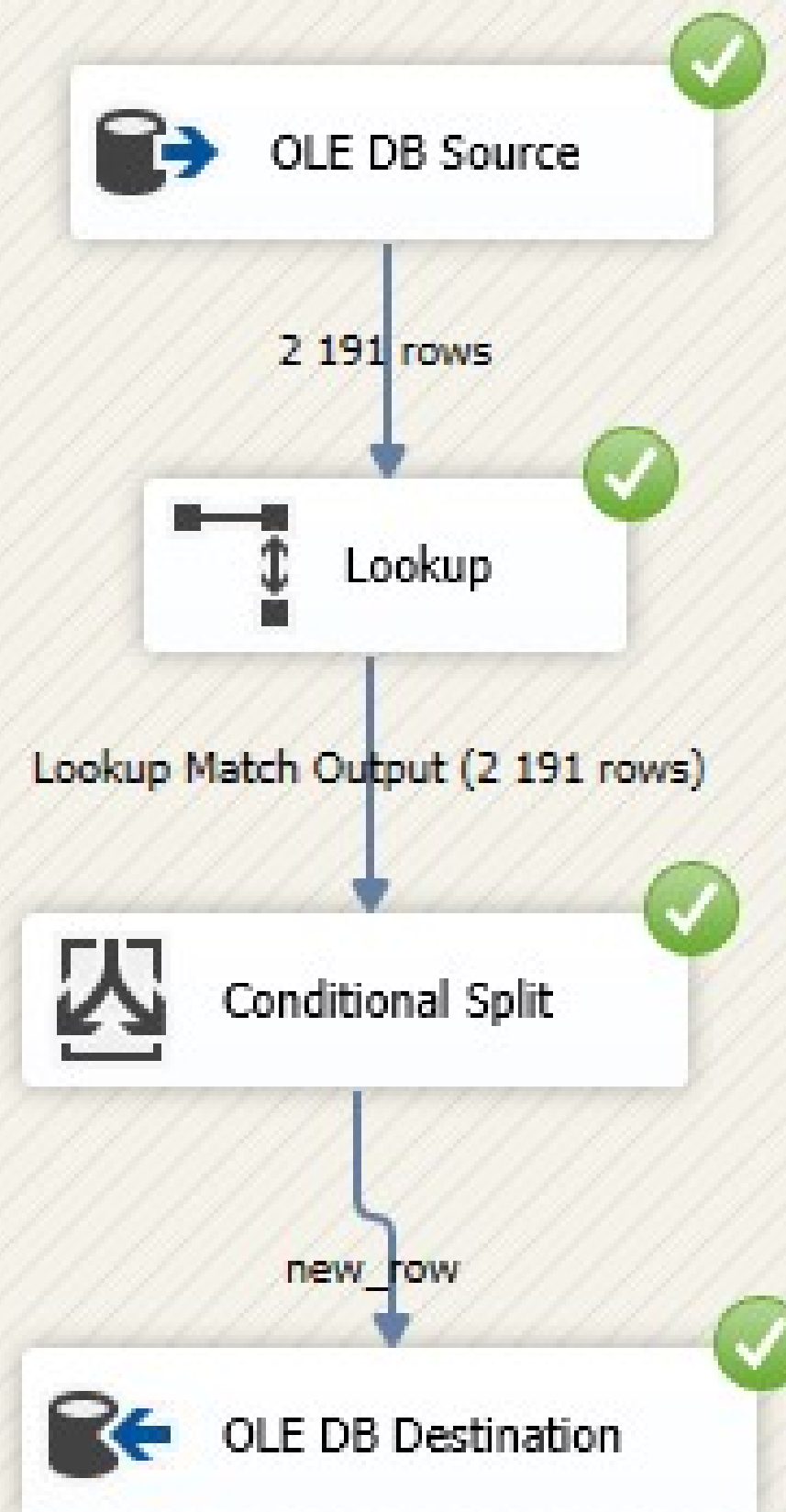
1. Comme mentionné précédemment, le stockage des données dans le Data Warehouse (DWH) s'effectue de manière stratégique :

- Définition d'un composant lookup comme jointure entre le stage et la DWH.
- Définition d'une règle d'extraction incrémentation



**Tous ces DWH
ont été fait et
exécutés**

Rows added



Exécution de la configuration

A première
l'exécution de cette
configuration, 2191
lignes ont été ajoutés
au DWH. A la
deuxièmes
exécution, on ne
verra pas d'ajout car
les lignes y sont déjà.