Create the following DimCustomer table in the OLAP\_Target database. The schema of DimCustomer is as follows:

CREATE TABLE dbo.dimcustomer  
  (  
     [customerid]   INT NOT NULL,  
     [title]        NVARCHAR (8) NULL,  
     [firstname]    [dbo].[NAME] NOT NULL,  
     [middlename]   [dbo].[NAME] NULL,  
     [lastname]     [dbo].[NAME] NOT NULL,  
     [suffix]       NVARCHAR (10) NULL,  
     [companyname]  NVARCHAR (128) NULL,  
     [salesperson]  NVARCHAR (256) NULL,  
     [emailaddress] NVARCHAR (50) NULL,  
     [inserteddate] DATETIME NULL,  
     [updateddate]  DATETIME NULL,  
     [hashkey]      NVARCHAR (128) NOT NULL,  
     PRIMARY KEY (customerid)  
  ); 

Then select the Hash Columns and use the Hash function. For this scenario, the derived column will use the following function which is shown in Figure 11-14:

sha1(FirstName+LastName+CompanyName)

Here is the code that has been used in the Columns for InsertedDate and UpdatedDate in Figure 11-18.

iif(isNull(InsertedDate),currentTimestamp(),{InsertedDate})

currentTimestamp()

Here is the SQL code that has been executed in Figure 11-26.

SELECT \*  
FROM   [SalesLT].[customer]  
WHERE  customerid = 148

Here is the SQL code that has been executed in Figure 11-27.

UPDATE [SalesLT].[customer]  
SET    lastname = 'Update'  
WHERE  customerid = 148;  
  
SELECT \*  
FROM   [SalesLT].[customer]  
WHERE  customerid = 148

Here is the SQL code that has been executed in Figure 11-28.

SELECT \*  
FROM   [dbo].[Dimcustomer]  
WHERE  CustomerId = 148

Here is the SQL code that has been executed in Figure 11-29.

SELECT \*  
FROM   [dbo].[DimCustomer]

Also test inserting a new record into the OLTP system and then re-run the ADF pipeline to see if the insert is picked up . To that end, execute the USE and INSERT statements in the following example. By executing the following query, a new record will be inserted into the [SalesLT].[Customer] table:

USE [OLTP\_Source]  
  
go  
  
INSERT INTO [SalesLT].[customer]  
            ([namestyle],  
             [title],  
             [firstname],  
             [middlename],  
             [lastname],  
             [suffix],  
             [companyname],  
             [salesperson],  
             [emailaddress],  
             [phone],  
             [passwordhash],  
             [passwordsalt],  
             [rowguid],  
             [modifieddate])  
VALUES      (1,  
             'Mr.',  
             'John',  
             'B',  
             'Doe',  
             NULL,  
             'MSSQLTips',  
             NULL,  
             NULL,  
             NULL,  
             'L/Rlwxzp4w7RWmEgXX+/A7cXaePEPcp+KwQhl2fJL7d=',  
             '1KjXYs4=',  
             '2005-08-01 00:00:00:000')  
  
go

Here is the SQL code that has been executed in Figure 11-31.

SELECT \*  
FROM   [SalesLT].[customer]  
WHERE  companyname = 'MSSQLTips'

Here is the SQL code that has been executed in Figure 11-32.

SELECT \*  
FROM   [dbo].[dimcustomer]  
WHERE  companyname = 'MSSQLTips'