Data Transfer

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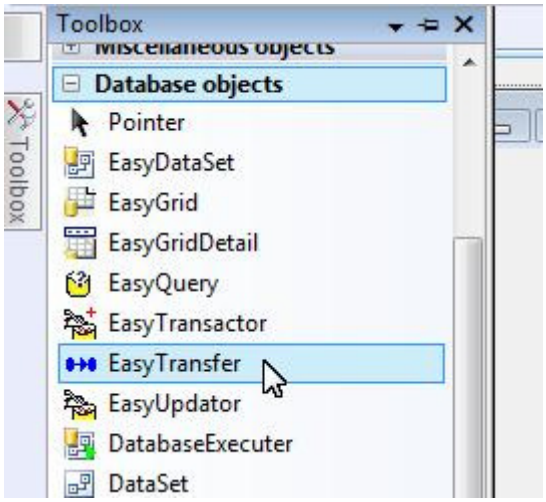
Introduction

EasyTransfer is a component for transferring data from a data source to a data destination.



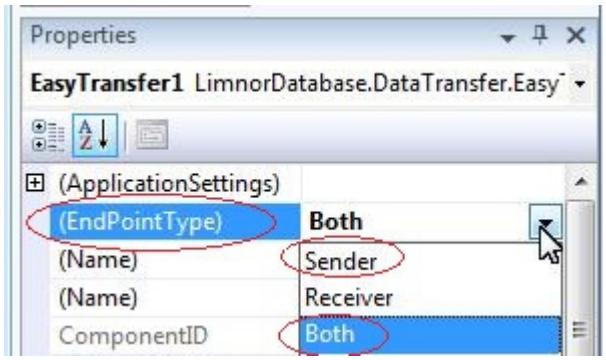
A data source can be a set of database records or a text file. A data destination can be database table or a file. The data source and the data destination can be in the same computer or in different computers. The data transportation can be done via FTP in a WAN environment, via file copy in a LAN environment, or via direct database operations.

Data Transfer End Points

An end point is a data source or a data destination. An EasyTransfer component can act as a data source, a data destination, or both. It is determined through the setting the EndPointType property.

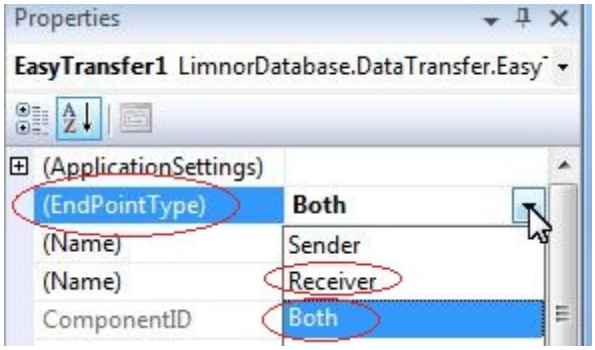
Data Source

To use EasyTransfer as a data source, set EndPointType to Sender or Both:



Data Destination

To use EasyTransfer as a data destination, set EndPointType to Receiver or Both:



End point location

Data source and data destination may be in one computer or in two different computers.

If an EasyTransfer is used as Sender and another EasyTransfer is used as Receiver then such two EasyTransfer components may be in two different programs locating in two different computers.

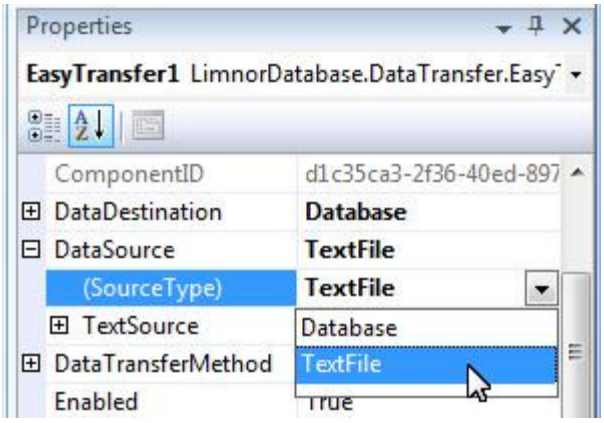
If data source and data destination are in the same computer then an EasyTransfer can be used as both a data sender and a data receiver, by setting its EndPointType to Both.

Data Source

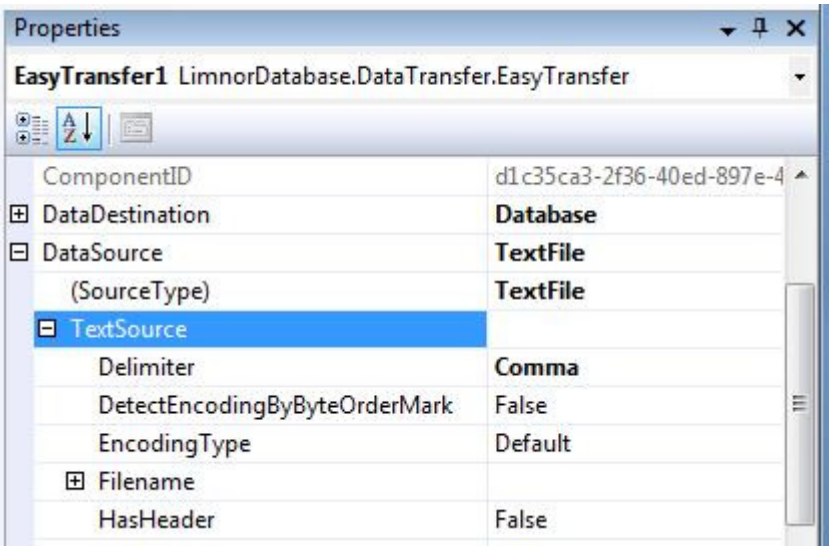
Set DataSource property to specify the data source for the data transfer.

Text file

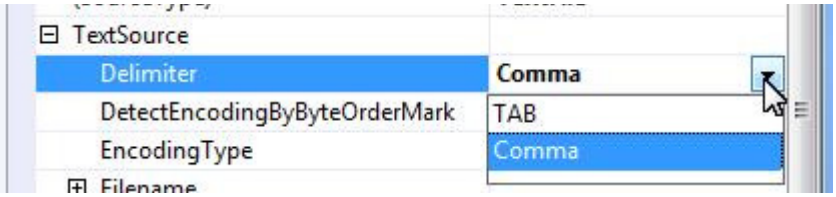
If a text file is the data source then set the SourceType property to TextFile.



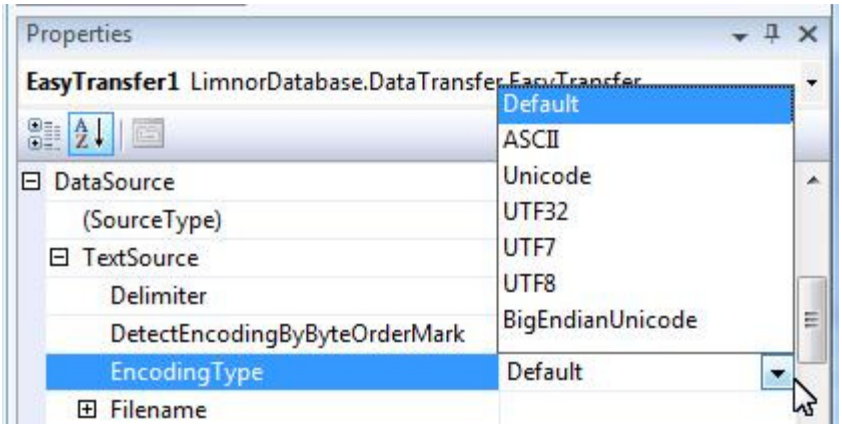
The text file attributes are specified through the TextSource property. Each property is explained below.



- **Delimiter** – In the text file, each line is one record, each record consists of a number of columns. Columns are separated by Comma or Tab. Specify Comma or Tab is used via this property.



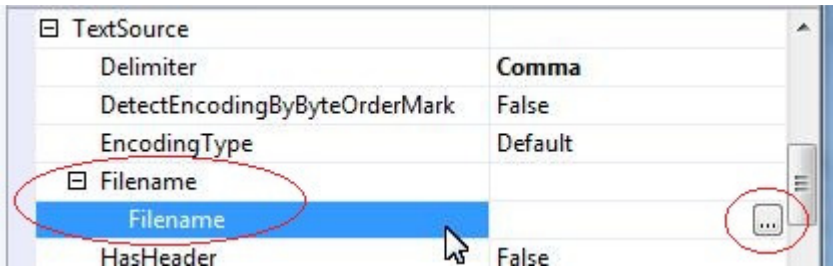
- **DetectEncodingByByteOrderMark** – If this property is true then the system detects the encoding by looking at the first three bytes of the stream. It automatically recognizes UTF-8, little-endian Unicode, and big-endian Unicode text if the file starts with the appropriate byte order marks. Otherwise, the UTF8Encoding is used. For more information about byte order marks (BOM) see http://msdn.microsoft.com/en-us/library/system.text.encoding.getpreamble(v=VS.90).aspx .
- **EncodingType** – If DetectEncodingByByteOrderMark is set to False then you may specify the file encoding through this property.



- Filename – It specifies the file name and path to the text file.

- To locate a file in the computer file system, select ConstantValue

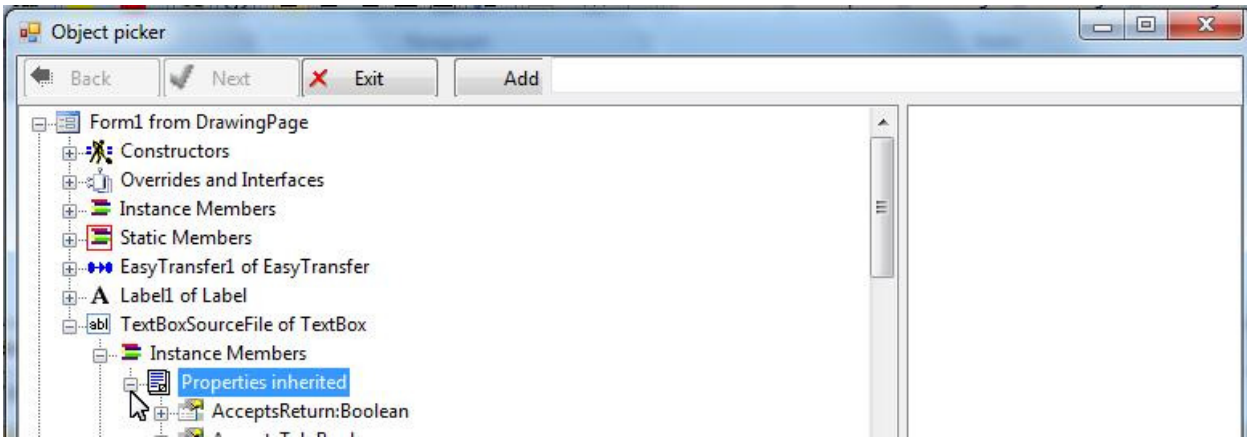
and click ... to launch an Open File Dialogue Box



- To use an expression to form the file name and path, select MathExpression; to use a property as the file name and path, select Property. For example, suppose we want to use a Text Box and let the user enter file name and path.

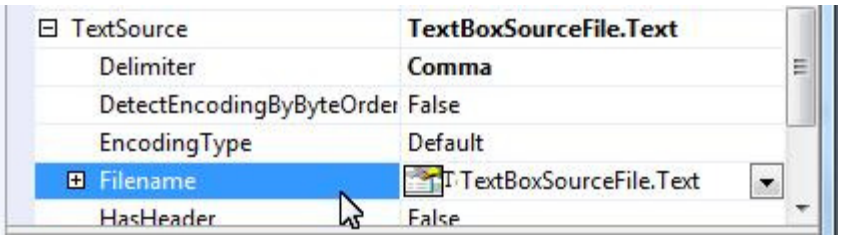
We may select Property

and then select the Text property of the Text Box:

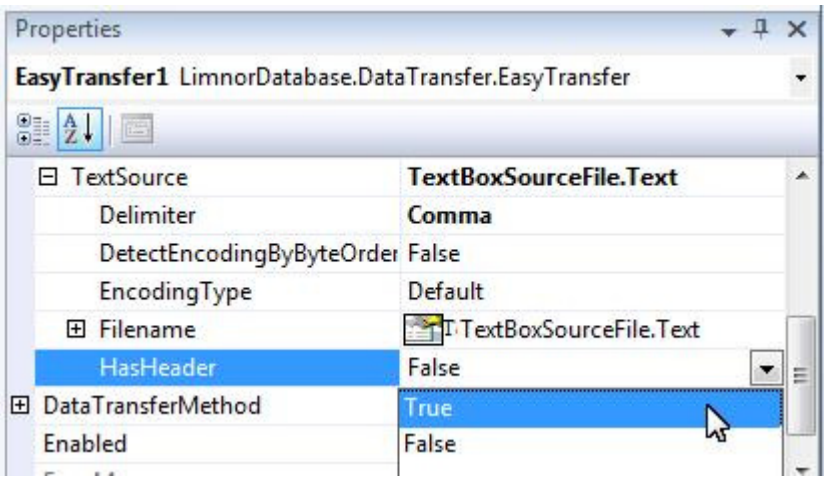


Select the Text property

The Text property of the text box is used as the file name and path

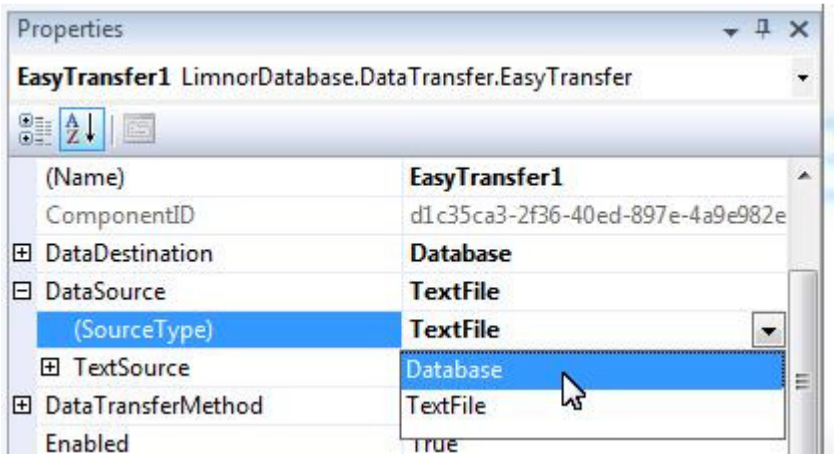


- HasHeader – Set this property to True if the first line of the text file contains column names.

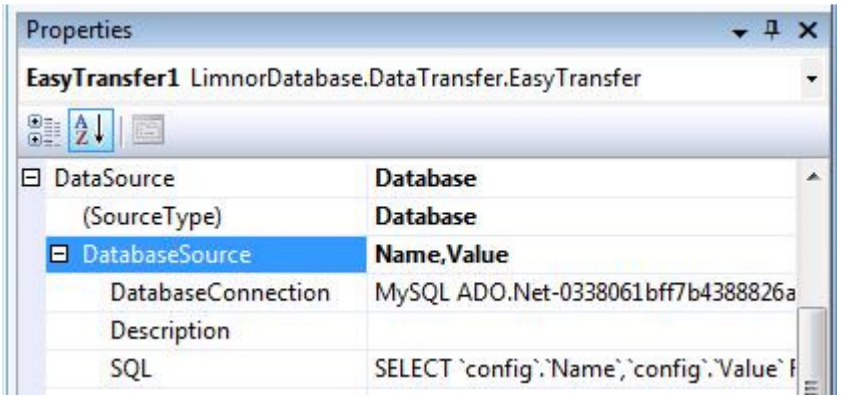


Data Query

If source data are from a database then set SourceType to Database

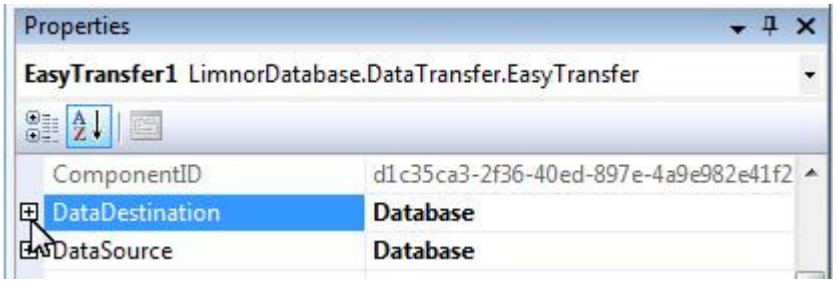


DatabaseSource property appears. Set its SQL property to build a data query to get desired data from a database. For more information on build data query, see http://www.limnor.com/support/Limnor%20Studio%20-%20User%20Guide%20-%20Part%20VI.pdf



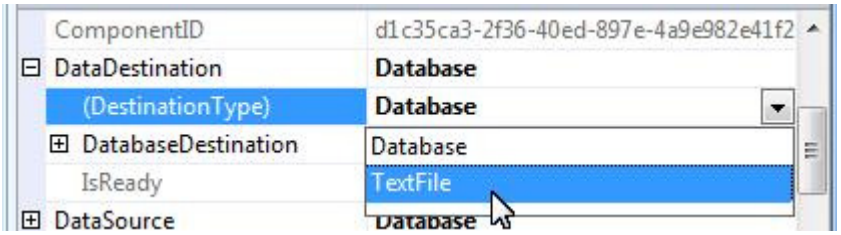
Data Destination

Set DataDestination property to specify the data source for the data transfer.

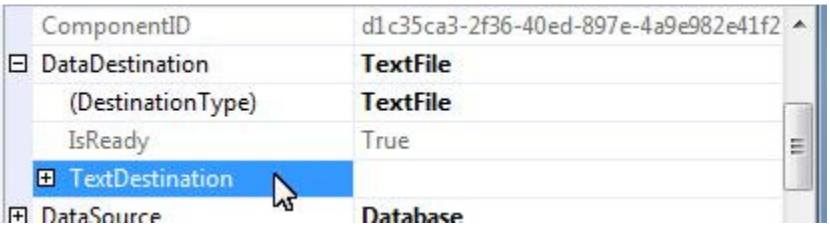


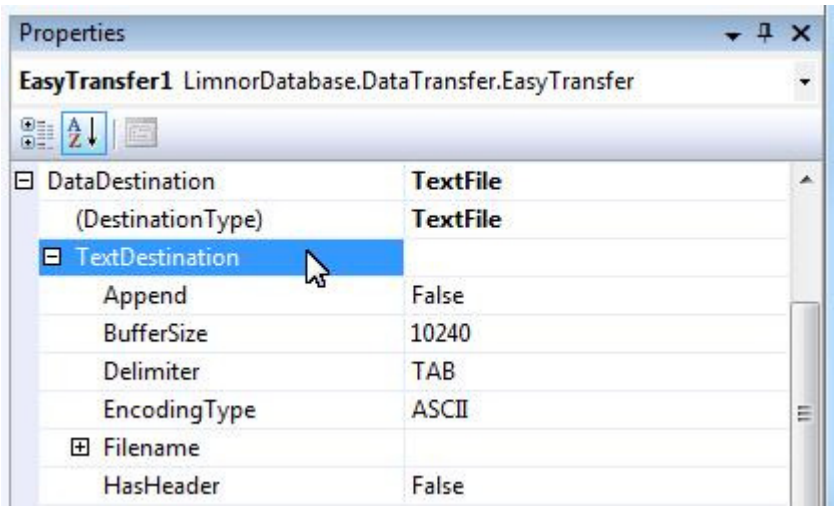
Text File

If the data destination is a text file then set DestinationType to TextFile

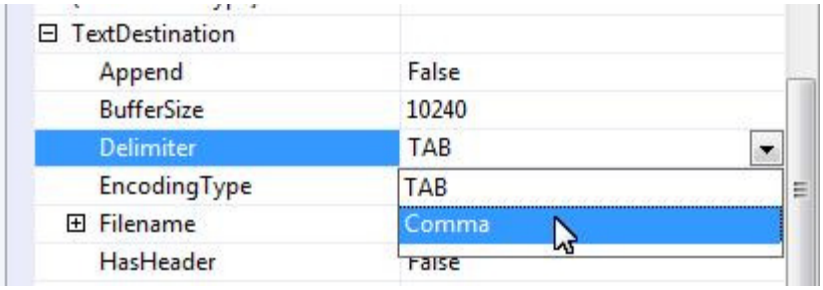


TextDestination property appears for specifying file attributes:

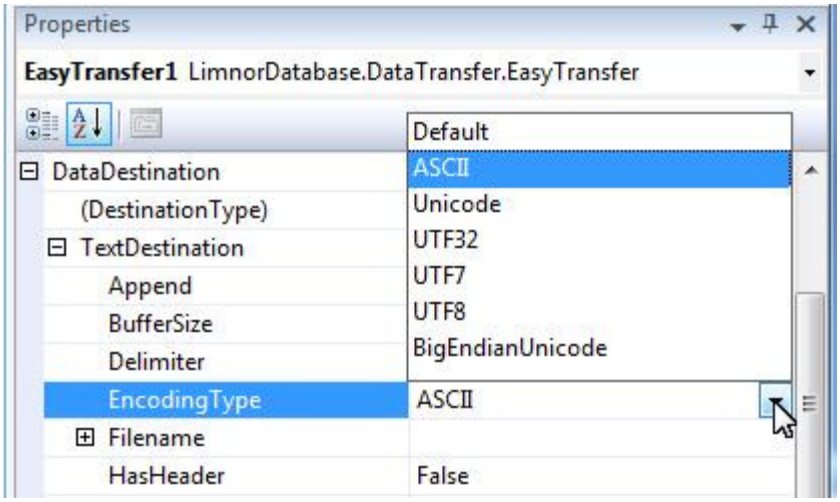




- Append – Set it to False to replace the whole file. Set it to True to append source data to the end of file if the file exists.
- BufferSize – It is the buffer size for writing file.
- Delimiter – In the text file, each line is one record, each record consists of a number of columns. Columns are separated by Comma or Tab. Specify Comma or Tab is used via this property.

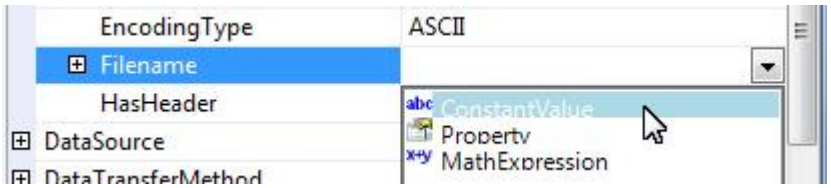


- EncodingType – Set this property to specify the encoding of the file

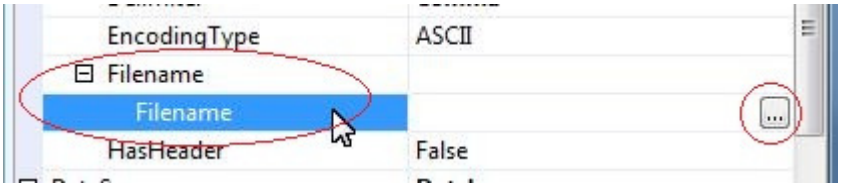


- Filename – It specifies the file name and path to the destination text file.

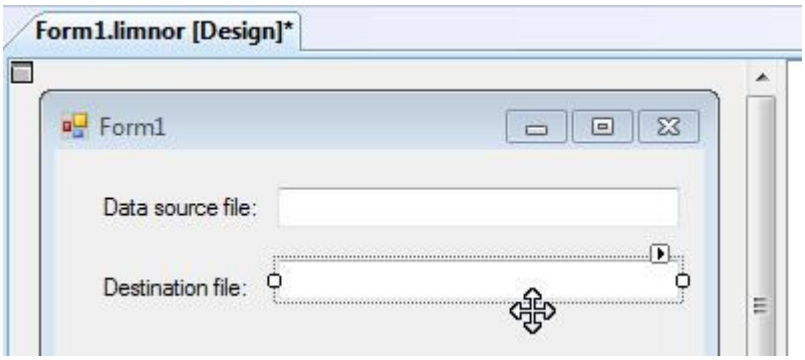
- To locate a file in the computer file system, select ConstantValue



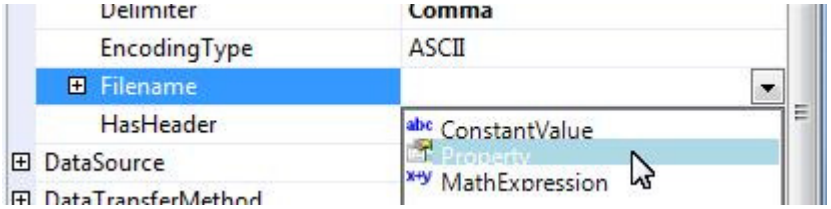
and click [...] to launch an Open File Dialogue Box



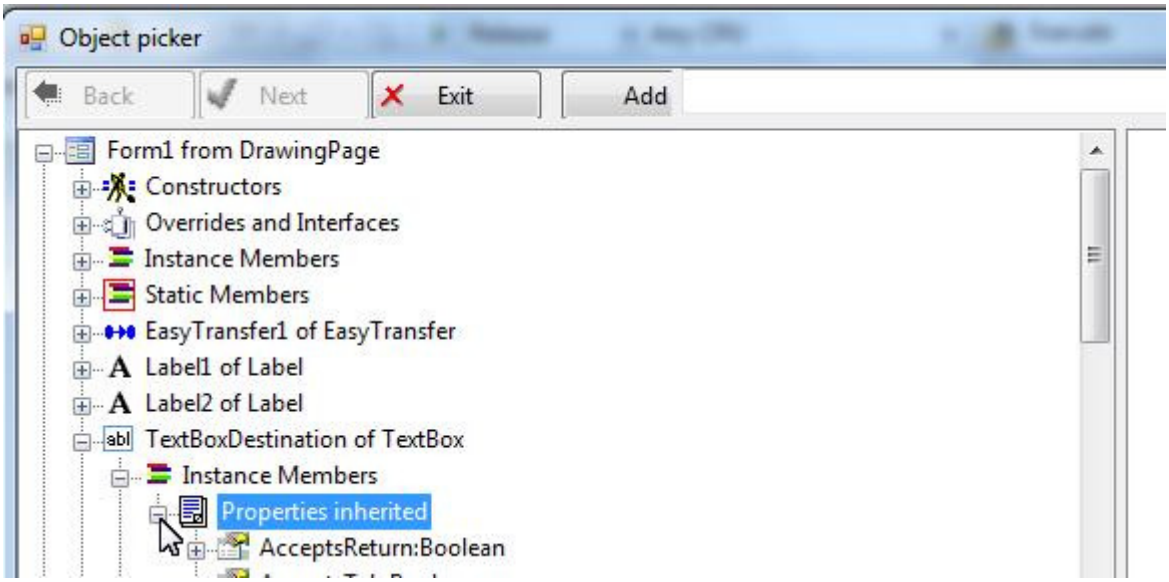
- To use an expression to form the file name and path, select MathExpression; to use a property as the file name and path, select Property. For example, suppose we want to use a Text Box and let the user enter file name and path.



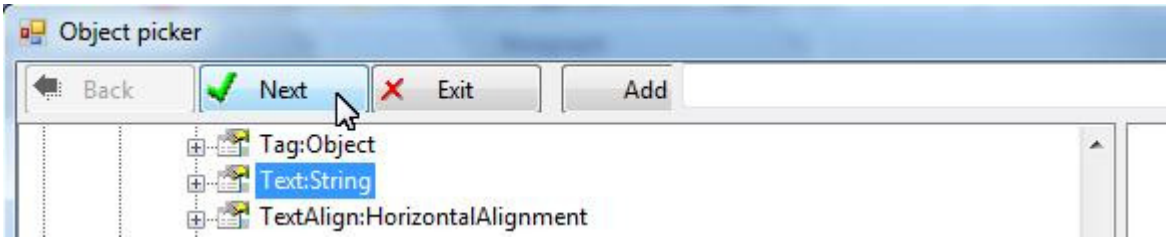
We may select Property



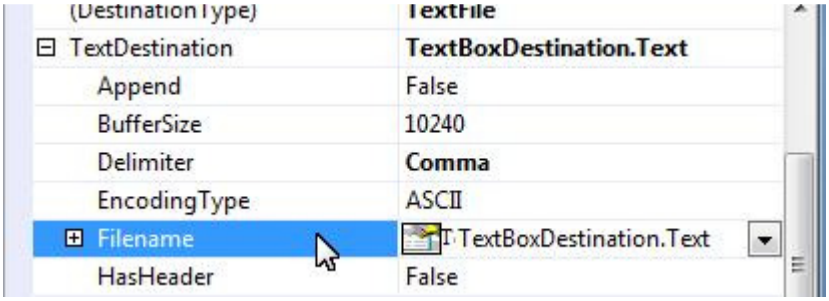
and then select the Text property of the Text Box:



Select the Text property



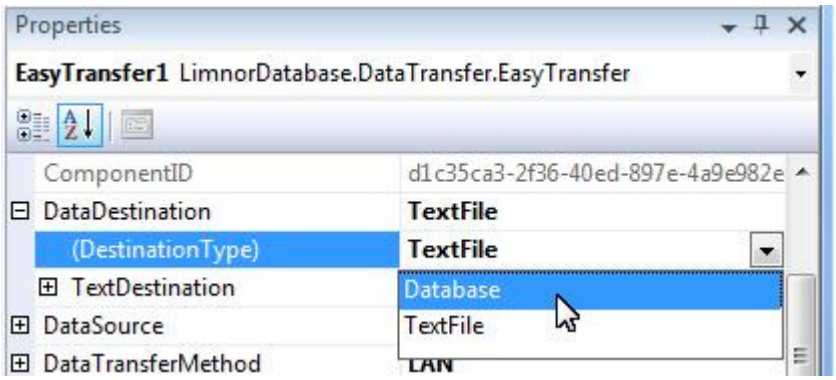
The Text property of the text box is used as the file name and path



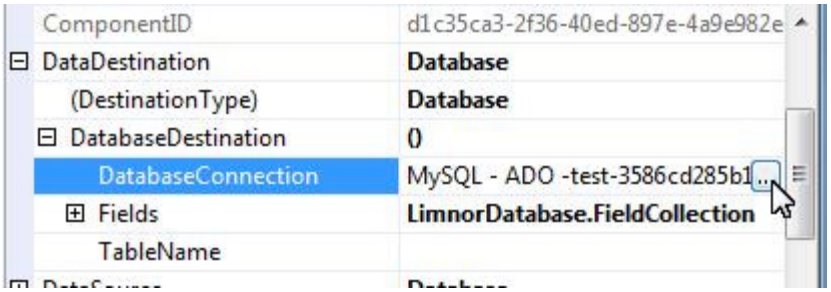
- HasHeader – Set it to True to write column names at the beginning of the file.

Database

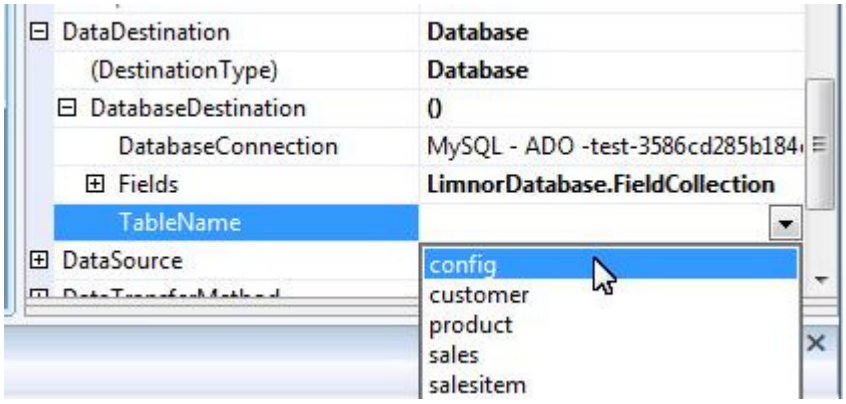
The data destination can be a table in a database. Set DestinationType to Database:



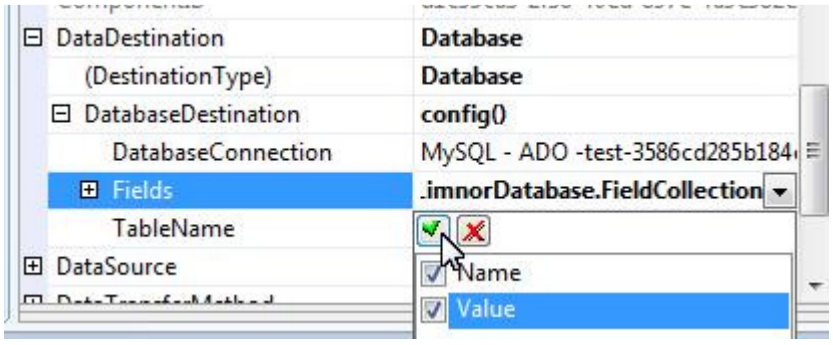
DatabaseDestination property appears. Set DatabaseConnection to point to the desired database:

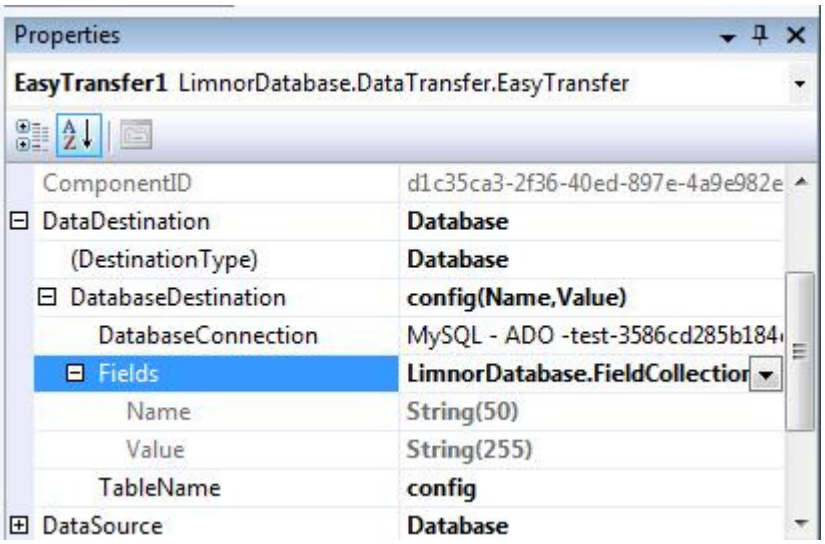


Select the Table name from the list:



Select fields to receive the data:





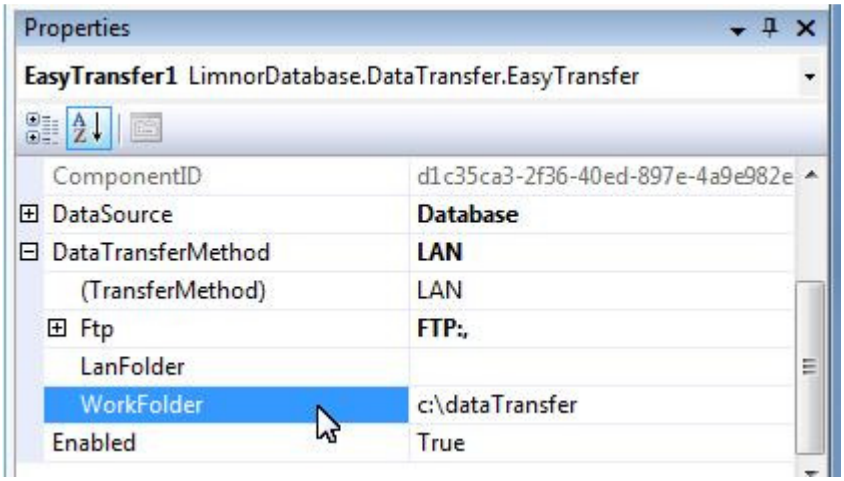
Data Transfer Method

DataTransferMethod property is used when the EndPointType is **not** set to Both.

Currently two transfer methods are supported: FTP and LAN.

Work Folder

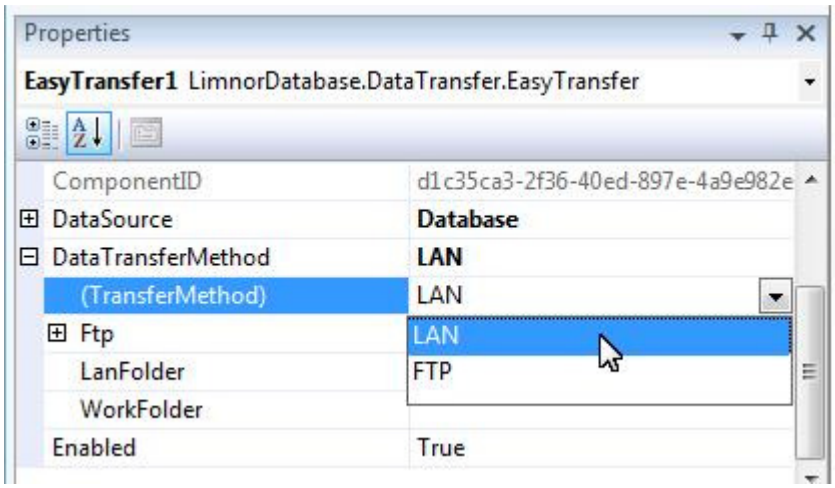
The WorkFolder property must be set to a folder where the Sender and the Receiver computer have the write permission:



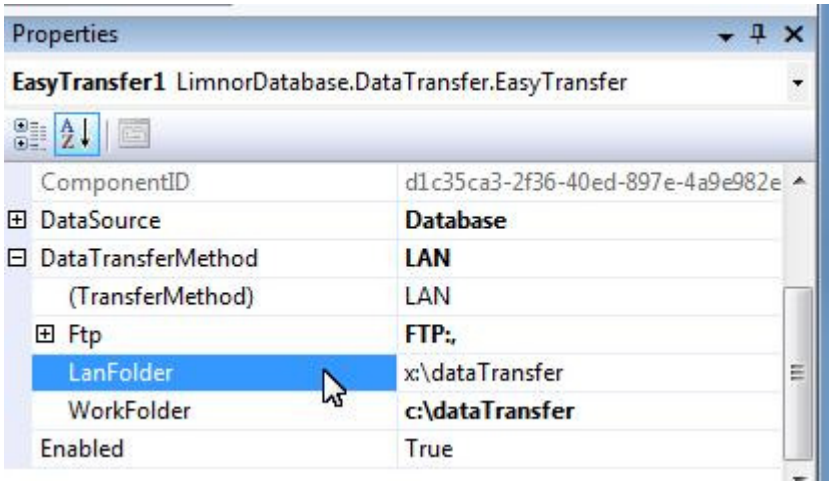
The folder can be a local folder for the sender and receiver. It does not need to be a shared folder. For a sender computer, the source data will be collected into data files into this folder before sending the files. For a receiver computer, the source data files will be copied or downloaded to the work folder first and then the files are processed and data are extracted from the files and transferred to data destination.

Local Area Network

If the data sender and data receiver computers are both in a same LAN environment then the DataTransferMethod property may be set to LAN for both the sender and receiver EasyTransfer components:



LanFolder property must be set to a shared folder on the LAN where the data sender computer has the write permission to it and the data receiver computer has the read permission to it.

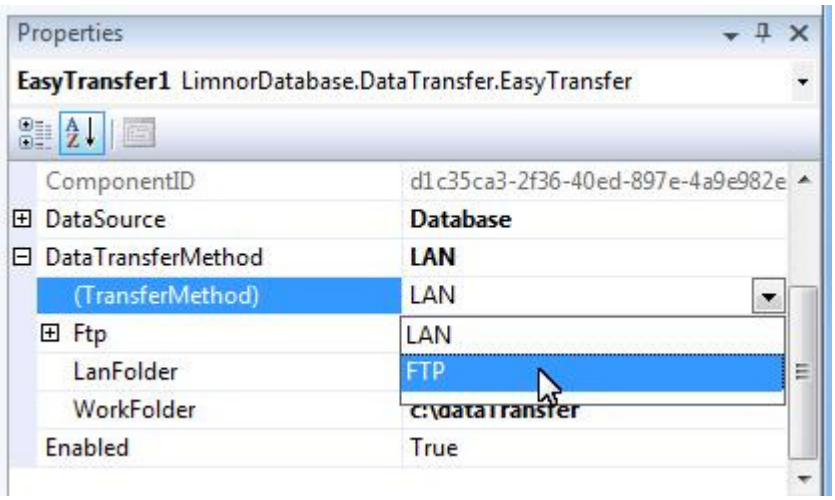


For a data sender computer, it first prepares data files in the Work Folder and then copies the data files to LanFolder.

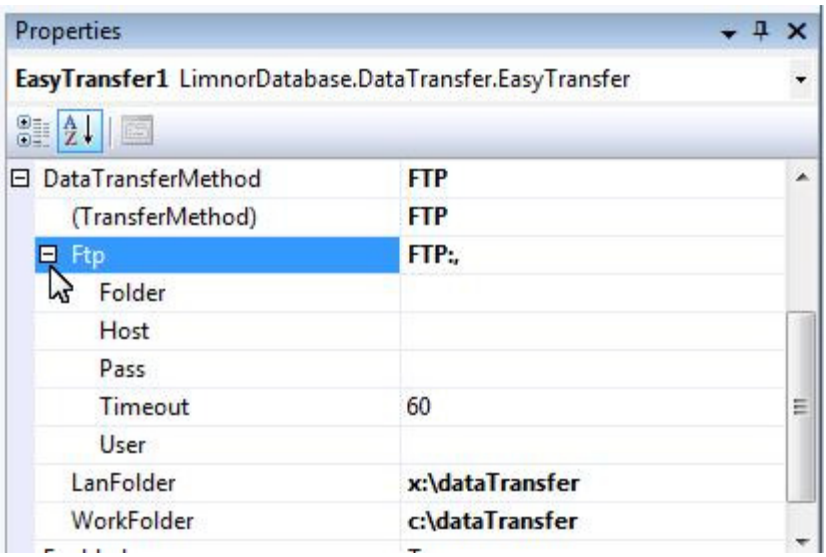
For a data receiver computer, it first copies data files from the LanFolder to the Work Folder and then processes the files in the Work Folder to extract data and transfer data to data destination.

Wide Area Network

If the data sender computer and the data receiver computer are not in a same LAN environment but both computers have internet access then the DataTransferMethod property may be set to FTP for both the sender and receiver EasyTransfer components:



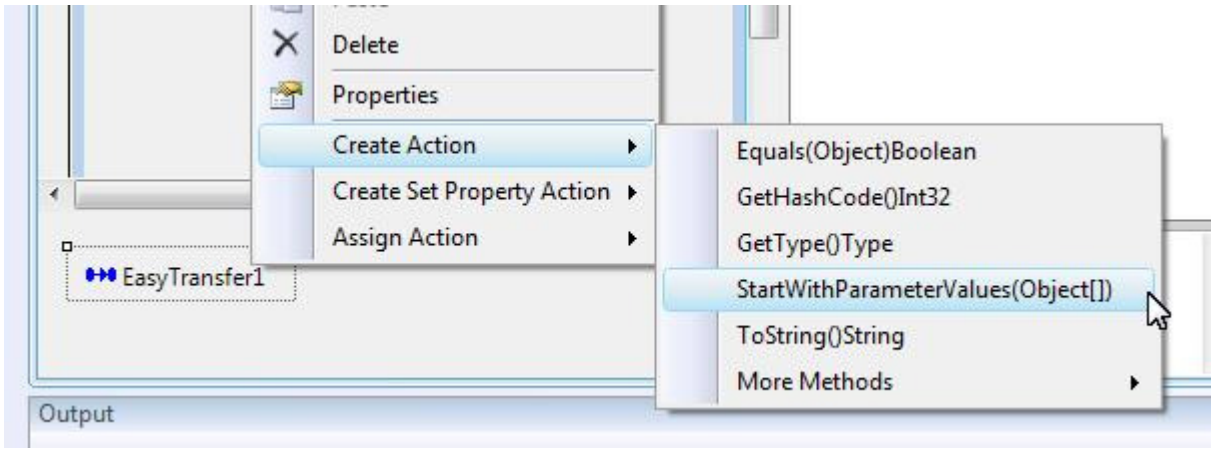
Ftp property must be set appropriately for both the sender and receiver EasyTransfer components:



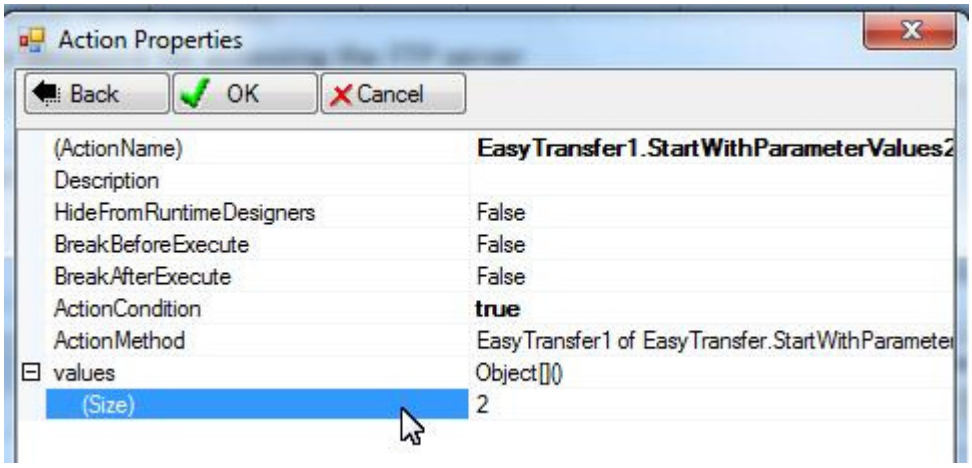
- **Folder** – It indicates a folder on the FTP server dedicated for data transferring. The Sender EasyTransfer component will upload data files to this folder; the Receiver EasyTransfer component will download data files from this folder.
- **Host** – It is the FTP server address
- **Pass** – It is the password for accessing the FTP server
- **Timeout** – It is the timeout setting, in seconds, for accessing the FTP server
- **User** – It is the user login name for accessing the FTP server

Start Data Transfer

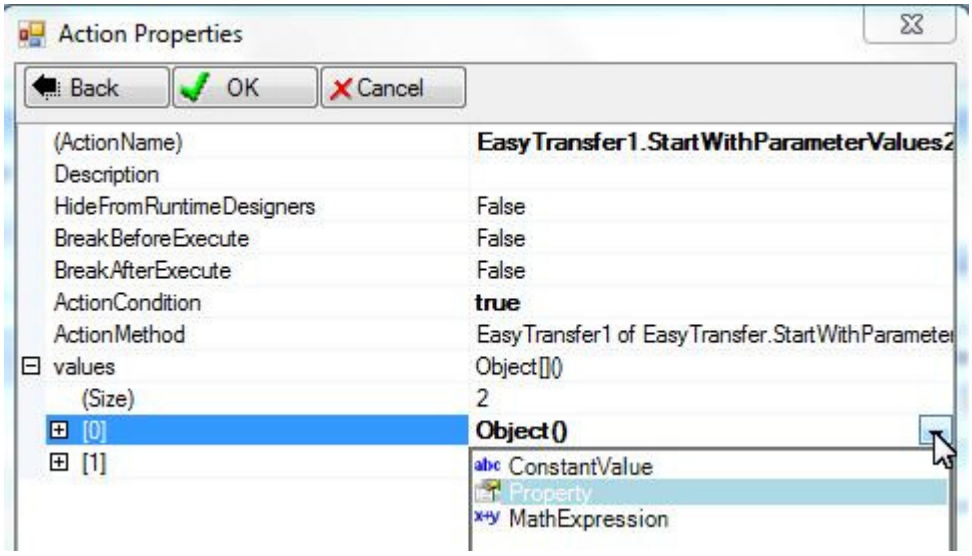
A StartWithParameterValues action is used to start the data transfer:



If your data query needs parameters then you may set the number of parameters to the Size property:

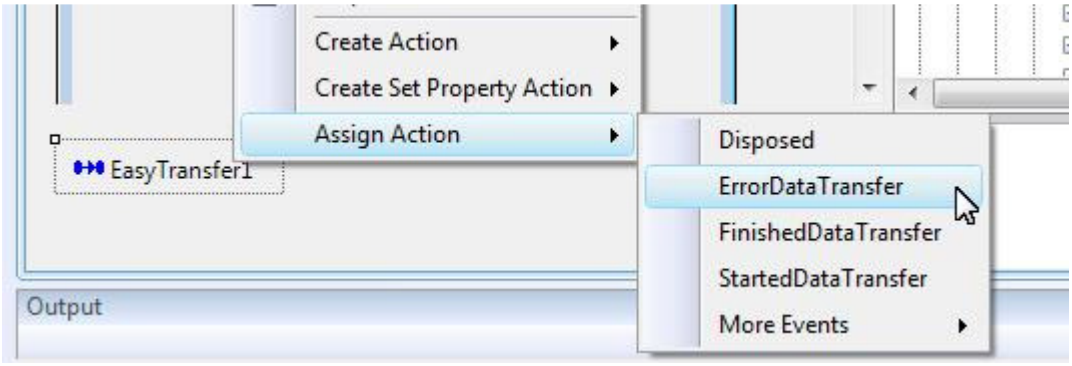


And then specify the parameter values for the action:

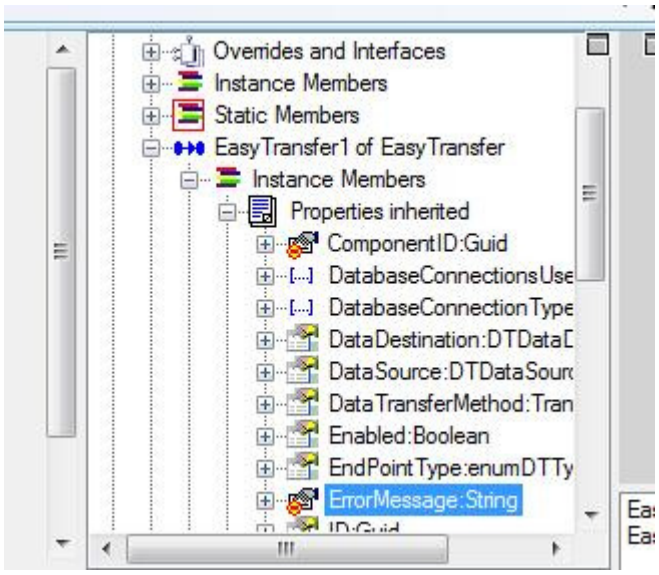


Data Transfer Events

Some events are generated during data transfer.



- **ErrorDataTransfer** -- It occurs when there is an error in the data transfer. The error message can be retrieved through the ErrorMessage property



- **FinishedDataTransfer** – It occurs when a data transfer is finished.
- **StartedDataTransfer** – It occurs when a data transfer is started.

Feedbacks

Please send bug reports and your suggestions and feature requests to support@limnor.com. Thanks!