Atelier 3

Loading Data and Using Data Compression and Indexes

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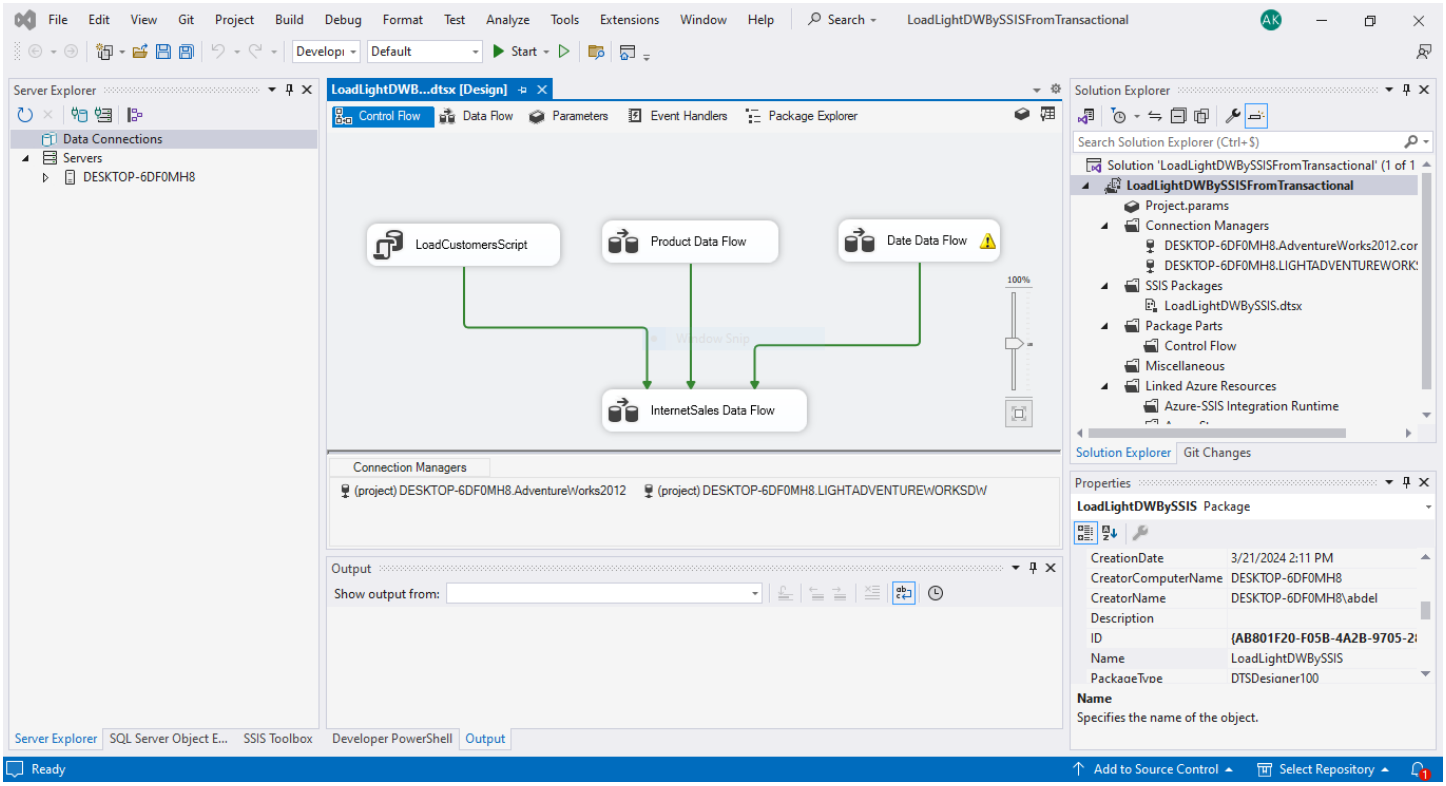
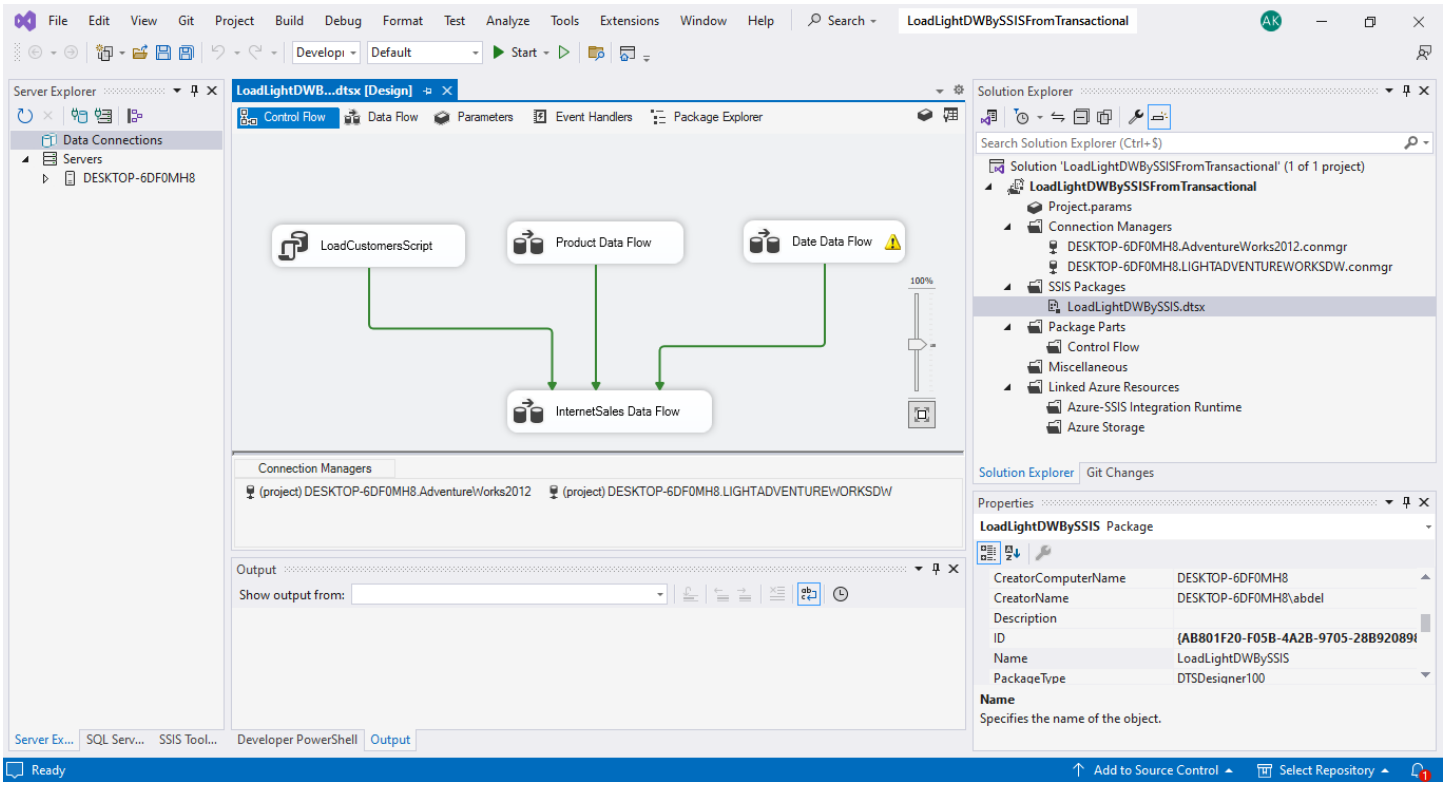
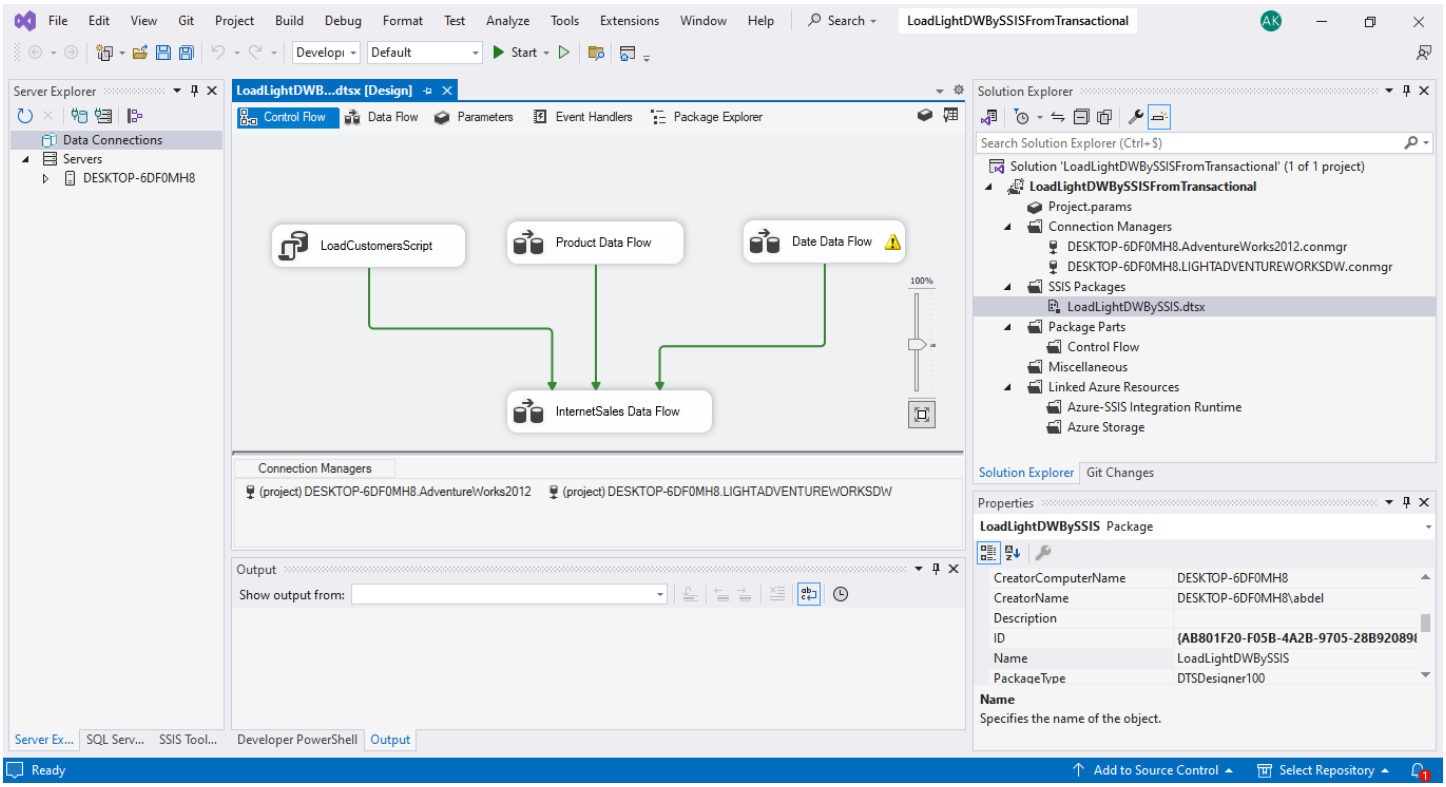
Étape 1 : Création du package



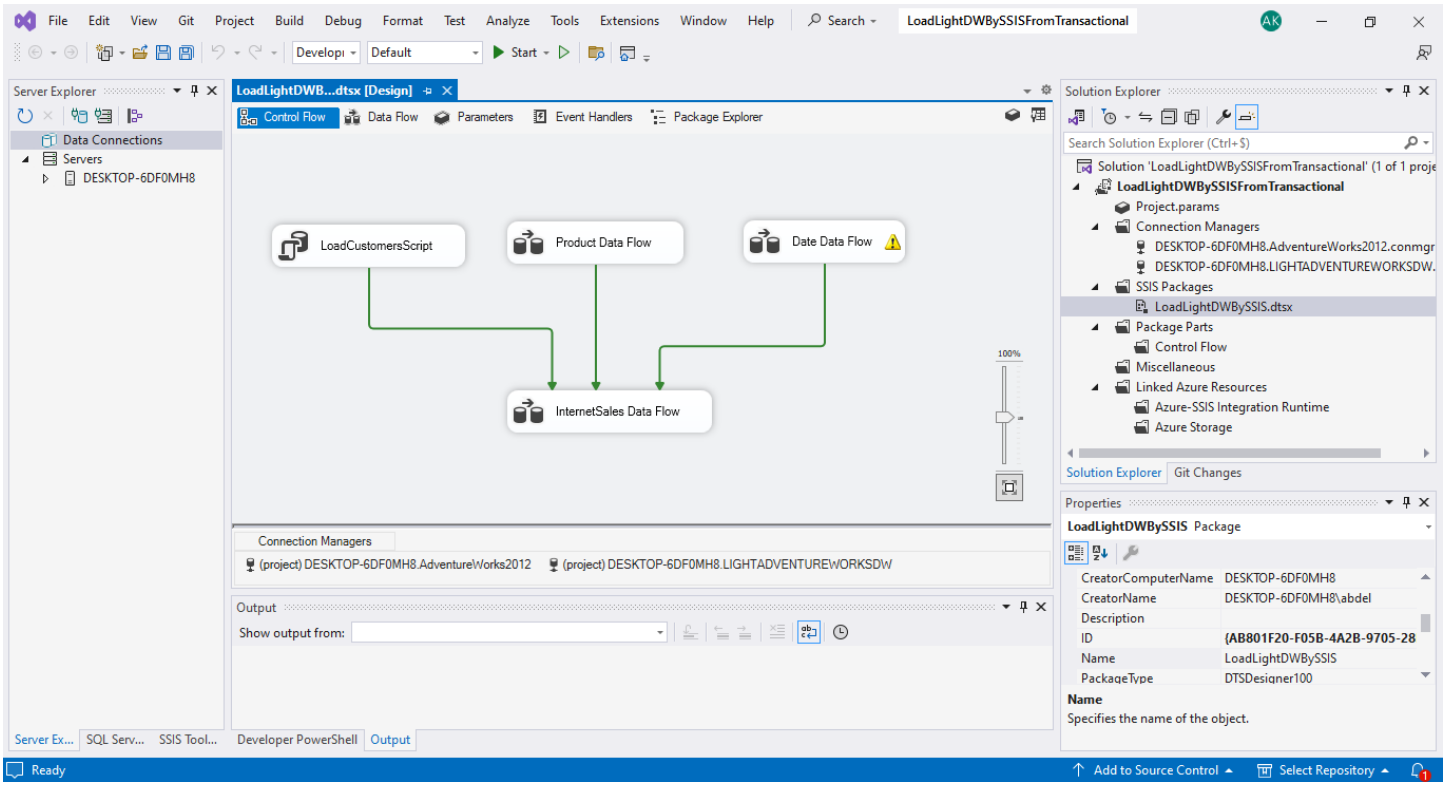
Étape 2 : Ajout et configuration du gestionnaire de connexion OLE DB source



Étape 3 : Ajout et configuration du gestionnaire de connexion OLE DB destination



Ajout d'une tâche SQLTASK nommée loadCustomers.



Le Script Utlilisé :

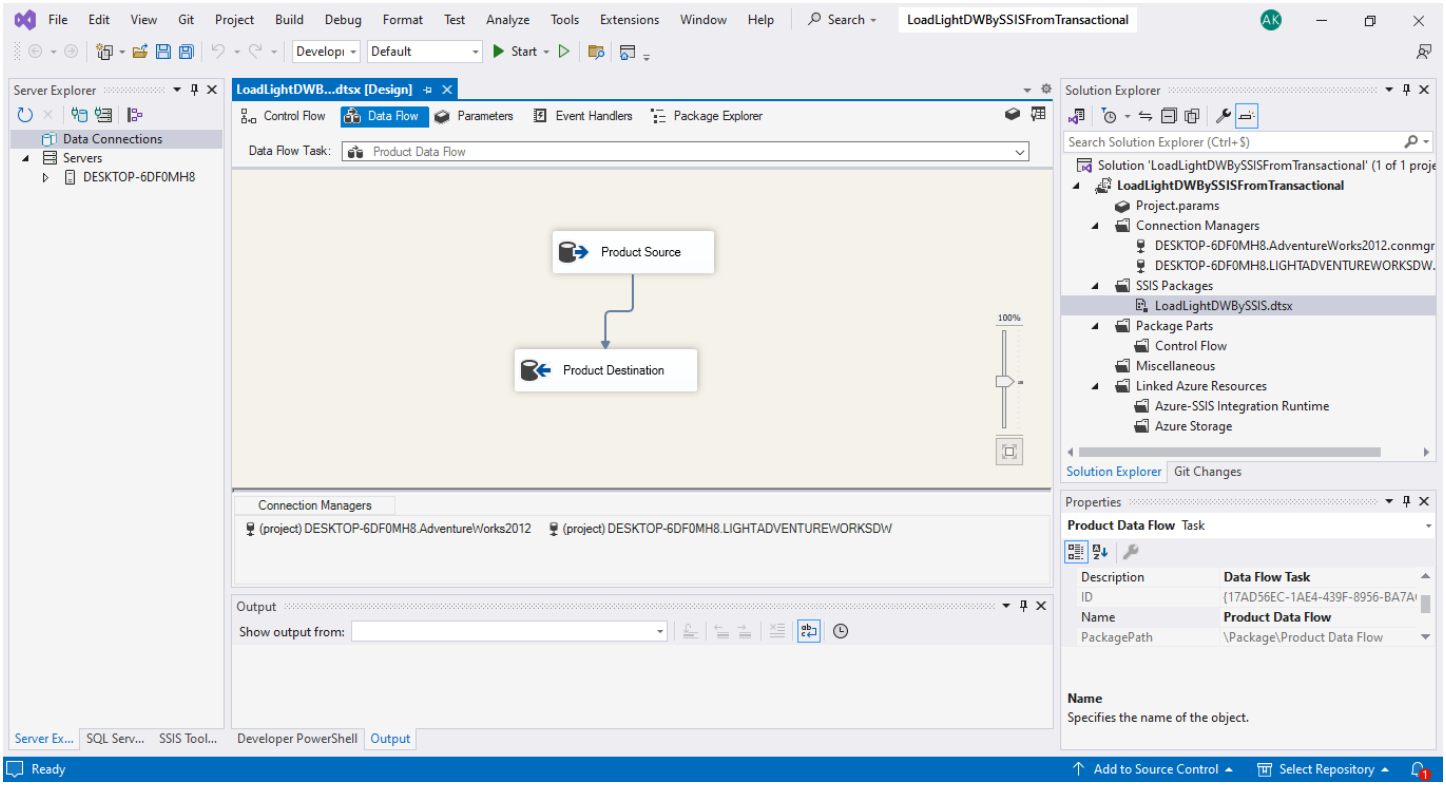
```
INSERT INTO
    LIGHTADVENTUREWORKSDW.dbo.Customers (
        CustomerDwKey,
        CustomerKey,
        FullName,
        EmailAddress,
        City,
        StateProvince,
        CountryRegion
    )
SELECT
    NEXT VALUE FOR LIGHTADVENTUREWORKSDW.dbo.SeqCustomerDwKey AS CustomerDwKey,
    C.CustomerID AS CustomerKey,
    P.FirstName + ' ' + P.LastName AS FullName,
    E.EmailAddress,
    A.City,
    SP.Name AS StateProvinceName,
    CR.Name AS CountryRegionName
FROM
    AdventureWorks2012.Sales.Customer AS C
    INNER JOIN AdventureWorks2012.Person.Person AS P ON C.PersonID = P.BusinessEntityID
    INNER JOIN AdventureWorks2012.Person.EmailAddress AS E ON E.EmailAddressID =
P.BusinessEntityID
    INNER JOIN AdventureWorks2012.Person.BusinessEntityAddress AS BEA ON P.BusinessEntityID =
BEA.BusinessEntityID
    INNER JOIN AdventureWorks2012.Person.Address AS A ON BEA.AddressID = A.AddressID
```

```
    INNER JOIN AdventureWorks2012.Person.StateProvince AS SP ON A.StateProvinceID =
SP.StateProvinceID
    INNER JOIN AdventureWorks2012.Person.CountryRegion AS CR ON SP.CountryRegionCode =
CR.CountryRegionCode;
```

Étape 4 : Ajout d'une tâche de flux de données nommée LoadProduct au package

Étape 5 : Ajout et configuration de la source OLE DB

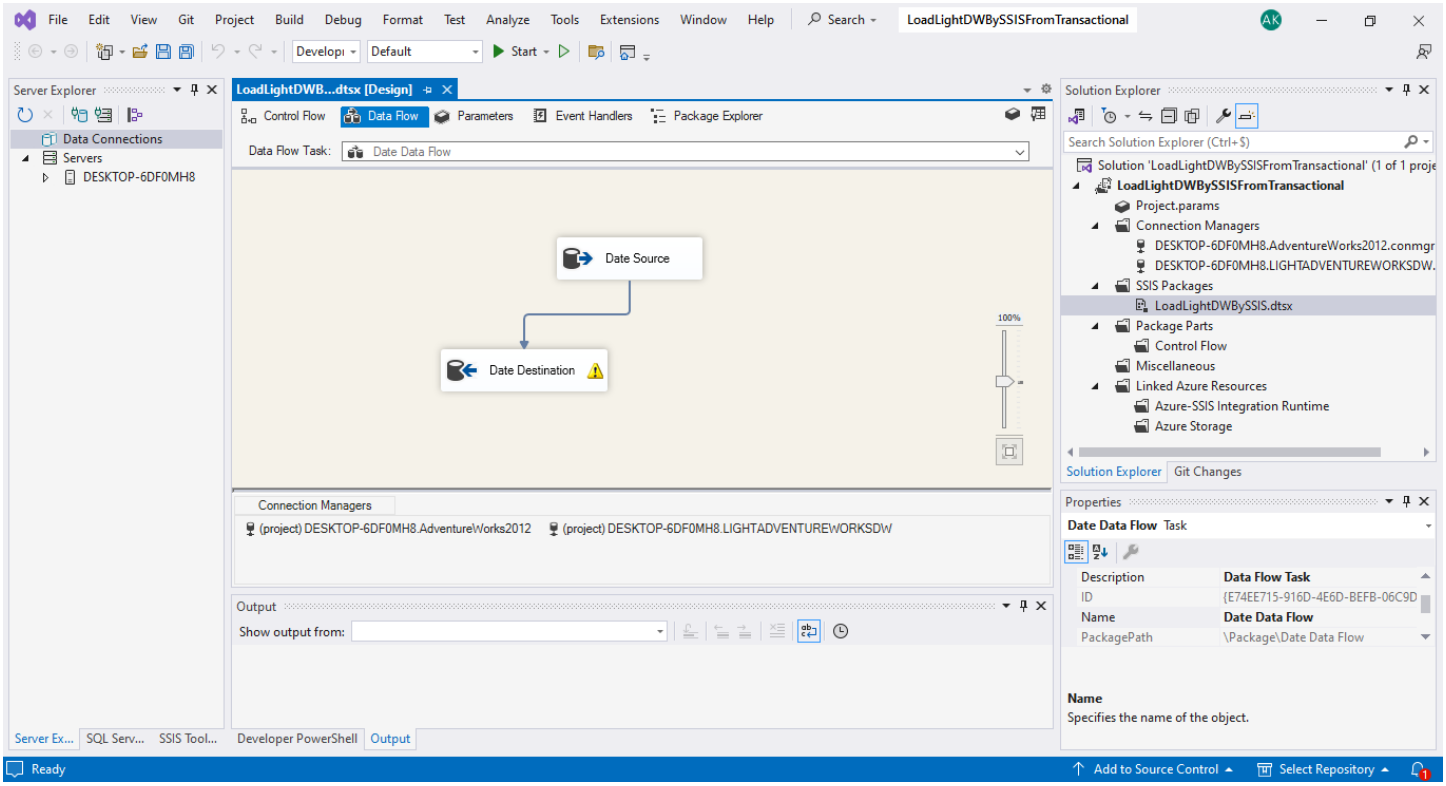
Étape 7 : Ajout et configuration de la destination OLE DB



Le Script Utlilisé :

```
SELECT
    P.ProductID AS ProductKey,
    P.Name AS EnglishProductName,
    P.Color,
    P.Size,
    S.Name AS EnglishProductSubcategoryName,
    C.Name AS EnglishProductCategoryName
FROM
    AdventureWorks2012.Production.Product AS P
    INNER JOIN AdventureWorks2012.Production.ProductSubcategory AS S ON
P.ProductSubcategoryID = S.ProductSubcategoryID
    INNER JOIN AdventureWorks2012.Production.ProductCategory AS C ON S.ProductCategoryID =
C.ProductCategoryID;
```

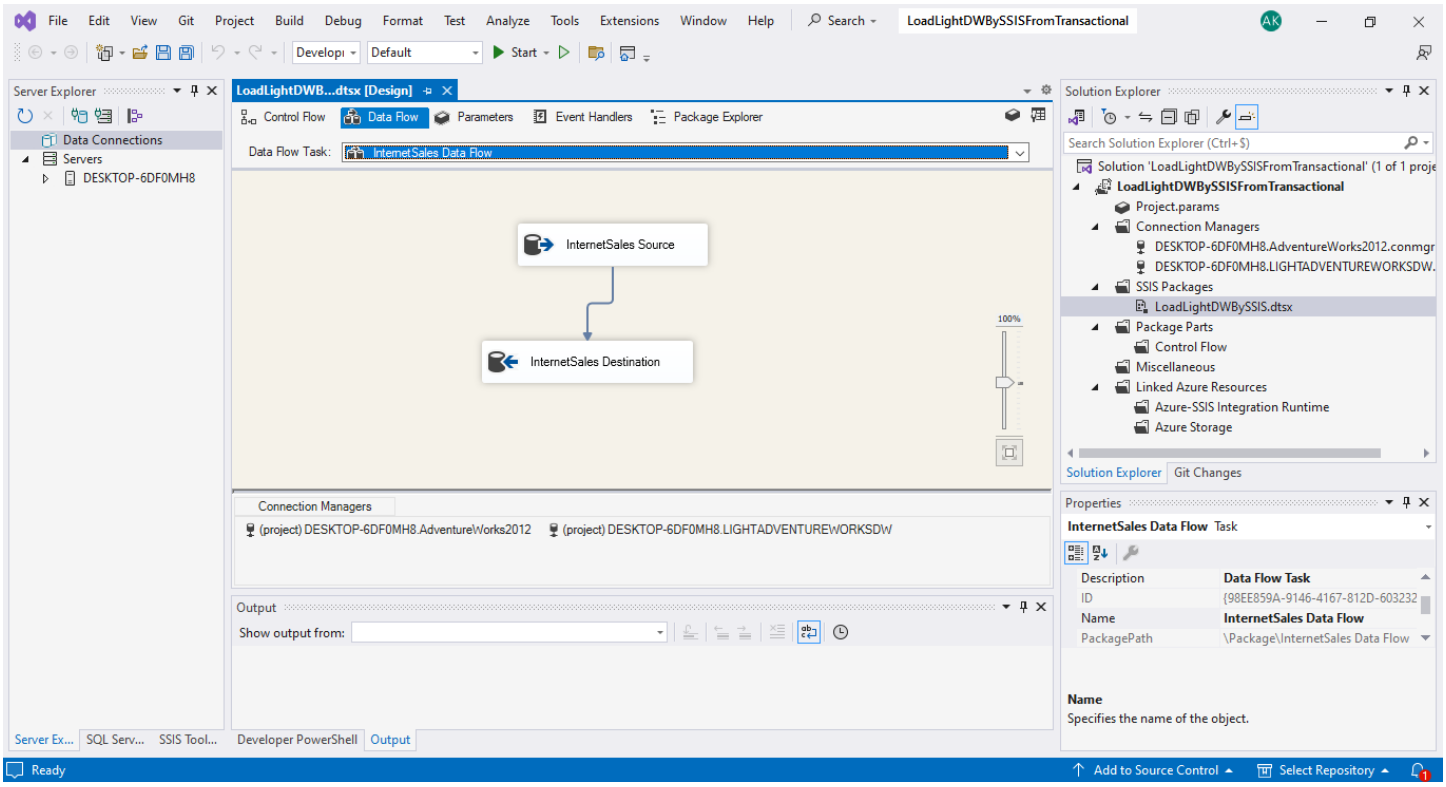
Ajout d'une tâche de flux de données nommée LoadDate au package



Le Script Utlilisé :

```
SELECT
    CONVERT(INT, CONVERT(CHAR(8), OrderDate, 112)) AS DateKey,
    CONVERT(DATE, OrderDate) AS FullDate,
    SUBSTRING(CONVERT(CHAR(8), OrderDate, 112), 5, 2) + ' ' + DATENAME(MONTH, OrderDate) AS
MonthNumberName,
    DATEPART(QUARTER, OrderDate) AS CalendarQuarter,
    DATEPART(YEAR, OrderDate) AS CalendarYear
FROM
    AdventureWorks2012.Sales.SalesOrderHeader;
```

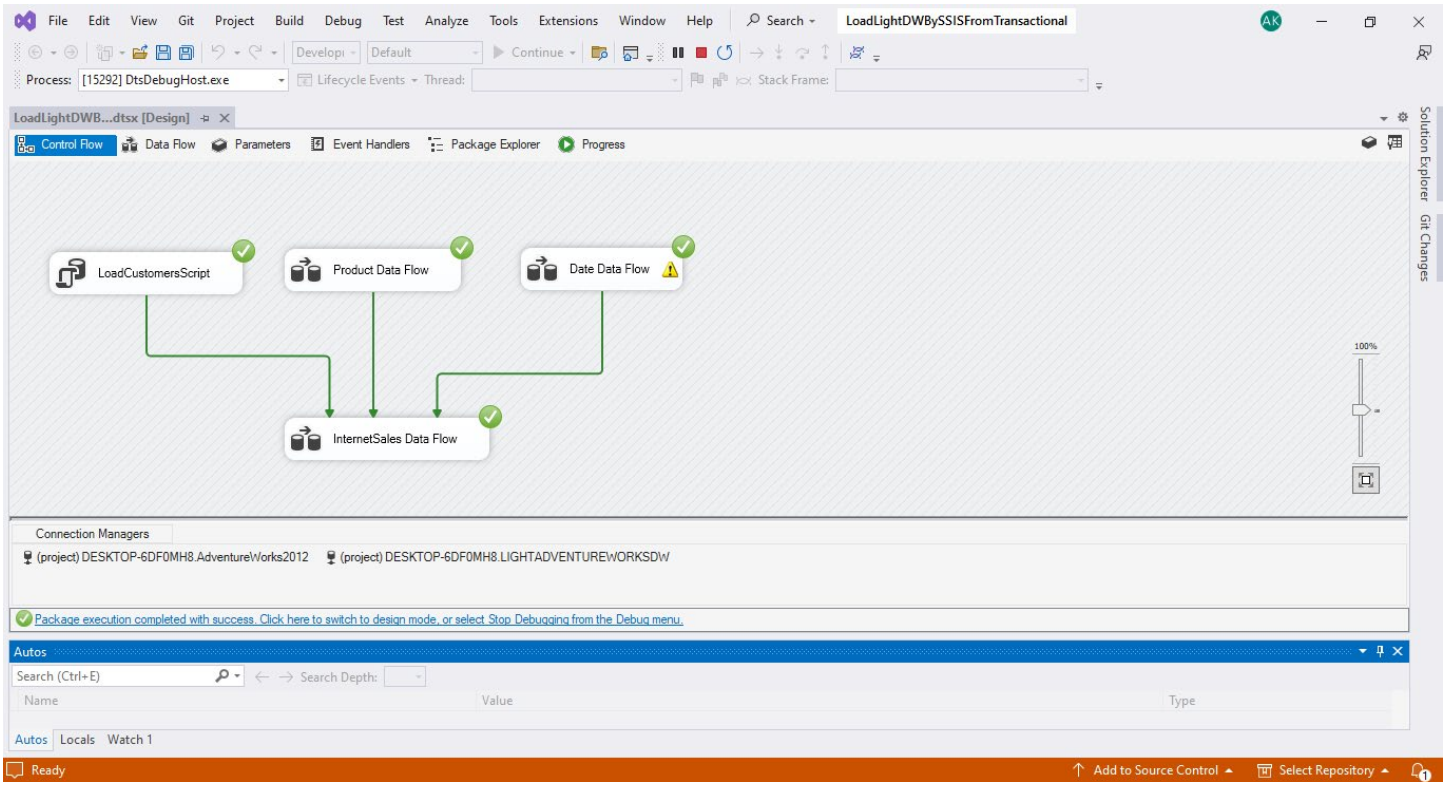
Ajout d'une tâche de flux de données nommée LoadInternetSale au package



Le Script Utlilisé :

```
SELECT
    C.CustomerDwKey,
    SOD.ProductID AS ProductKey,
    CONVERT(INT, CONVERT(CHAR(8), SOH.OrderDate, 112)) AS OrderDateKey,
    SOD.OrderQty AS OrderQuantity,
    SOD.OrderQty * (SOD.UnitPrice - SOD.UnitPriceDiscount) AS SalesAmount,
    SOD.UnitPrice,
    SOD.UnitPriceDiscount AS DiscountAmount
FROM
    AdventureWorks2012.Sales.SalesOrderHeader AS SOH
    INNER JOIN LightAdventureWorksDW.dbo.Customers AS C ON SOH.CustomerID = C.CustomerKey
    INNER JOIN AdventureWorks2012.Sales.SalesOrderDetail AS SOD ON SOH.SalesOrderID =
SOD.SalesOrderID;
```

Résultats



Application de la compression des données.

Utilisation d'un index.

Lien Github des scripts et résultats détaillés : https://github.com/khaouitiabdelhakim/ETL-Real-Example