**Mini Project Data Mart**

**Business Need:**

a. What are the count of correspondences and cost of communication

per sender per subject per institution per client per year/month?

b. What is the correlation between month, subject and institute

|  |  |  |
| --- | --- | --- |
| **Measure** | **OLTP Fields** | **Data Type** |
| Cost | Rejected flag | Int |

Figure 1. Finalized measures for the Mini Project Data Mart

|  |  |  |  |
| --- | --- | --- | --- |
| **Dimension** | **OLTP Fields** | **Data Type** | **Parent Dimension** |
| Dim\_Client | Dim\_Client | Int | None |
| Dim\_Date | Dim\_Date | Int | None |
| Dim\_Subject | Dim\_Subject | Int | None |
| Dim\_Institution | Dim\_Institution | Int | None |
| Dim\_Sender | Dim\_Sender | Int | None |

Figure 2. Finalized dimensions and hierarchies for the Mini Project Data Mart

|  |  |
| --- | --- |
| **Mini\_Project\_Fact** | |
| **Field Name** | **Data Type** |
| Cost | Int |

Figure 3. The Mini Project Data Mart schema with measures in a fact table

|  |  |
| --- | --- |
| **Mini\_Project\_Fact** | |
| **Field Name** | **Data Type** |
| Fact\_ID (PK) | Varchar(500) |
| Cost | Int |

|  |  |
| --- | --- |
| **Dim\_Client** | |
| **Field Name** | **Data Type** |
| Client\_Num (PK) | Varchar(500) |
| EN\_Client | Varchar(500) |
| FN\_Client | Varchar(500) |

|  |  |
| --- | --- |
| **Dim\_Date** | |
| **Field Name** | **Data Type** |
| Date\_ID (PK) | Varchar(500) |
| Reg\_Num | Varchar(500) |
| Reg\_LN | Varchar(500) |
| Reg\_FN | Varchar(500) |
| Comm\_Date | Datetime |
| Cert\_Date | Datetime |
| Post\_Date | Datetime |

|  |  |
| --- | --- |
| **Dim\_Subject** | |
| **Field Name** | **Data Type** |
| Subject\_ID (PK) | Varchar(500) |
| Subj\_Comm | Varchar(500) |

|  |  |
| --- | --- |
| **Dim\_Institution** | |
| **Field Name** | **Data Type** |
| Institution\_ID (PK) | Varchar(500) |
| Institution | Varchar(500) |

|  |  |
| --- | --- |
| **Dim\_Sender** | |
| **Field Name** | **Data Type** |
| Sender\_ID (PK) | Varchar(500) |
| Sender\_LN | Varchar(500) |
| Sender\_FN | Varchar(500) |
| Sender\_PosTit | Varchar(500) |
| Sender\_Branch | Varchar(500) |

Figure 4. The Mini Project Data Mart schema with dimension tables added

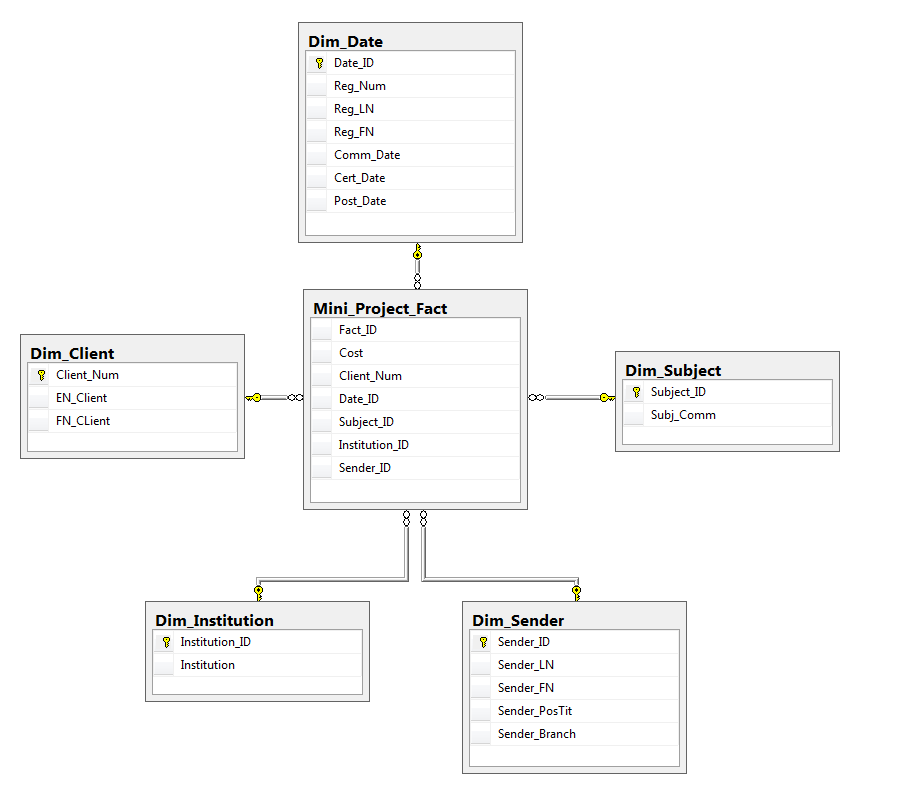


Figure 5. The Mini Project Data Mart Diagram

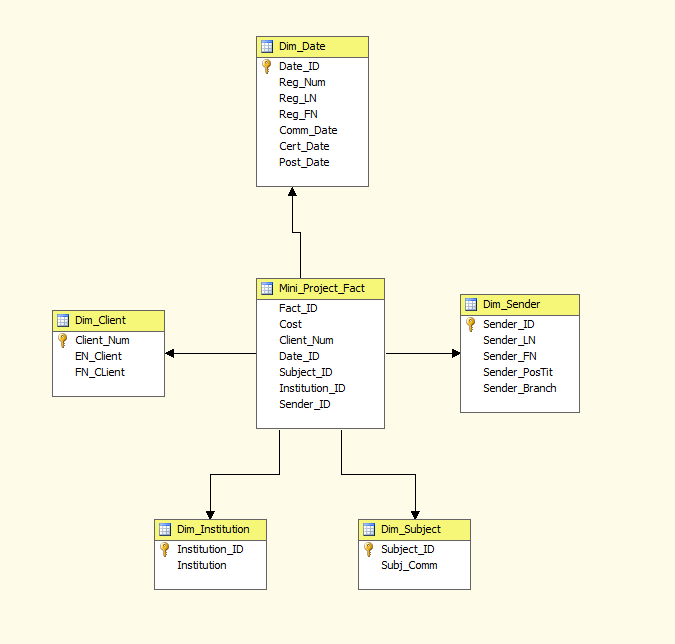
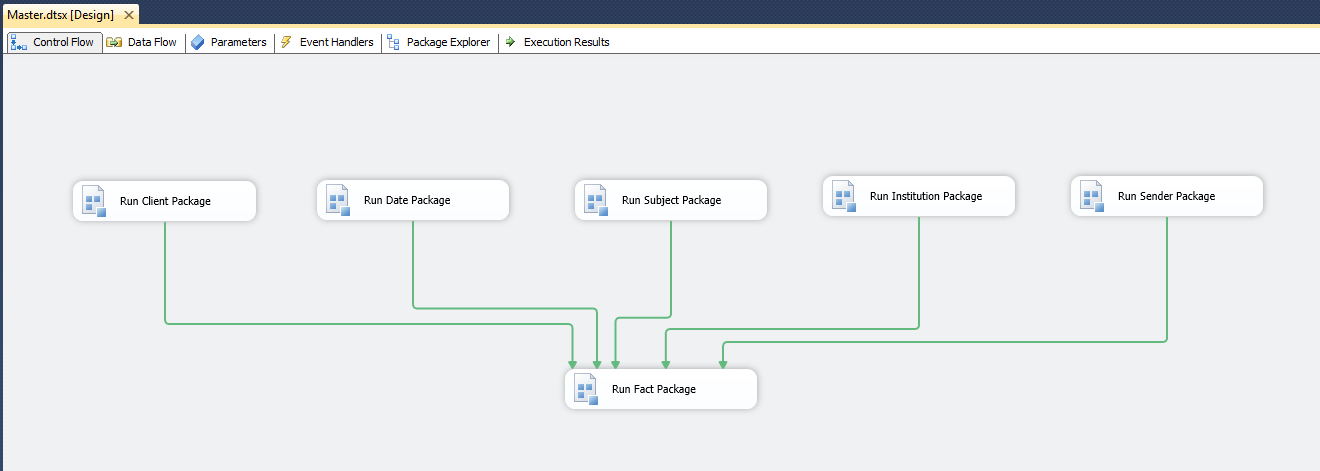


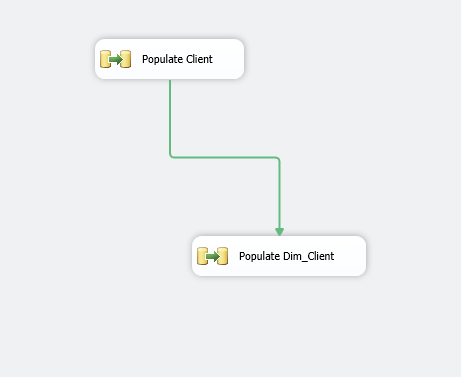
Figure 6. The Mini Project Data Mart Cube

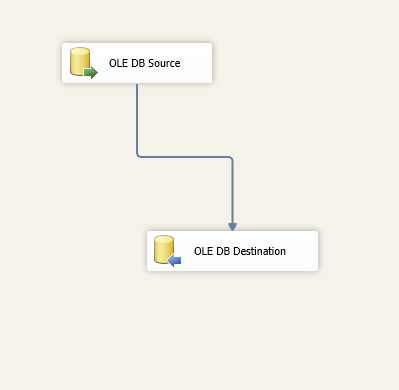
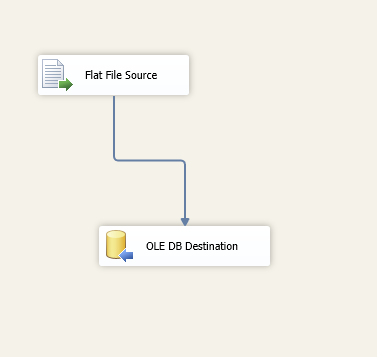
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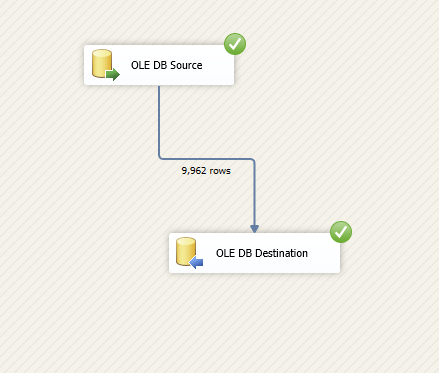
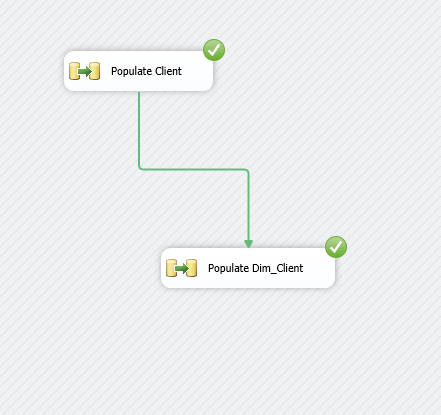


Client.dtsx

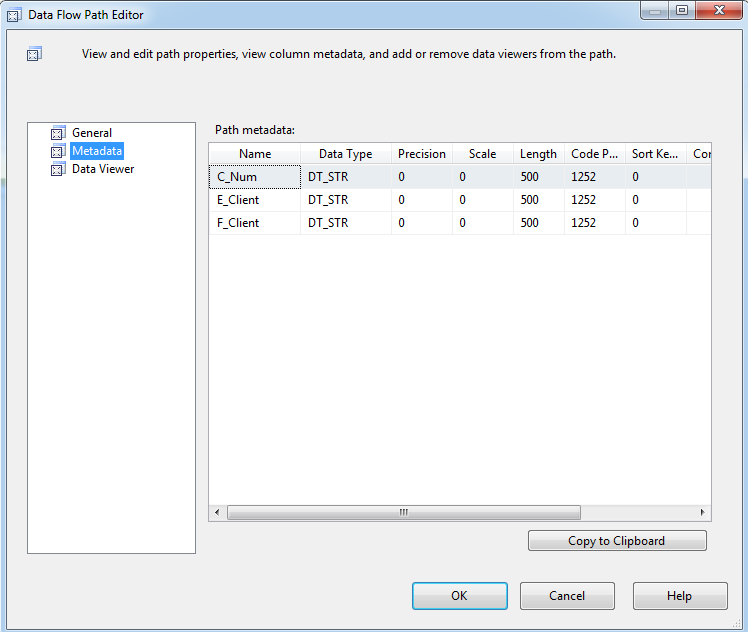
A Snapshot of the SSIS package DataFlow



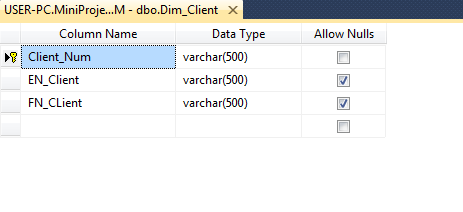
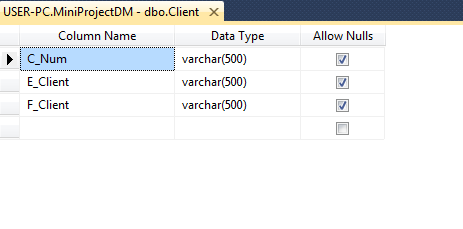




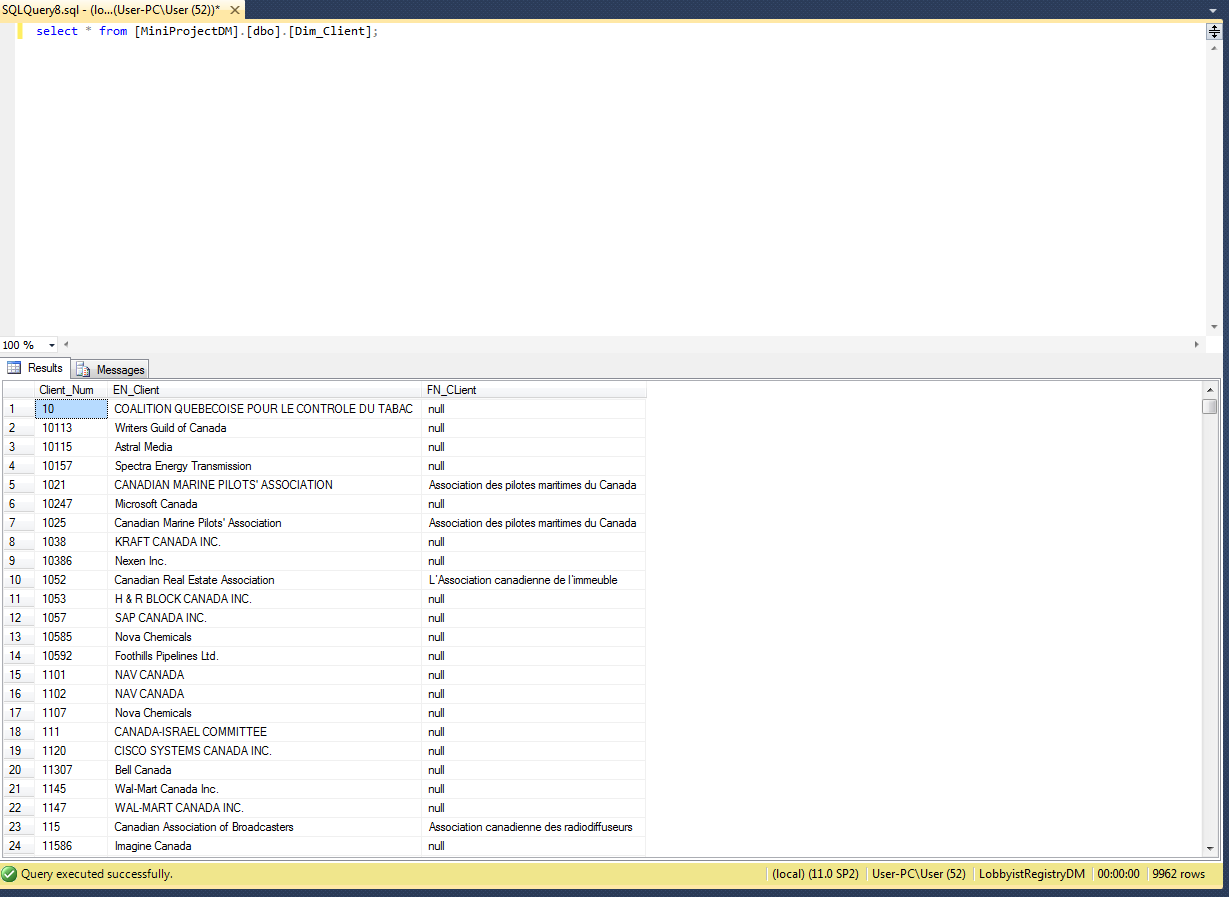
A snapshot of DataFlow MetaData showing the types and sizes of data in SSIS



A snapshot of table design view showing the types and sizes of columns in SQL Server

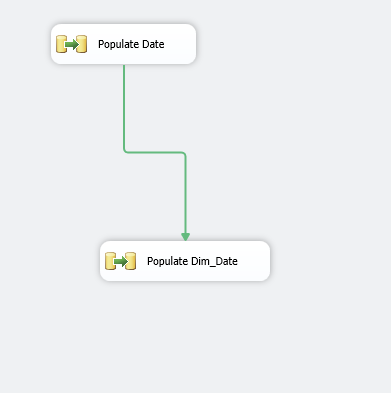


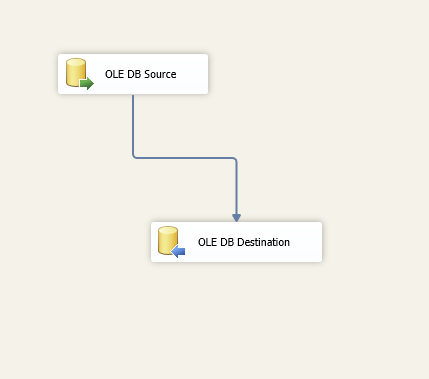
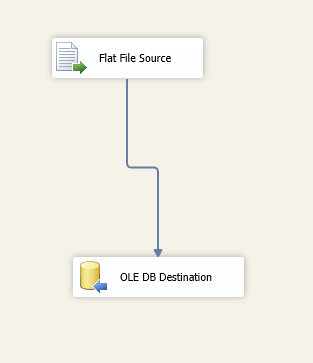
A snapshot of the result of the "Select \* from ..." query from your table after successfully running the SSIS package

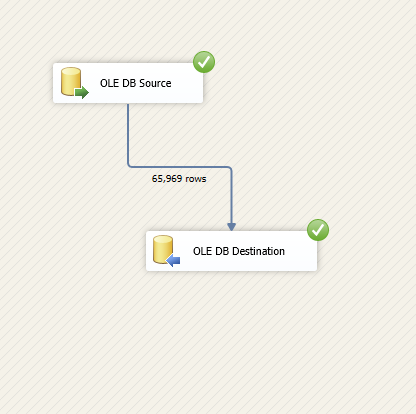
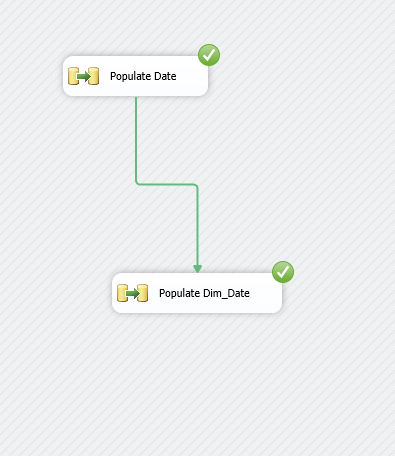


Data.dtsx

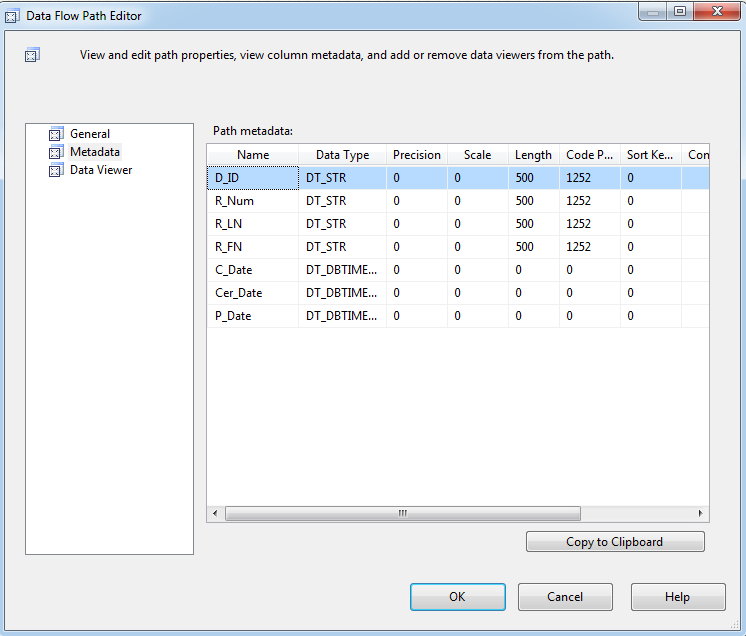
A Snapshot of the SSIS package DataFlow



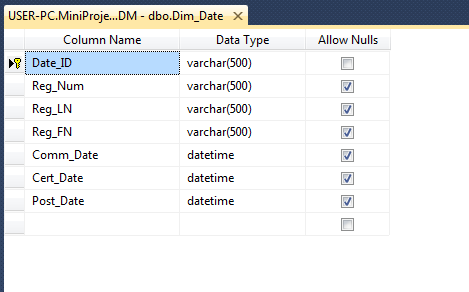
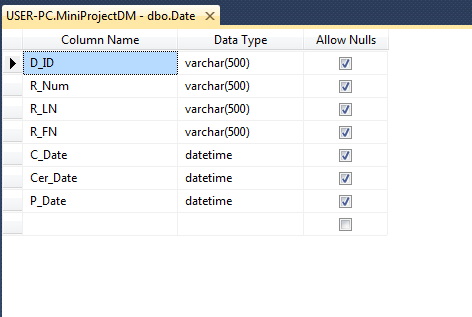




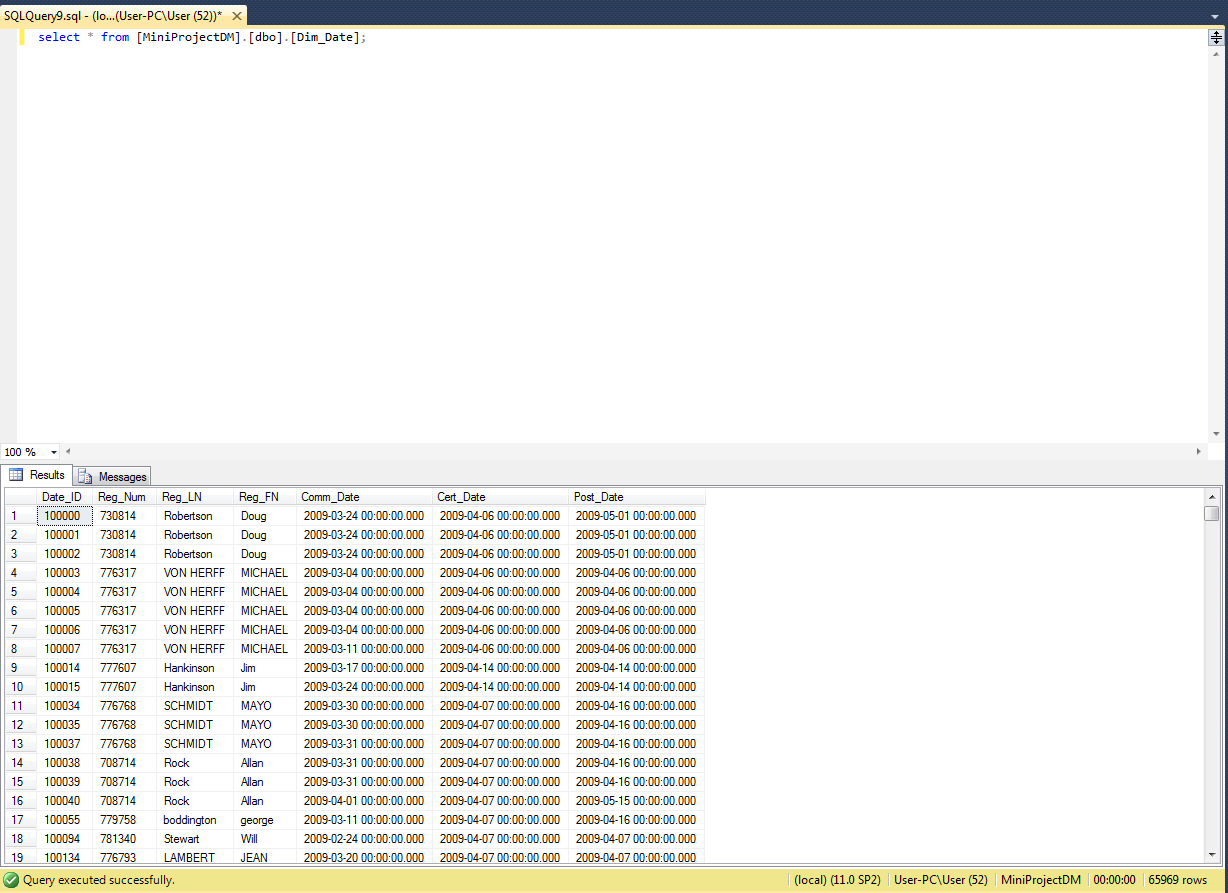
A snapshot of DataFlow MetaData showing the types and sizes of data in SSIS



A snapshot of table design view showing the types and sizes of columns in SQL Server

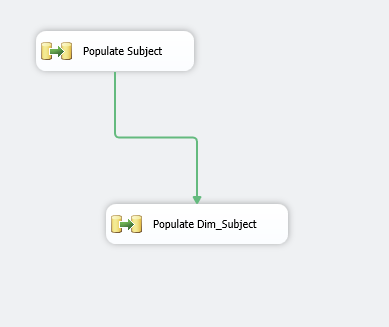


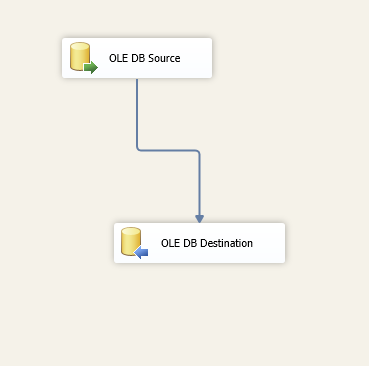
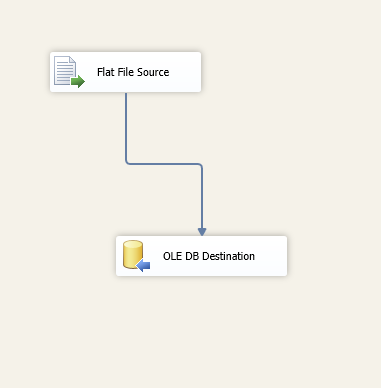
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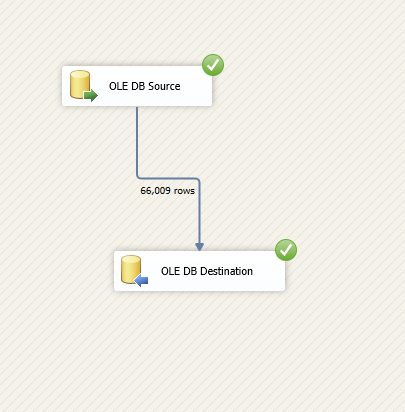
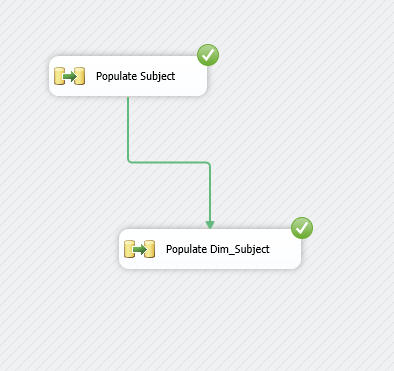


Subject.dtsx

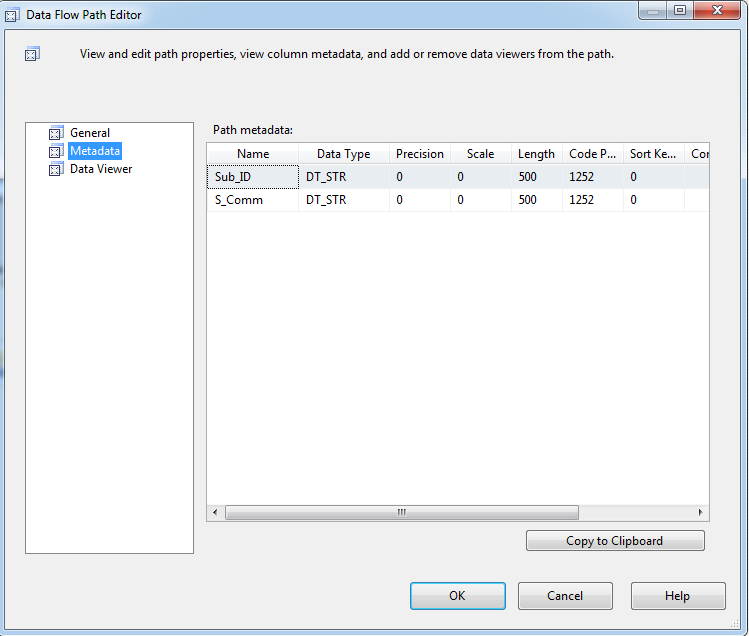
A Snapshot of the SSIS package DataFlow



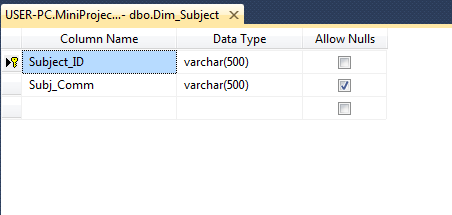
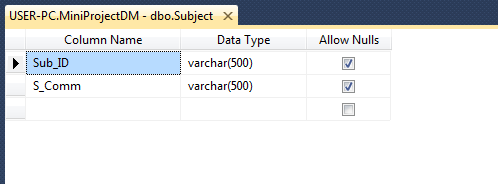




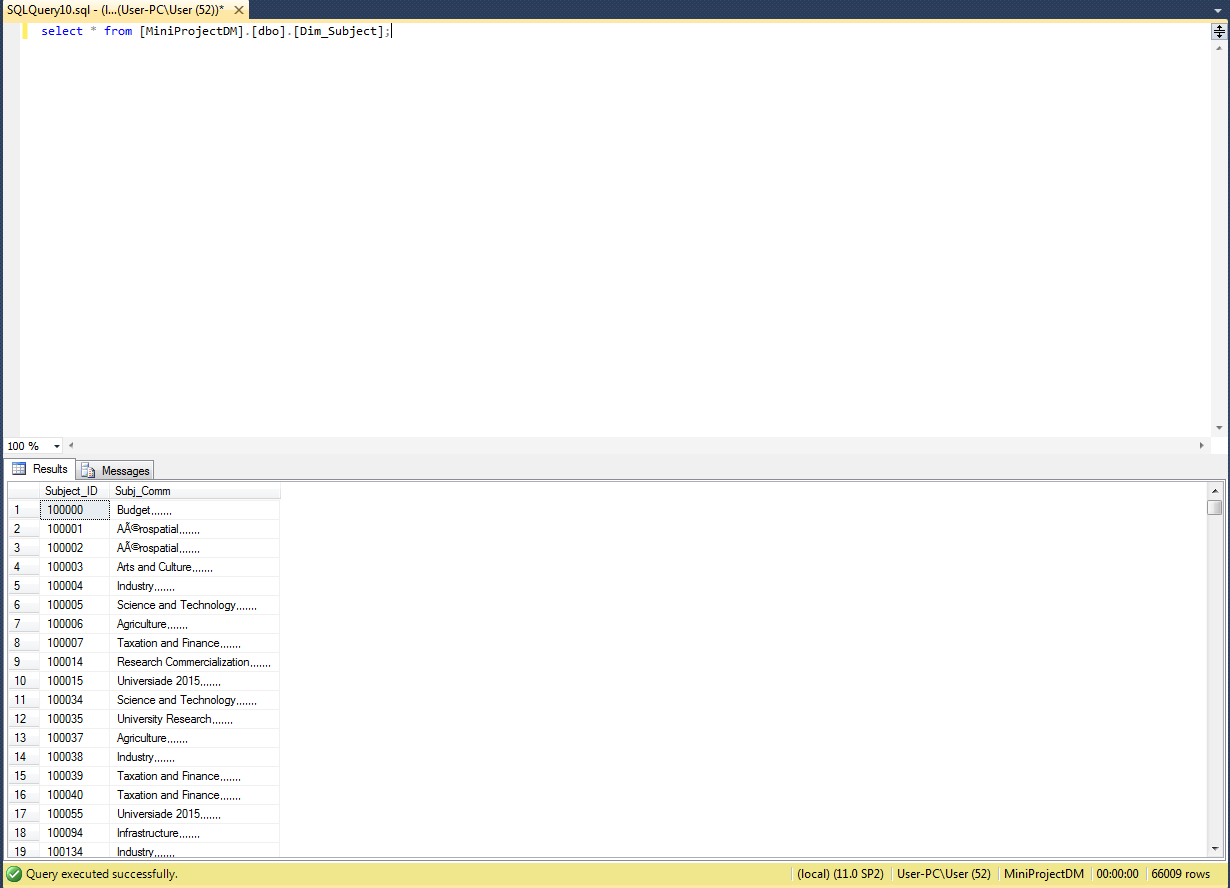
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A snapshot of table design view showing the types and sizes of columns in SQL Server

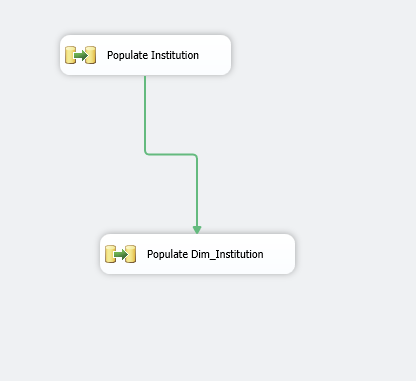


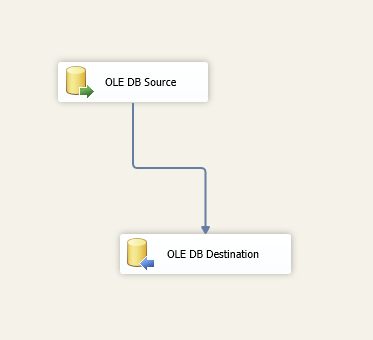
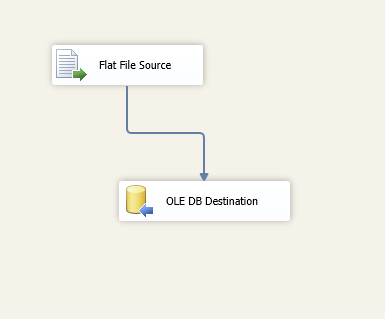
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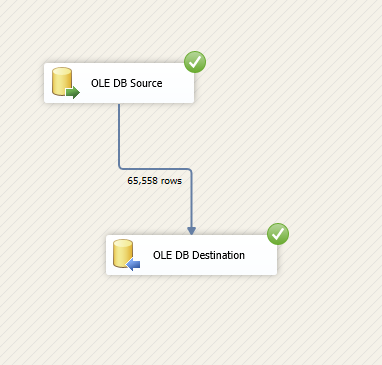
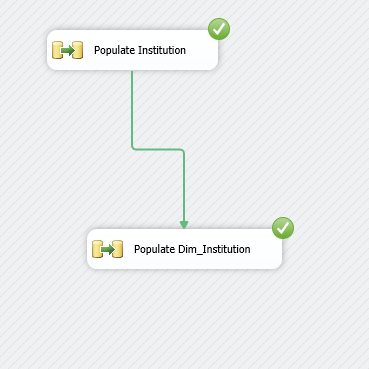


Institution.dtsx

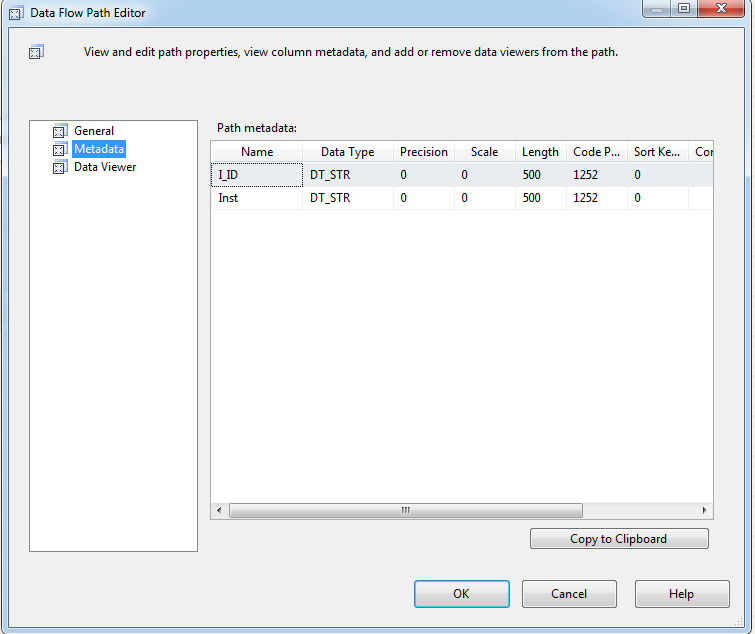
A Snapshot of the SSIS package DataFlow



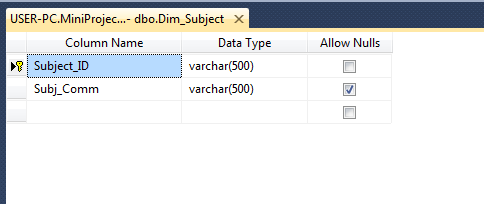
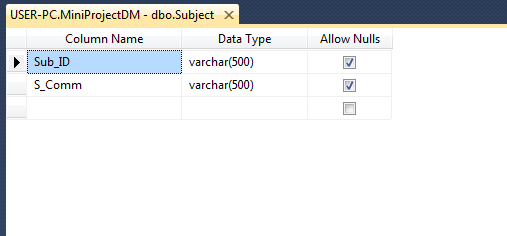




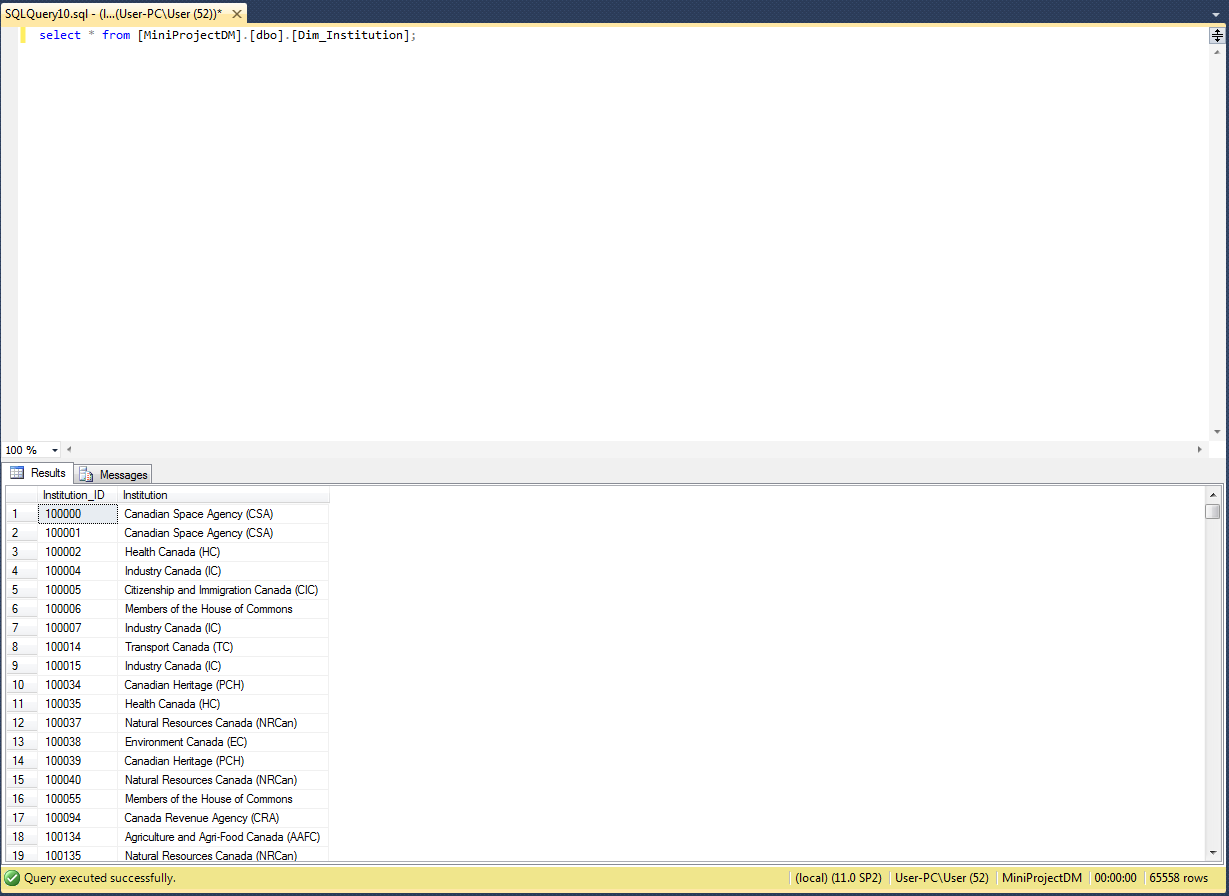
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A snapshot of table design view showing the types and sizes of columns in SQL Server

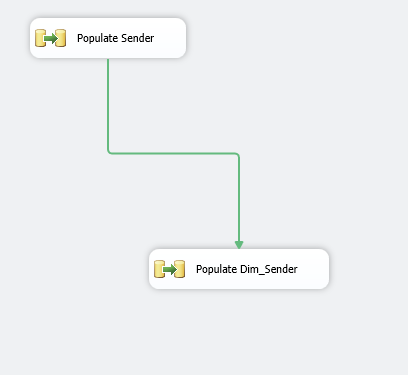


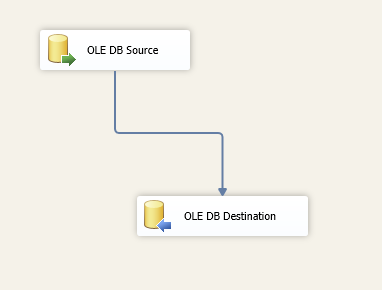
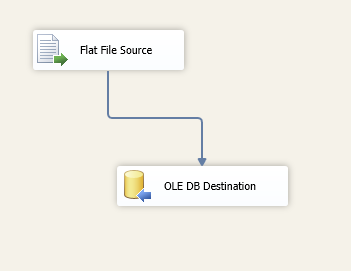
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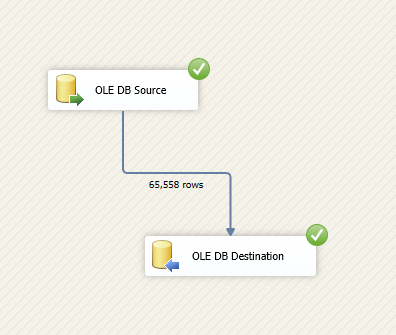
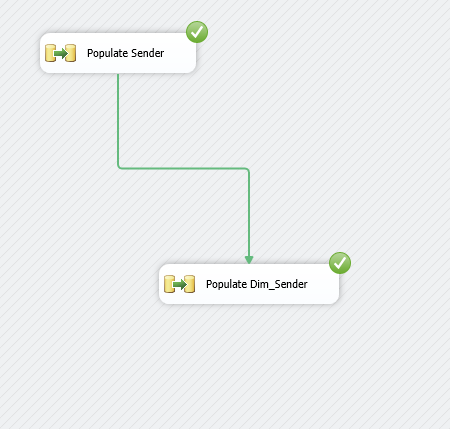


Sender.dtsx

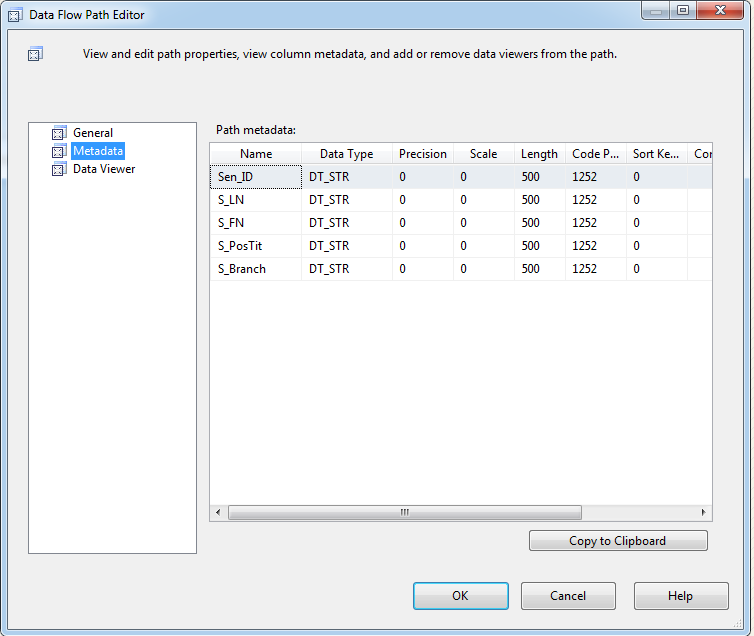
A Snapshot of the SSIS package DataFlow



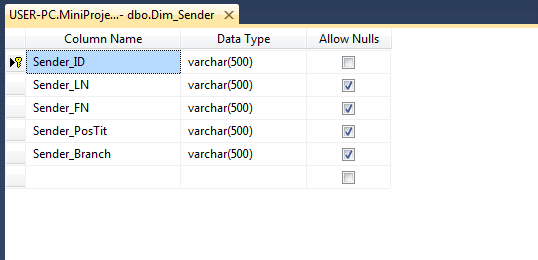
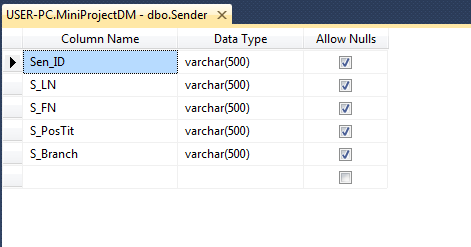




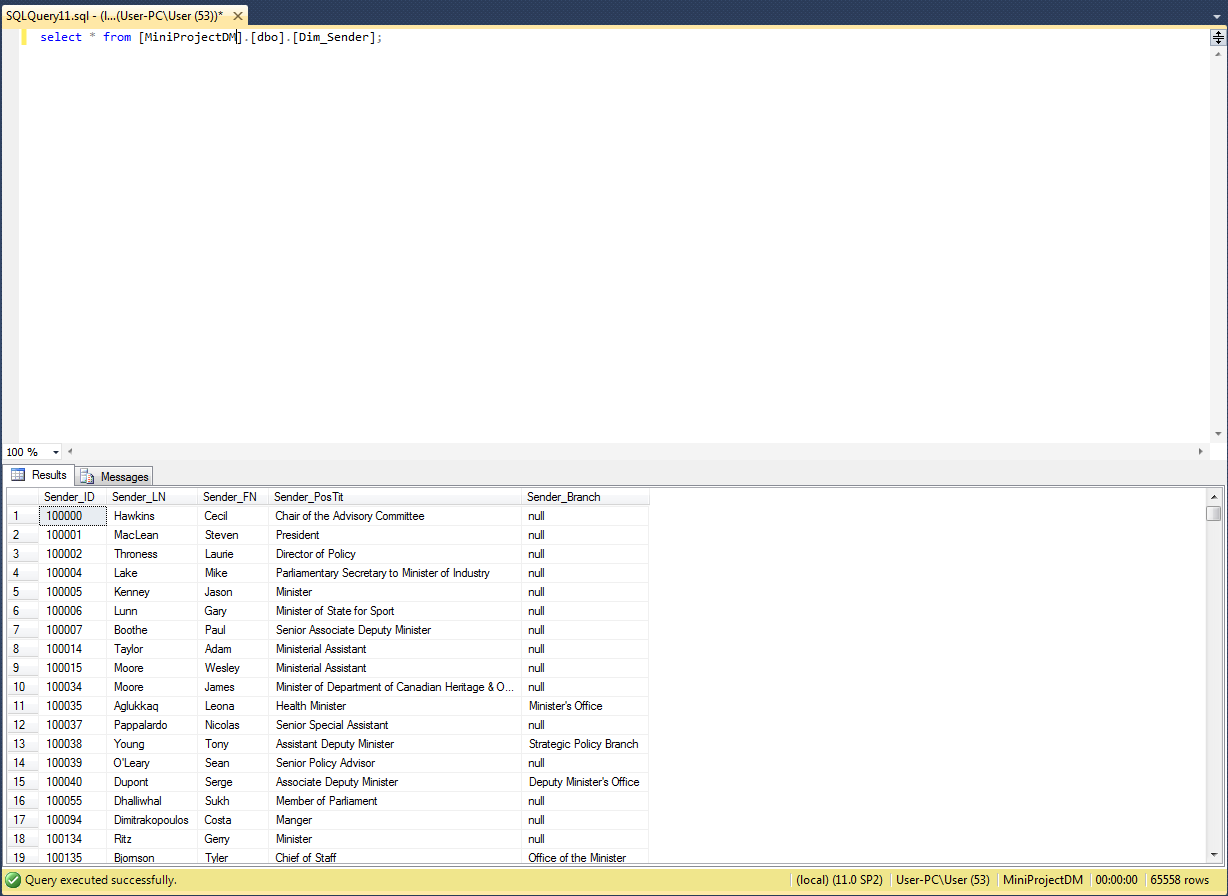
A snapshot of DataFlow MetaData showing the types and sizes of data in SSIS



A snapshot of table design view showing the types and sizes of columns in SQL Server

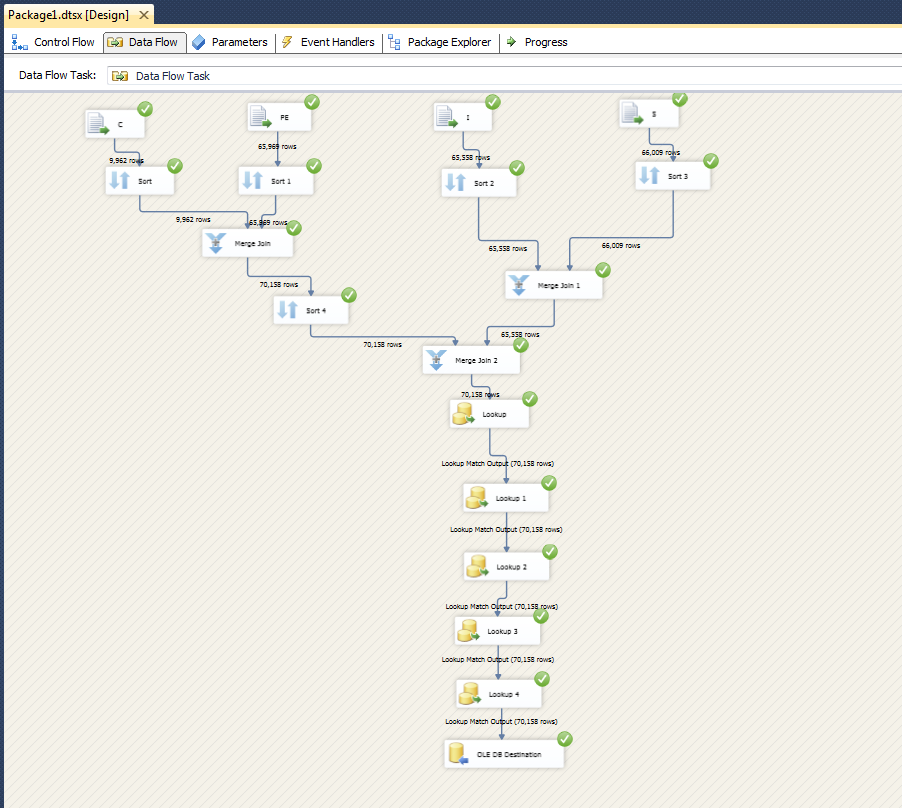


A snapshot of the result of the "Select \* from ..." query from your table after successfully running the SSIS package

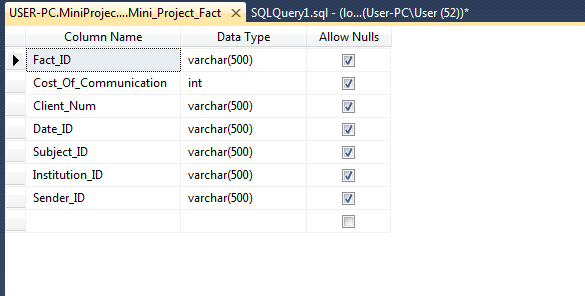


Fact.dtsx

A Snapshot of the SSIS package DataFlow



A snapshot of table design view showing the types and sizes of columns in SQL Server



A snapshot of the result of the "Select \* from ..." query from your table after successfully running the SSIS package

