

Description: Using BridgeWorX Data Mining Wizards to bridge data to or from databases without having to write a single line of SQL code.

OS Requirement: Win XP/Server 2003/ Server 2008/Vista/Windows 7

General Requirement: BridgeWorX version 9.X installed and access to the database that you wish to data mine.

Create a Database Data Connector

The first step to bridging any database data is to create the appropriate Data Connectors for the data sources that you would like to use. Follow these simple steps to create a new Database Data Connector:

1. Expand your **Data Connectors** tree
2. Right-click on **Database Connectors** and select **New → Data Connector**.
3. Specify a name for your data connector
4. Select the appropriate **Data Direction** depending on whether you will want to read from this database, write to it, or both.
5. Set up the database connection by clicking on the **Database Login** button. This will open the Database Connections Browser. Right-click on the folder for the type of database to which you want to connect and select **Insert New Connection**. Configure your connection appropriately.

NOTE: Connections you create in the Database Connections Browser will be available whenever you open the Connections Browser, even when you are configuring other applications, like ReportWorX. This means you only have to create a connection to each database once, no matter how many times you use that database.

6. Use the **Test Connection** button to make sure your login information is valid.

NOTE: The Reload Schema button on the bottom of this page is used if your database schema ever changes. In the event that the structure of your database changes you should come back here and click the Reload Schema button so that BridgeWorX can load your new tables and/or fields into its cache.

Reading from Database Tab

To read data out of the database connection you created above to transfer it somewhere else, configure the **Reading from Database** tab as follows:

1. Select the **Reading from Database** tab as shown in **Figure 1**.
2. Click the **Edit Command** button. In this example we will use the **Simple SQL Query Wizard**.

NOTE: If you want to select data from more than one table or use other more advanced functionality; choose the Advanced SQL Query Wizard.

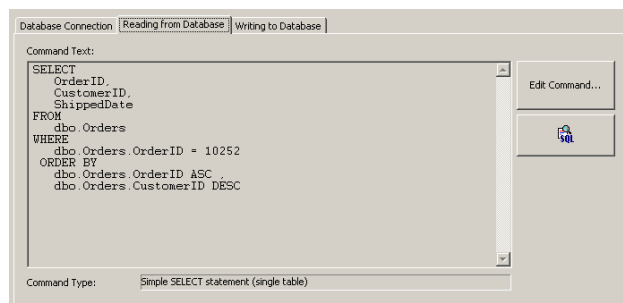


Figure 1 - Reading from database

3. Click on the ... button next to **Table Name** to pick a table or view from your database.
4. Check the boxes for the columns you want to read from in the Columns Selection area as shown in **Figure 2**.

NOTE: You can also click the **Add Exp...** button to add a column that contains an expression.

5. Use the **Move Up** or **Move Down** buttons to rearrange the columns you've selected to appear in a different order.

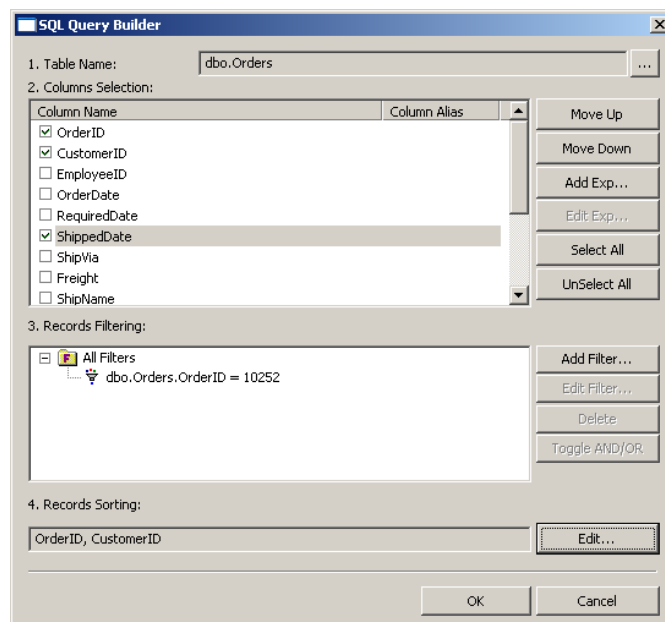


Figure 2 - Simple SQL Query Wizard

6. Once you have selected your table and columns, you can then use the **Records Filtering** section to narrow down the number of records returned by your query. Click the **Add Filter** button to add a filter. This section is optional. You may add as many filters as you need.
7. To sort your results, click the **Edit** button under the **Sorting Order** section, and then specify (in order of sorting



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- priority) the fields that you would like to sort on (ascending or descending). This section is also optional.
- Click **OK** when you are done with the Simple SQL Query Wizard.
 - Finally, be sure to click **Apply** to save the data connector that you have just configured.

Writing to Database Tab

If you need to write data into a database, then you will need to configure the **Writing to Database** tab by following these simple steps:

The screenshot shows a software window with three tabs: 'Database Connection', 'Reading from Database', and 'Writing to Database'. The 'Writing to Database' tab is active. It contains two main sections: 'Operation Type' on the left and 'Operation Details' on the right. In 'Operation Type', there are four radio buttons: 'Inserting record(s) into a table' (selected), 'Updating record(s) in a table', 'Deleting record(s) from a table', and 'Stored Procedure Call'. In 'Operation Details', there are two text input fields. The first is labeled 'Table Name:' and contains the text 'dbo.Customers'. The second is labeled 'Stored Procedure Name:' and contains the text 'Unknown'. Both input fields have a small '...' button to their right for selecting from a list.

Figure 3 - Writing to database tab

- Select the **Writing to Database** tab.
- Choose the appropriate **Operation Type** from the list.
- Select the table on which you'd like to perform an Insert, Update or Delete operation by clicking the ... button in the **Table Name** field.
- For a **Stored Procedure Call**, select your desired stored procedure by clicking the ... button in the **Stored Procedure Name** field.
- Finally, click the **Apply** button to save your configuration.

You can now use this Database Data Connector as a building block in any Transaction Diagram. For more help on the Transaction Diagram Designer, please refer to the Help documentation or to the application note titled, *BridgeWorX – Transaction Diagram Designer Quick Start*.