BI Studio
User Manual

BI Studio is a product by Nucleon Software.

Table of Contents

1 Welcome to BI Studio

BI Studio is an innovative business intelligence, reporting and data analysis software for the **Oracle, DB2, Informix, IBM Netezza, Ingres, SQL Server, MySQL, PostgreSQL, FireBird, EffiProz, SQLite, dBase, FoxPro and MS Access** database systems. BI Studio simplifies analyzing, managing, editing, visualizing, exporting, importing and reporting your database and file based data.

BI Studio is a modern Microsoft Windows and .Net-based desktop application that provides a business intelligence and data analytics development and management platform for **Oracle, MongoDB, NuoDB, IBM DB2, IBM Informix, IBM Netezza, Ingres, MS SQL Server, MySQL, PostgreSQL, FireBird, EffiProz, dBase, FoxPro** and **SQLite** database systems, and supports also **XML, MS Excel and CSV** files. It also allows the user to connect any database system via **ODBC** and **OleDb** connection technologies.

1.1 Supported Databases and Data Sources

- MongoDB 1.4 or higher
- NuoDB
- Oracle 11 g
- IBM DB2
- IBM Informix
- IBM Netezza
- Ingres Database
- SQL Server 2005, 2008, 2012
- SQL Azure
- MySQL 4 or higher
- PostgreSQL 7 or higher
- FireBird Database 1.5 or higher
- SQLite Database
- EffiProz Database
- dBase, FoxPro and XML Files (XMLDB)
- ODBC and OleDb Connections to any database system.
- CSV and MS Excel Files

1.2 System Requirements

- Windows XP/Vista/Windows 7 (32/64 Bit)
- Windows Server 2003/2008
- Min. 512 MB RAM
- .Net Framework 4.0

1.3 Supported Database Requirements

- IBM Data Client (Optional)
- IBM Informix Client (Optional)
- IBM Netezza ODBC Driver (Optional)
- NuoDB ODBC Driver (Optional)
- R Software for Statistics (Optional)
- Apache Hadoop Hive ODBC Driver from Microsoft (Optional)

1.4 General Installation Instructions

The BI Studio application is a Microsoft Windows based program and does require the **.Net Framework** to be installed. The minimum runtime environment needs to be **.Net Framework 4.0**.

2 Getting Started

To start working with databases in BI Studio, you should first create a BI project file which includes database connections and BI files.
After creation a project file, you can connect to the database host. When you connect to the database host, BI Studio will populate the databases and tables and will show you the Table Manager tab. To change the connected database; **double-click a database then this database will become the current connected database.**

The toolbar includes all important features and is divided into different sections, and changing the host connection will modify the toolbar.

3 BI Project Management

BI Studio manages multiple database connections and other bi specific resource files (reports, queries etc.) in a project file. The project file extension is **"biproj"** and has a custom icon.

The project file is an encrypted and **human unreadable** file, which includes all database connections. The user has the option to save the database connection password into its project file.

3.1 Creating a New BI Project

To create a Project file, either uses the **Project Selector** dialog or the **Project Explorer** window.

The Project Selector dialog will be only shown on Application start up. The Project Selector toolbar contains **New Project, Edit Project** and **Open Project** buttons. Using these buttons, you can create a new project, edit or open an existing project.

The user must enter a project name and browse a project file; otherwise the "OK" button will not be enabled.

3.1.1 Adding a New Database Connection

To create a new database connection, click the **"Add"** button. A connection dialog will be shown and a database engine (system) can be selected from the combo-box.

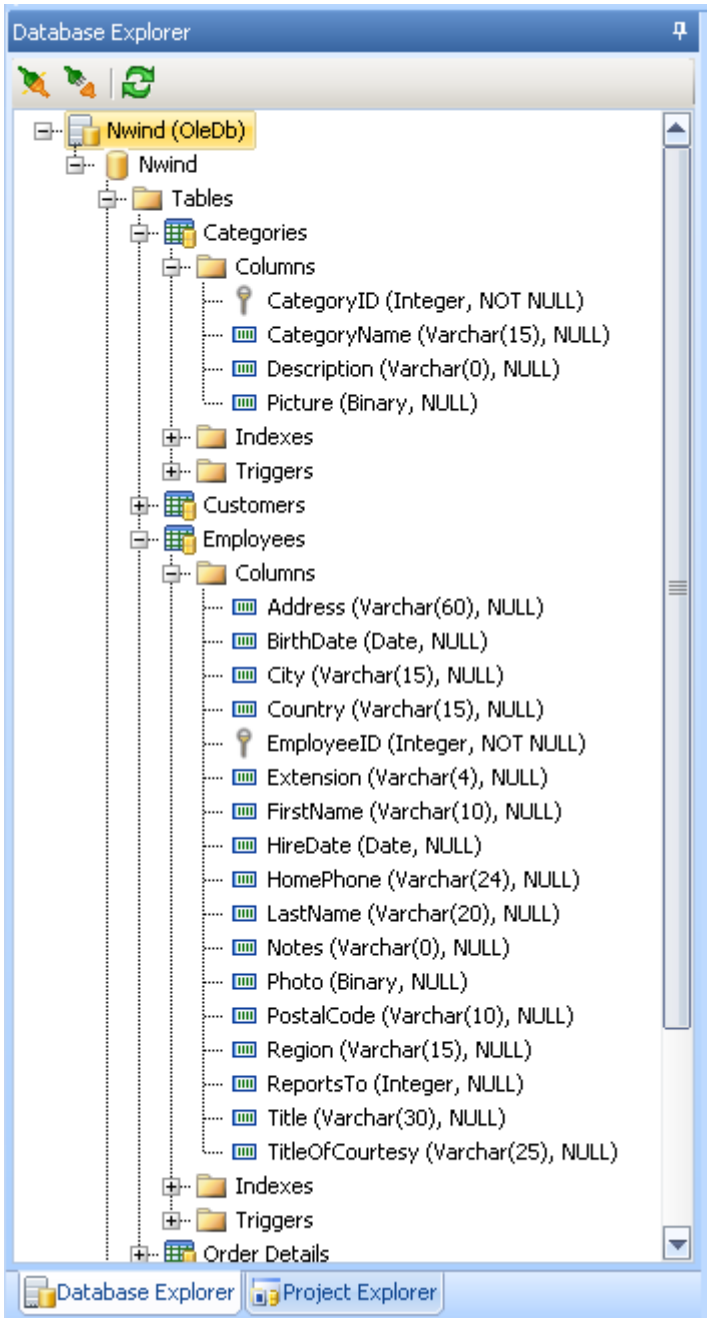
After selecting a database engine, you will get the connection specific options.
After filling the fields and testing the connection, click the **"OK"** button to save the connection. The dialog will be closed automatically.

The following steps explain how to add a connection:

- Click the "Add" button and Connection dialog will appear.
- Select a host engine
- Fill the connection fields
- Click "OK" button

4 Datasource Explorer

Database Explorer is the main part of **BI Studio** which allows the user to perform practically all necessary operations upon databases and database objects. The Database Explorer occupies the left hand side of BI Studio's main window.



All of the objects in the explorer tree are listed under the related server's database node.

5 Tables and Views

Table and Object Manager provides a useful, important and rich feature set to manage the table objects. The following figure shows the currently supported Table Manager features.

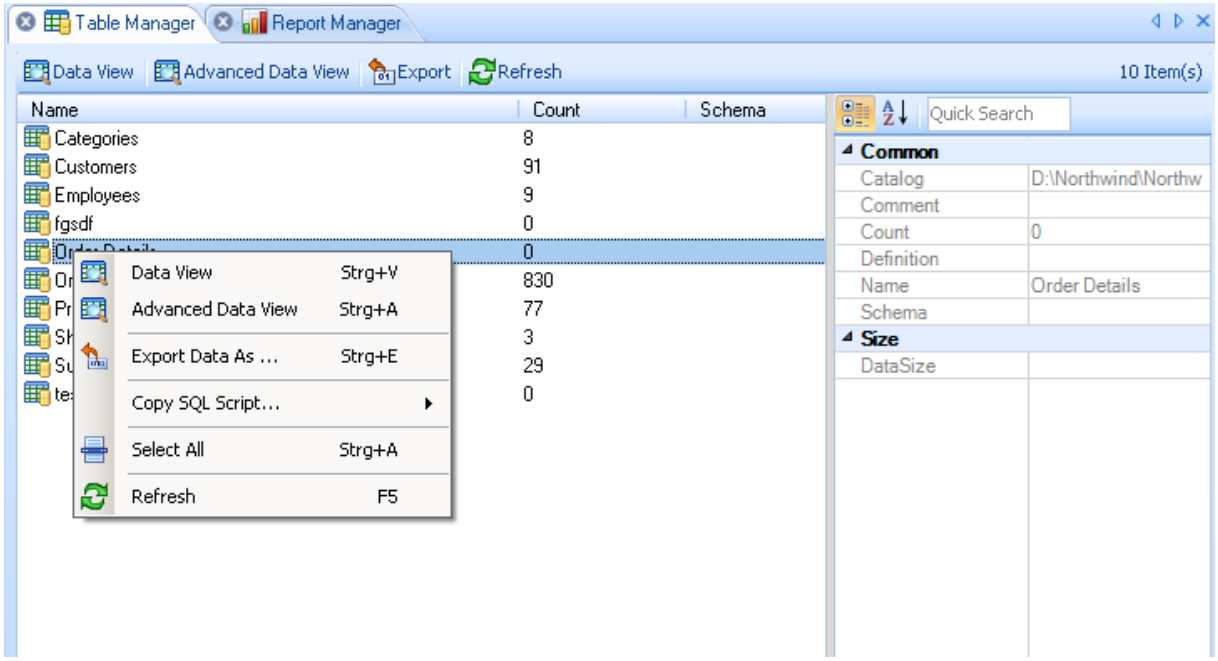


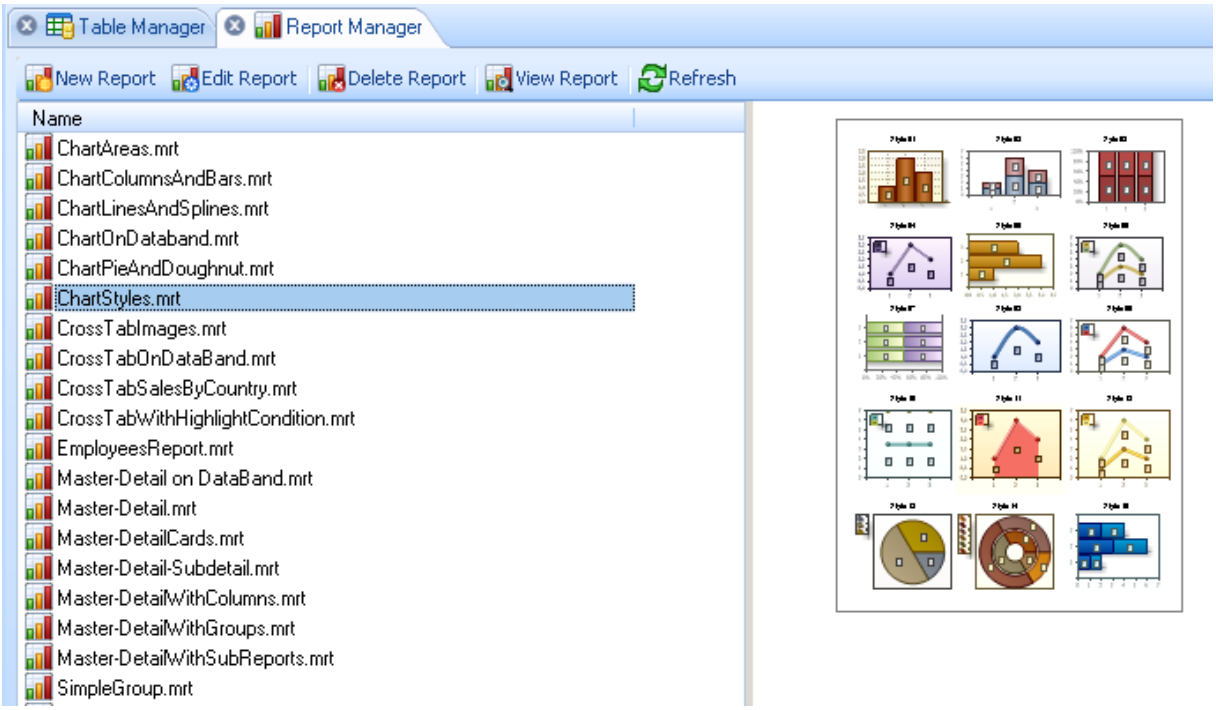
Table & View Manager

The following list describes the features of the Table Manager:

- Refresh: Refreshes the table list.
- View Data: Views the table data.
- Advantage Data View: Views the table data with data visualizers on the right hand side.
- Copy SQL Script: Copies the selected table as a SQL command.
- Export As: Exports the selected table to the different file formats.
- Copy Table Structure/Data: Using this feature you can copy a table structure or its data or both. You can also specify a where clause like: ***id=12 and Name='Bob'***

6 Reports

BI Studio provides you feature rich Reporting module for data reporting and visualization. Using BI Studio Reporting tool, you can create or design feature rich reports (Text, Image, Chart, Pivot-Table, Math. Operations etc.), edit or view the existing reports. The report Manager allows you the manage reports for a bi project.



Reports Manager

For more information, please read the Reporting User Manual. You can get it from download center.

7 Dashboards

BI Studio provides you a Dashboard system (Dashboard Designer and Dashboard Viewer) to build business intelligence dashboards.

7.1 Dashboard Designer

The Designer allows you to add to panel pre-designed or newly added Reports, Charts, Queries, Images, Web pages or other supported BI Modules.

7.2 Dashboard Viewer

BI Viewer is the dashboard viewer, which can visualize and mange all dashboard modules. Using BI Viewer you can open the BI projects and visualize the dashboards within.

For more information, please read the Dashboard User Manual. You can get it from download center.

8 Charts

A Chart picture is worth a 1,000 words... This adage rings especially true when it comes to charting. Charts summarize and illuminate patterns in data in a way that long tables of numbers simply cannot. BI Studio Charting is a feature reach Microsoft Charting library.

BI Studio are an encompassing set of charts for business intelligence projects or applications. The Chart Controls suite offers a wide array of chart types and charting features. The Chart Controls offer all of the standard chart types: line charts, bar charts, pie charts, column charts, stack charts and so forth - as well as more specialized ones, like pyramid and bubble charts.
The Chart Controls suite offers a comprehensive set of charting features, including support for multiple series, customizable legends, trend lines, and labels. And the Chart Controls makes it easy to sort, search, filter, group, and export the chart data.

8.1 Chart Designer

There is a wizard to guide you through customizing the chart's look and feel and specifying its data source. The Chart Designer allows you to add new data series, Labels, Titles and allows you to customize the chart look and feel.

The Charting documentation is not written here . For more information, please read the Charting User Manual. You can get it from download center.

9 Workflows

BI Studio Workflows use Windows Workflow Foundation, which is a framework that enables users to create system or human workflows in business intelligence applications. It consists of a namespace, an in-process workflow engine, and designers for BI Studio. Windows Workflow Foundation can be used to solve simple scenarios, such as showing UI controls based on user input, or complex scenarios encountered by large enterprises, such as order processing and inventory control. Windows Workflow Foundation comes with a customizable workflow engine, and Designer for quickly building workflow-enabled business intelligence applications on Windows.

For more information, please read the Workflows User Manual. You can get it from download center.

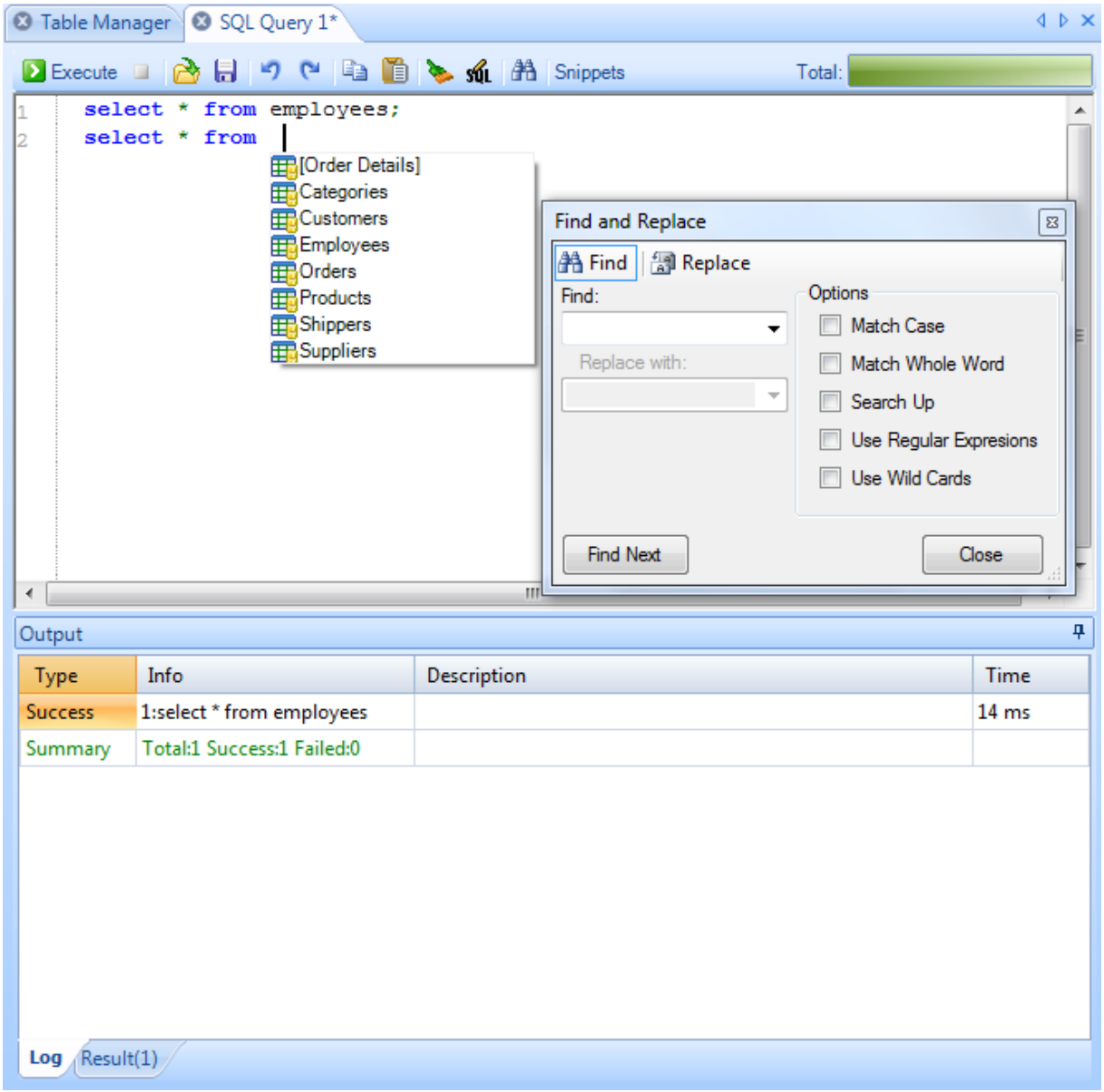
10 Queries

BI Studio Queries are live database Views but easy to create and can have more than one queries. BI Studio provides you a query setup dialog to add new SQL and JSON for MongoDB queries. You can easily execute and view the queries.

11 SQL Query Editor

BI Studio Query editor is a powerful SQL editor and provides SQL code highlighting, IntelliSense (Code Completion), code regions, snippets and find features. It also displays the current executed query status with a progress bar and gives information about the total executed query status on the toolbar.

BI Studio provides powerful tools which allow you to edit query text directly with syntax highlighting and code completion.



SQL Query Editor

11.1 Executing a script

Pressing **F5, CTRL+E** or using the tool menu would execute any highlighted text in the query window. If no text is highlighted, all the text will be sent for execution.

11.2 Output Window

Many database servers such as Microsoft SQL Server are able to handle batch statements. This means they are able to execute many SQL statements at once, returning many data tables* (in case of select statements). If you are executing a script containing five select statements, the result would be five data tables presented in the output window.

Some other database servers, such as Oracle and MySQL, require each statement to end with a semicolon ";" and do not support batch statements. If you would type five statements (ended with ";") in one script and execute it, BI Studio would split the script into five statements and execute each one separate from the others.
Using the "GO" word in MS SQL Server would give the same result.

When you execute a script that returns a result, the result of the script will be presented in the output window. The output window contains a Log output tab and tabs for each select query result. If there is more than one SQL select query all the results will be displayed here.

The Log window contains the following information about the SQL query:

- **Type**: Result type.
- **Description**: SQL command and database engine message.
- **Time**: Execution time of the SQL command in milliseconds.

11.3 IntelliSense

By pressing ***any key*** IntelliSense will provide an array of options that make language references easily accessible. When coding, you do not need to leave the editor window to perform searches on database elements.

You can keep your context, find the information you need, insert elements directly, and even have IntelliSense complete your typing. IntelliSense comprises database objects, reserved words, local variables, columns and even joining options.

11.4 Code Scripts

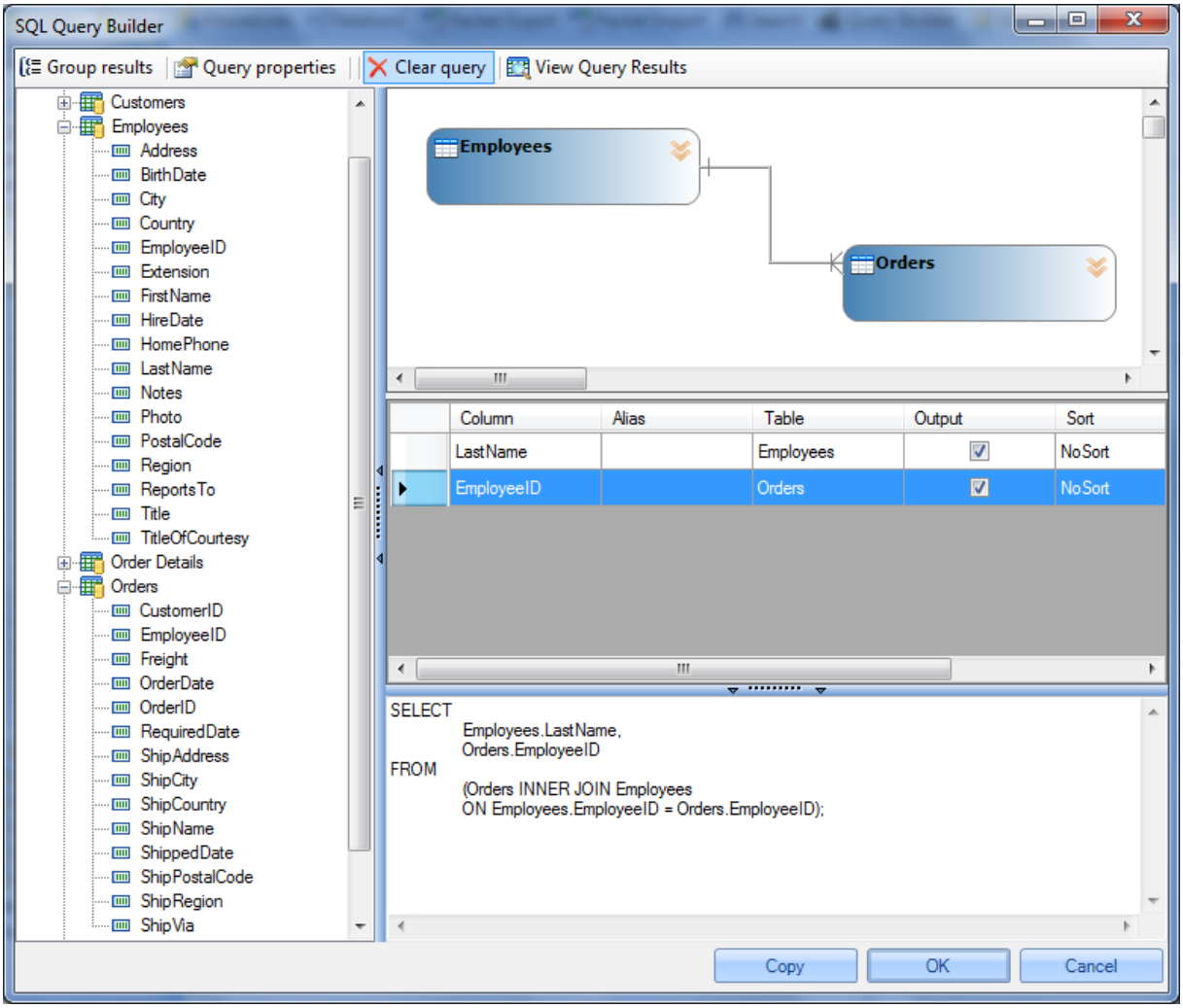
BI Studio's IntelliSense snippets enable developers to easily manage and distribute their own customized SQL code libraries. Inserting these commonly used pieces of code is an effective way to enhance your productivity. You can save time because you no longer need to search

countless sources of code examples just to find a similar piece of code to copy and paste into your solution code.

To add a snippet, simply highlight its text, right-click and select Snippets->Add to snippets. To delete a snippet, use the Snippet Manager on the toolbar.

12 SQL Query Builder

The SQL query builder helps you quickly build SQL select statements. On the left side the current connected database tables are listed. On the right hand side the ER-Diagram, columns and SQL script box show up.



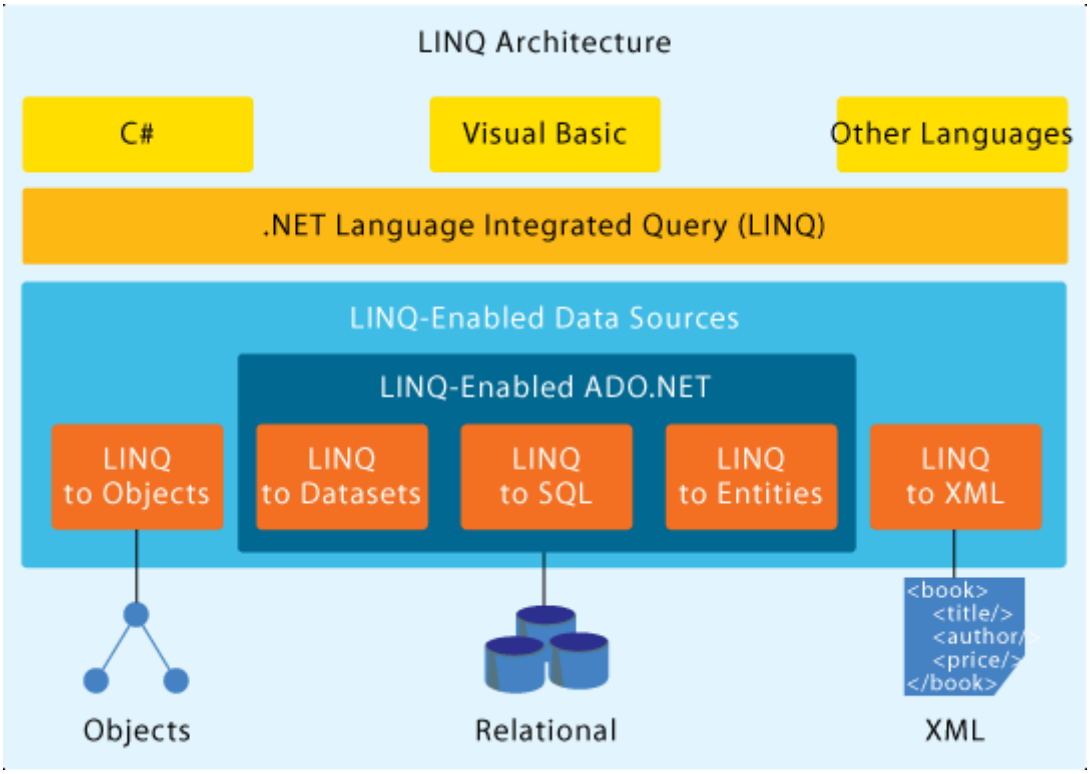
SQL Query Builder

13 LINQ Query Editor

The Language Integrated Query - LINQ is a Microsoft .NET Framework technology that adds native data querying capabilities to .NET languages. LINQ enables developers to form set-based queries in their application code, without having to use a separate query language.

You can write LINQ queries against various enumerable data sources, such as in-memory data structures, XML documents, SQL databases, and DataSet objects. Although these enumerable data sources are implemented in various ways, they all expose the same syntax and language constructs. Because queries can be formed in the programming language itself, you do not have to use another query language (like SQL) that is embedded as string literals that cannot be understood or verified by the compiler.

There are three separate ADO.NET Language-Integrated Query (LINQ) technologies: LINQ to DataSet, LINQ to SQL, and LINQ to Entities. LINQ to DataSet provides richer, optimized querying over the DataSet and LINQ to SQL enables you to directly query SQL Server database schemas, and LINQ to Entities allows the user to query an Entity Data Model.
The following diagram provides an overview of how the ADO.NET LINQ technologies relate to high-level programming languages and LINQ-enabled data sources.



LINQ Query editor is an innovative feature and can run dynamically LINQ Query scripts. It supports currently LINQ to Entities (Entity Framework), LINQ to DataSet, LINQ to Objects and

LINQ to XML queries. The LINQ query feature is currently supported for MS SQL Server, IBM DB2, MySQL, PostgreSQL, SQLite, FireBird, EffiProz database engines. Support for Oracle, MongoDB and Informix engines will be implemented soon.

Note:
Microsoft LINQ to SQL technology is not supported.

13.1 Result Output

After executing the query script, you can dump the results using ***Output*** method. The Dump method detects automatically the given object list and visualize the data as a table or a tree view.

13.2 Linq to Entity Framework

ADO.NET Entity Framework (EF) is an object-relational mapping (ORM) framework for the .NET Framework. ADO.NET Entity Framework abstracts the relational (logical) schema of the data that is stored in a database and presents its conceptual schema to the application. The ADO.NET Entity Framework enables developers to create data access applications by programming against a conceptual application model instead of programming directly against a relational storage schema. The goal is to decrease the amount of code and maintenance required for data-oriented applications.

If you open the LINQ Query Editor, the conceptual schema or Database Object Context (Database Access Layer) will be generated automatically using EDM generator. The user can access the all database Entities and Objects and execute C#/VB.Net code.

Info:
http://en.wikipedia.org/wiki/ADO.NET_Entity_Framework

13.3 Linq to DataSet

BI Studio allows the user to execute Linq to DataSet code against any database system. LINQ to DataSet makes it easier and faster to query over data cached in a DataSet object. Specifically, LINQ to DataSet simplifies querying by enabling developers to write queries from the programming language itself, instead of by using a separate query language. This is especially useful for Microsoft Visual Studio developers, who can now take advantage of the compile-time syntax checking, static typing.

LINQ to DataSet can also be used to query over data that has been consolidated from one or more data sources. This enables many scenarios that require flexibility in how data is

represented and handled, such as querying locally aggregated data and middle-tier caching in applications.

The LINQ to DataSet functionality is exposed primarily through the extension methods in the DataRowExtensions and DataTableExtensions classes.

13.4 Linq to XML

LINQ to XML was developed with Language-Integrated Query over XML in mind from the beginning. It takes advantage of standard query operators and adds query extensions specific to XML. From an XML perspective, LINQ to XML provides the query and transformation power of XQuery and XPath integrated into .NET Framework languages that implement the LINQ pattern. This provides a consistent query experience across LINQ enabled APIs and allows the user to combine XML queries and transforms with queries from other data sources.

For more help:

LINQ Basic Info:	http://en.wikipedia.org/wiki/Language_Integrated_Query
LINQ to Entities:	http://msdn.microsoft.com/en-us/library/bb399367.aspx
LINQ to XML:	http://msdn.microsoft.com/en-us/library/bb387098.aspx
LINQ to DataSet:	http://msdn.microsoft.com/en-us/library/bb386977.aspx
LINQ to Objects:	http://msdn.microsoft.com/en-us/library/bb397919.aspx

14 R Statistics

BI Studio integrates the R statistical analysis software, combines LINQ, SQL and R statistical analysis with business intelligence to deliver easy and low cost data warehouse solutions.

To run R Scripts you must install the R Statistical software. R integration requires native R-DLLs installed with R environment. You need no other extra installations. R is a free software environment for statistical computing and graphics.

R-Integration can be used with the combination of SQL, LINQ and R statistical software. Using BI Studio with R combination, you can do advanced data analysis with LINQ and R Scripts.

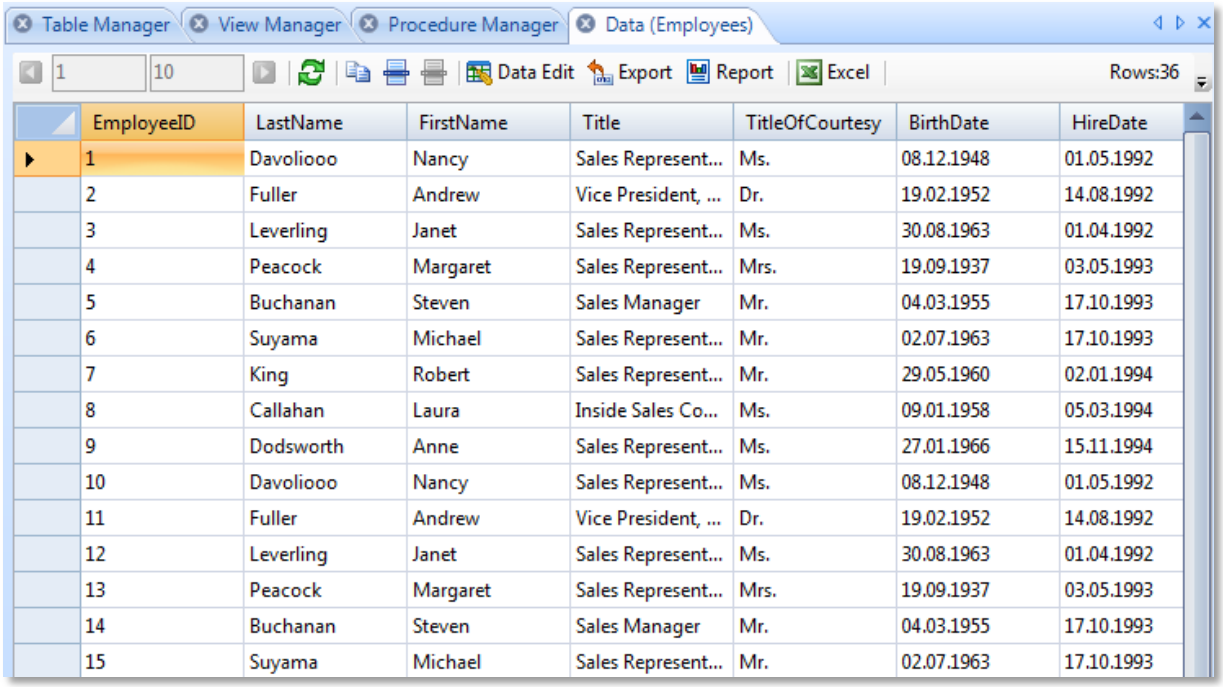
This code example illustrates how R-Integration works.

```
// .NET Framework array to R vector.
NumericVector group1 = engine.CreateNumericVector(new double[] { 30.02,
29.99, 30.11, 29.97, 30.01, 29.99 });
engine.SetSymbol("group1", group1);

// Direct parsing from R script.
NumericVector group2 = engine.Evaluate("group2 <- c(29.89, 29.93, 29.72,
29.98, 30.02, 29.98)").AsNumeric();

// Test difference of mean and get the P-value.
GenericVector testResult = engine.Evaluate("t.test(group1,
group2)").AsList();
double p = testResult["p.value"].AsNumeric().First();

//Dump the Reults
Output(("Group1: [{0}]", string.Join(", ", group1)));
Output (("Group2: [{0}]", string.Join(", ", group2)));
Output (("P-value = {0:0.000}", p));
```

More about R Statistical Software:
http://www.r-project.org/

15 Table Data View

The data table view provides rich data export, report, GUI based data editing, data copy and data paging features for the users.



EmployeeID	LastName	FirstName	Title	TitleOfCourtesy	BirthDate	HireDate
1	Davoliooo	Nancy	Sales Represent...	Ms.	08.12.1948	01.05.1992
2	Fuller	Andrew	Vice President, ...	Dr.	19.02.1952	14.08.1992
3	Leverling	Janet	Sales Represent...	Ms.	30.08.1963	01.04.1992
4	Peacock	Margaret	Sales Represent...	Mrs.	19.09.1937	03.05.1993
5	Buchanan	Steven	Sales Manager	Mr.	04.03.1955	17.10.1993
6	Suyama	Michael	Sales Represent...	Mr.	02.07.1963	17.10.1993
7	King	Robert	Sales Represent...	Mr.	29.05.1960	02.01.1994
8	Callahan	Laura	Inside Sales Co...	Ms.	09.01.1958	05.03.1994
9	Dodsworth	Anne	Sales Represent...	Ms.	27.01.1966	15.11.1994
10	Davoliooo	Nancy	Sales Represent...	Ms.	08.12.1948	01.05.1992
11	Fuller	Andrew	Vice President, ...	Dr.	19.02.1952	14.08.1992
12	Leverling	Janet	Sales Represent...	Ms.	30.08.1963	01.04.1992
13	Peacock	Margaret	Sales Represent...	Mrs.	19.09.1937	03.05.1993
14	Buchanan	Steven	Sales Manager	Mr.	04.03.1955	17.10.1993
15	Suyama	Michael	Sales Represent...	Mr.	02.07.1963	17.10.1993

Table Data View

15.1 Data Visualizer

The data visualizers allow you to visualize BLOB data types.

15.1.1 Image Visualizer

The Image Visualizer visualizes the BLOB data type as an image. It allows the user to save the image object into the following image formats (PNG, GIF, JPEG etc.).

15.1.2 Text Visualizer

The Text Visualizer allows the user to visualize the BLOB data type as a text. It allows the user to save the text to the hard disk.

15.1.3 Chart Visualizer

The Chart Visualizer allows the user to visualize the selected data as a Chart view. You can save your chart as an image file.

16 Data Editor

The Data Editor provides an easy to use GUI interface for viewing, adding, editing, or deleting entries in a database. You can edit (update) or create new data entries (rows) with this editor without any SQL code. You can also delete the existing data. The data editor visualizes the table data in the dialog.

When you create new data record or edit the existing, you should always click to "Save Changes" button on the toolbar.

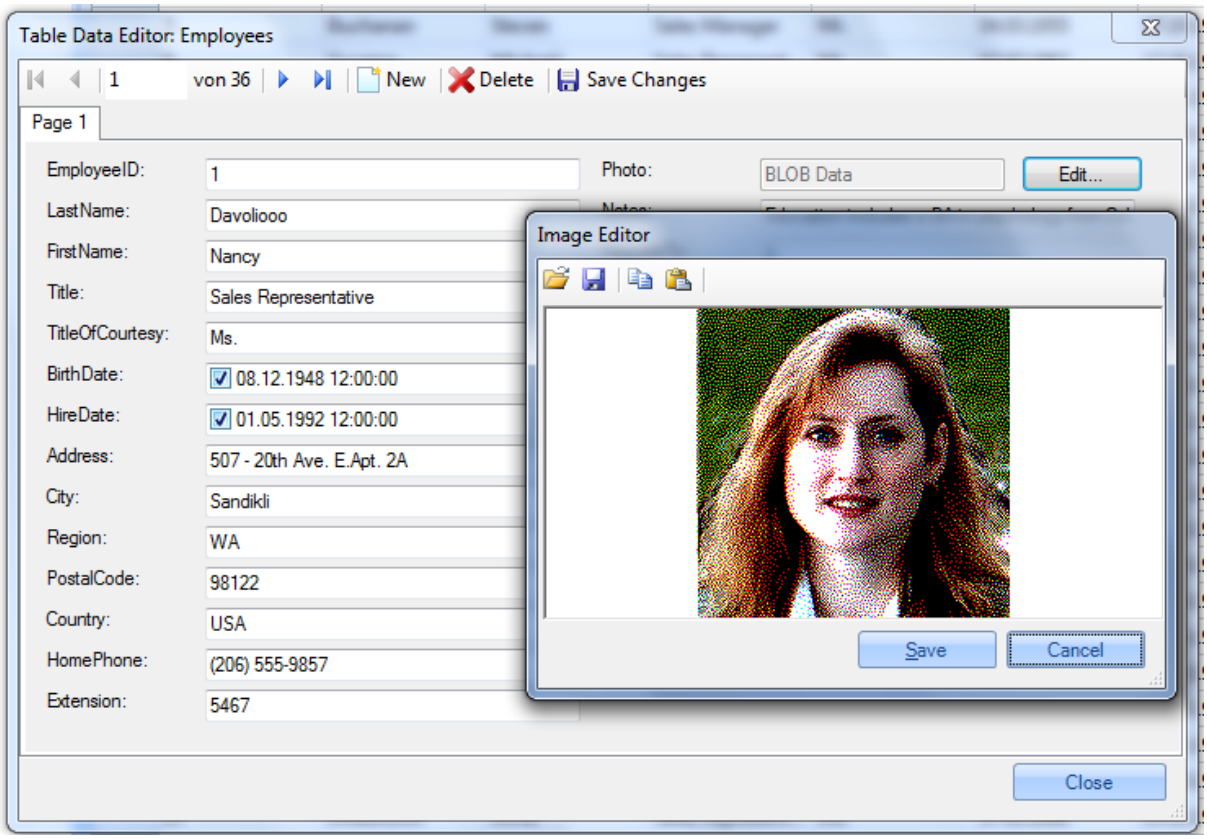


Table Data Editor

The data editor allows the user the edit BLOB (Binary Large Objects) data using Image and Text Editor.

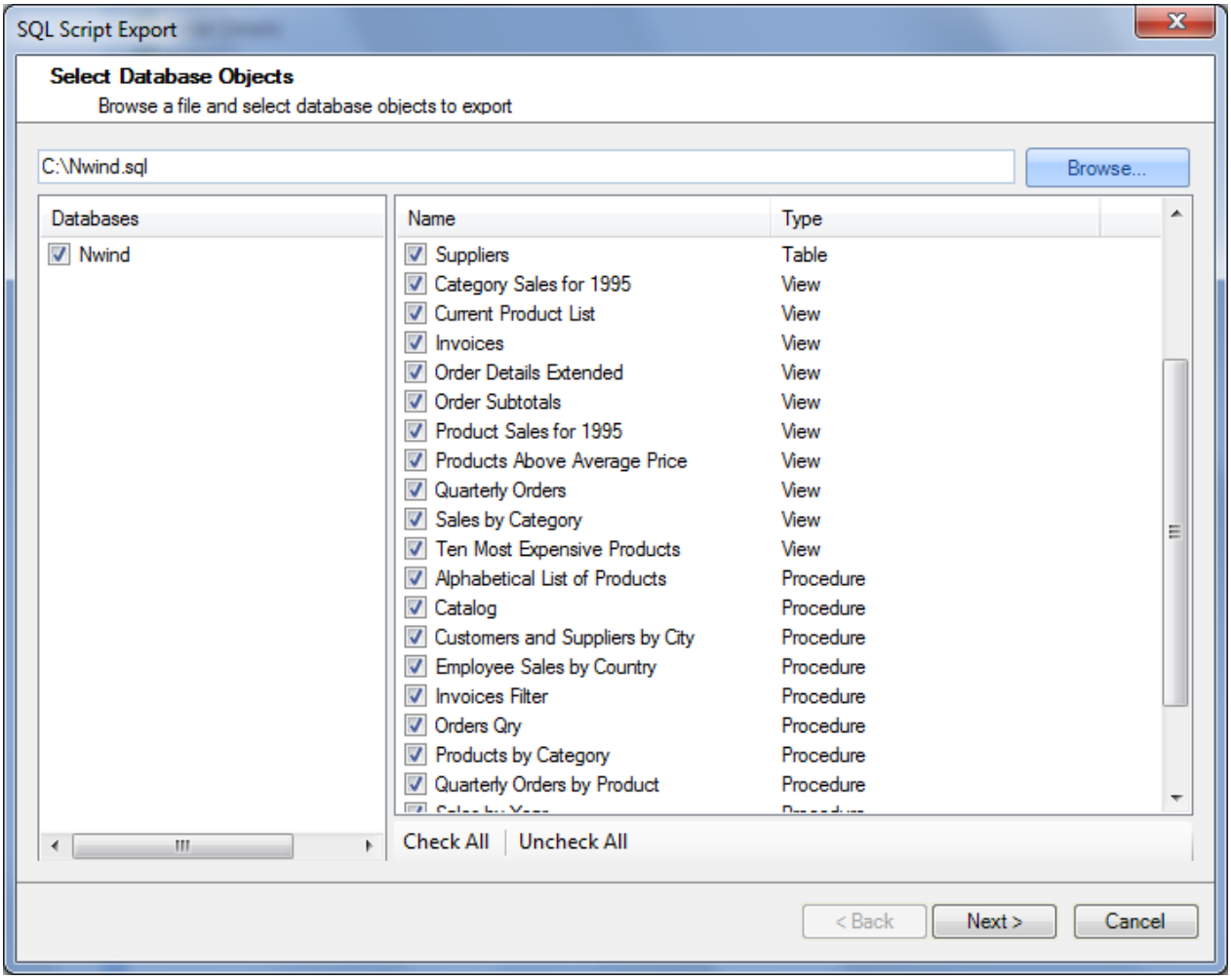
Image Editor:
Using Image Editor you can copy the current image into clipboard or hard disk and load a new image and save it.

Text Editor:

The Text Editor allows the user to edit text BLOB data, where you can save it to the hard disk or change and update text data in the database.

17 SQL Export

BI Studio allows the user to export your database structure as an SQL script. The user can export database structures like table, view, and procedure and table data. The user can also dump all database data into an SQL file.



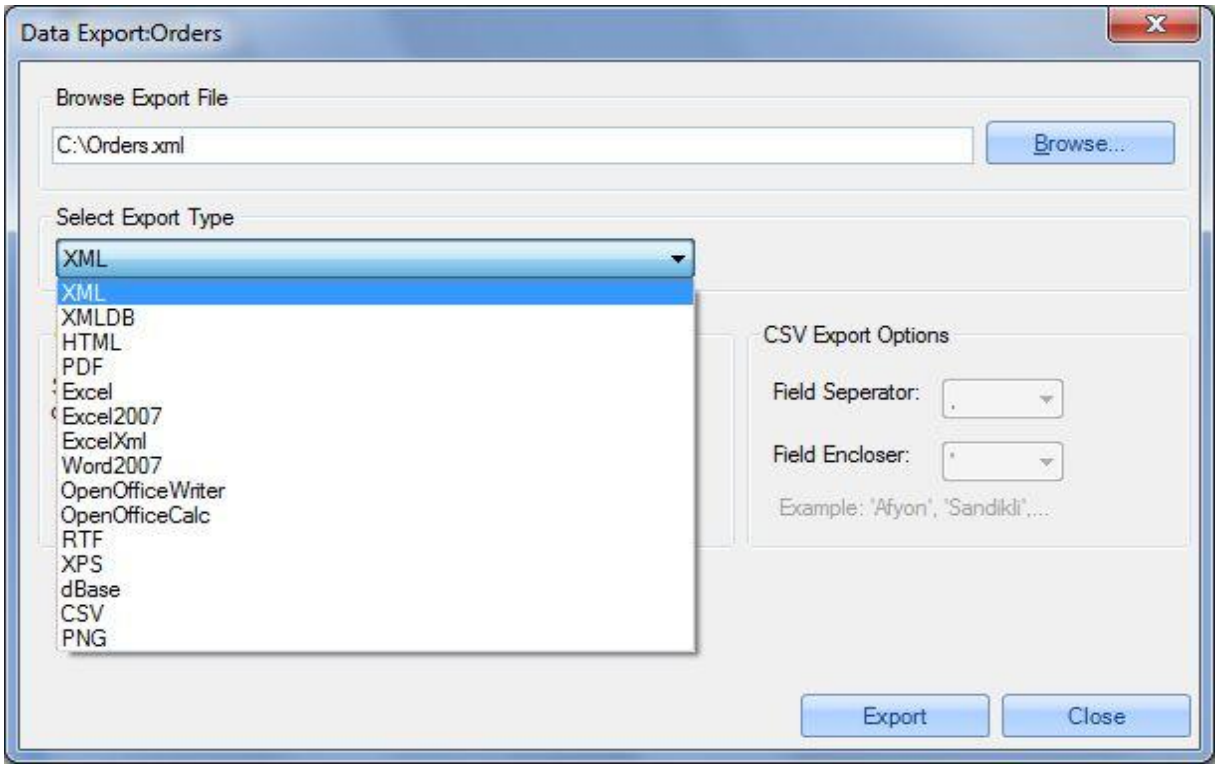
SQL Export Dialog

To export the data as an SQL script, you must select a database and one or more tables.

18 Data Export

The data export feature gives you an option to export and share your data. The export dialog provides the following data export formats:

- XML, XMLDB (XML file with XSD Schema), HTML, CSV, JSON
- Excel (XML), Excel 2007, Word 2007, RTF
- PDF, RTF, Open Office Writer, Open Office-Calc, XPS, dBase, PNG (Image)



Data Export Dialog

18.1 General Options

Encoding: Encoding of the file.
Write Column Headers: If the checkbox is checked, the Field (Column) headers will be included in the export.

Substitution for NULL (or Empty) Values: If data row or cell contains null (or empty) values they will be replaced by the chosen value type from the combo box.

18.2 CSV Data Export

CSV Data Export provides the following options:

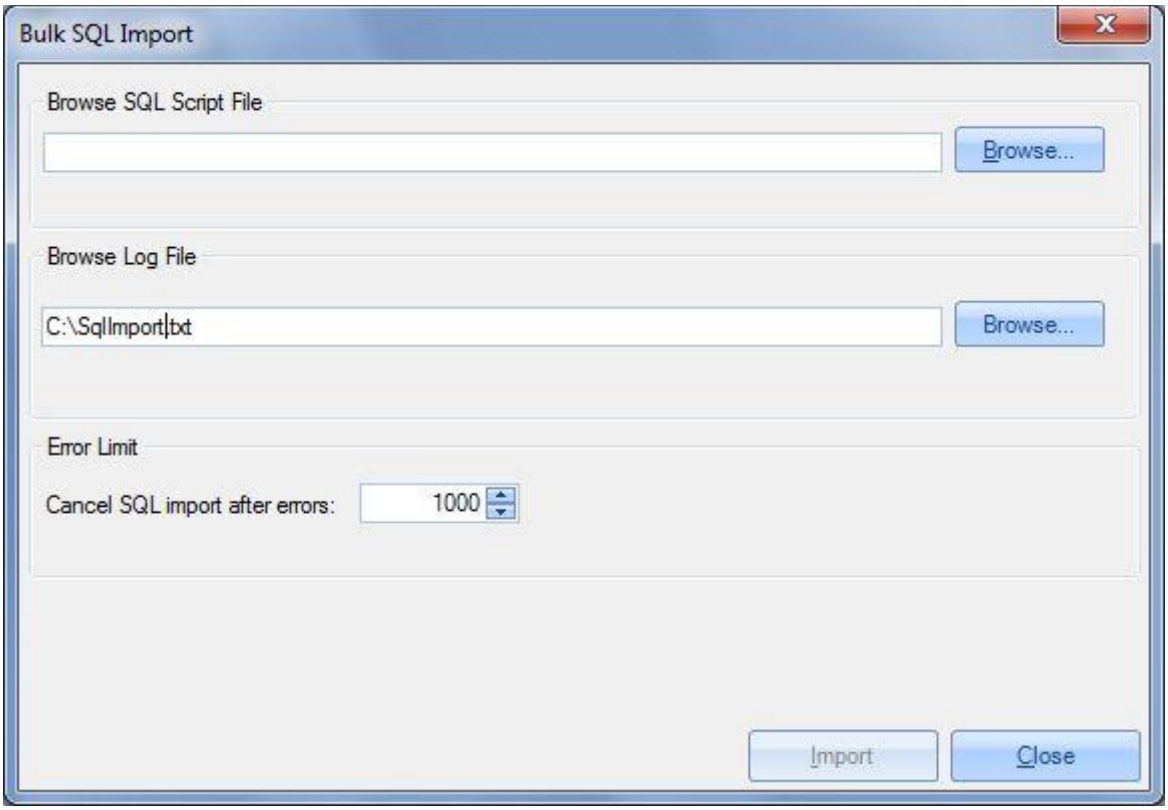
- **Field Separator:** The separator character between the fields (columns)
- **Field Encloser:** The field (column) data encloser.

19 Data Import

BI Studio provides advanced XML, CSV and bulk SQL import features.

19.1 Bulk SQL Import

The **Bulk SQL Import** can import or execute SQL commands (or statements) in an SQL file. Bulk SQL Import feature is a good fit for large SQL files and imports. You can import any large SQL file into your database and a progress dialog will be shown. During SQL import all log status and information will be written in a log file. After the import the user can check and find more information about bulk import.

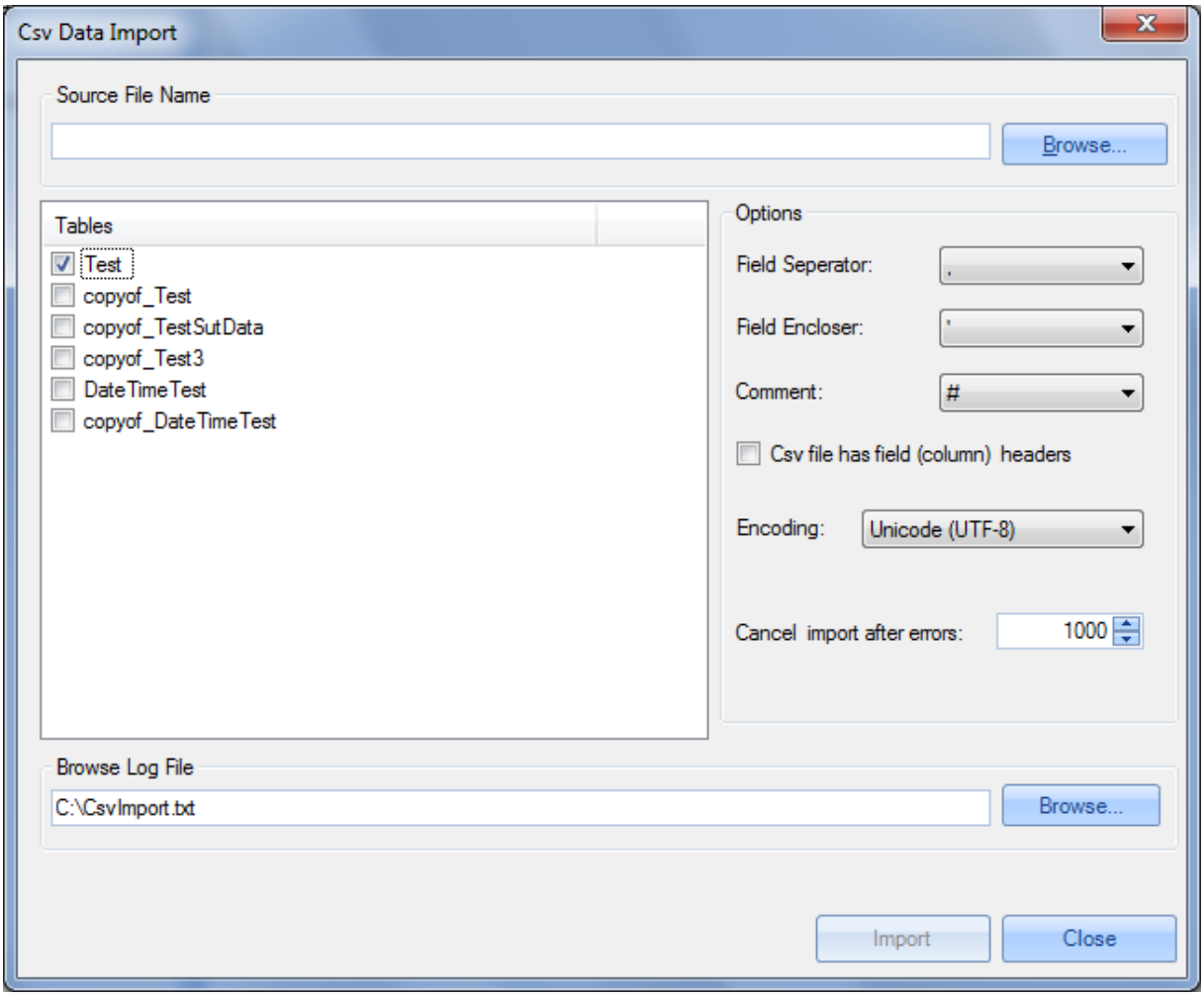


Bulk SQL Import Dialog

The log file will be written to the desktop but the user can change the file location.

19.2 CSV Data Import

Data import feature supports only CSV format. With this feature you can import any CSV data into a database table.



CSV Data Import Dialog

19.2.1 CSV Import Options

Field Encloser : Encloser character for the field or table column.

Field Separator: Separator character for the field or table column.

Comment: start character for the comment line

Encoding: Encoding of the CSV file.

Number of Error Limit: This option allows the user to control your CSV data import process in case of errors.

Log File: The CSV import feature writes all import errors and import summary into the log file. You can check this file after the import.

20 Data Search

Nucleon BI Studio provides you two data search modules: Advanced Data Search and Full-Text data search engine.

20.1 Advanced Data Search

The **Search Engine** feature is implemented to search data in the database with advanced data search options. It allows the user to search data without using any SQL query which makes searching more easily and rich. The searches results are presented in a data view and can be exported to supported file formats.

When you create a definition to search, you can define one or more clauses that will look for what you want to find. For each clause, you can specify a field, an operator, and a value or variable. For example, you can search for all column data in a particular table by specifying the table column.

A sample search clause:

And/Or	Field	Operator	Value
	City	Equals	Afyon
And	Code	=	03500
OR	MyDate	DateTimeEqual	01.01.2010

20.2 And / Or Operators

You can use this column to specify how clauses are tested. You can specify "AND" if you want to find work items that meet the criteria in both this clause and the previous one. You can specify "OR" if you want to find work items that meet the criteria in either this clause or the previous one.

20.2.1 Query Fields and Values

When you specify a value for a field, the value must conform to the data type of that field.

Data Search Operators

You can use search operators in following operator table to specify how each value in a clause must relate to the corresponding value in the table column.

20.2.2 Text (String) Operators

The search engine provides the following text (string) operators:

Operator	Description
Equals	Compares whether the specified text matches the string in the database.
NotEquals	Compares whether the specified text does not matches the string in the database.
EqualsIgnoreCase	Case In-Sensitive: Compares whether the specified text matches the row data and ignores case.
EqualsMatchCase	Case Sensitive: Compares whether the specified text matches the row data match the case.
EndsWith	Determines whether the end of this string instance matches the specified string.
StartsWith	Compares whether the beginning of string instance matches the specified string.
Contains	Returns a value indicating whether the specified text object occurs within this string.
IndexOfAny	Searches the index of the first occurrence in this instance of any Character in a specified array of Unicode characters. This method performs an ordinal (culture-insensitive) search, where a character is Considered equivalent to another character only if their Unicode scalar values are the same.
Fuzzy Search	Search with fuzzy (approximate) matching. The matching score is 50%.
Regular Expression	Searches with regular expression.

20.2.3 Mathematical Operators

The search engine provides the following number operators:

Operator	Description
=	Equals (Matches the value in the database)
<	Smaller (Is less than the value in the database)
>	Bigger (Is bigger than the value in the database)
> =	Equals or Bigger (Is bigger than or equal to the value in the database)
< =	Equals or Smaller (Is less than or equal to the value in the database)
< >	Not Equals (Does not match the value in the database)

20.2.4 Date and Time Operators

The search engine provides the following date and time search operators:

Operator	Description
DateTimeEqual	Compares whether the specified date time matches the date time.
DateTimeEarlier	Compares whether the specified date time earlier than the date time in the database.
DateTimeLater	Compares whether the specified date time later than the date time in the database
DateTimeNotEqual	Compares whether the specified date time is not equal to the date time in the database.

20.3 Full-Text Data Search

Full-Text search allows you to search your text (words, sentences, numbers etc.) in your database tables.

20.3.1 Fuzzy Searching

Fuzzy searching will find a word even if it is misspelled. For example, a fuzzy search for **apple** will find **appple**. Fuzzy searching can be useful when you are searching text that may contain typographical errors (such as emails), or for text that has been scanned using optical character recognition (OCR). There are two ways to add fuzziness to your searches:

1. Check Fuzzy searching in the search dialog box to enable fuzzy searching for all of the words in your search request. You can adjust the level of fuzziness from 1 to 10. (Usually values from 2 to 5 are best for moderate levels of error tolerance.)

2. Add fuzziness selectively using the % character. The number of % characters you add determines the number of differences search engine will ignore when searching for a word. The position of the % characters determines how many letters at the start of the word have to match exactly. Examples:
ba%nana: Word must begin with **ba** and have at most one difference between it and banana.
b%%anana: Word must begin with b and have at most two differences between it and banana.

21 Data Package Export/Import

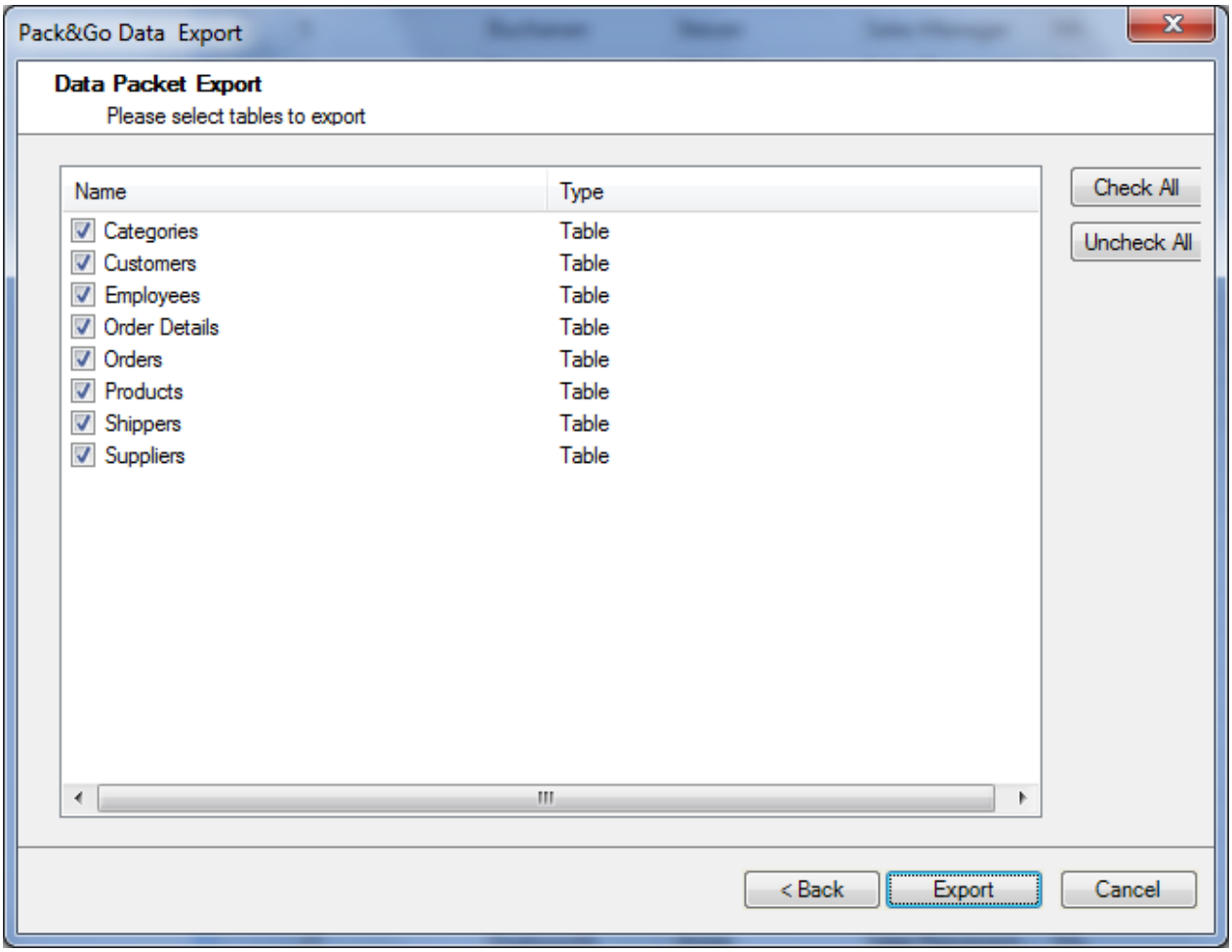
BI Studio provides a powerful export and import feature to export and import your data without any encoding, corruption and size problem. It also provides the advantage of blob data type export and import. You can backup your database data, transfer your data via internet or network or send it to your friends via e-Mail without any data corruption or data error.

Data Package feature has **.datapac or .dpack** file extension and can be opened by any zip utility. **Data Package** feature allows you to export large databases that contains images or any blob data. it also allows you to protected the data package with a password. **Data Package** file format uses the ZIP file format to package data and it is also readable by and useful for third party applications.

Why should I use Data Package Export/Import?
Exporting data as an SQL script is not suitable for large data or blob types. The data can corrupt or importing large SQL files can fail. **Data Package** feature allows you to export and import your data in a secure way and by doing so you can share your data with third party applications.

21.1 Exporting Data Package

To export a Data Package you should select a database and its tables to export. The following dialog shows how to export a data package:



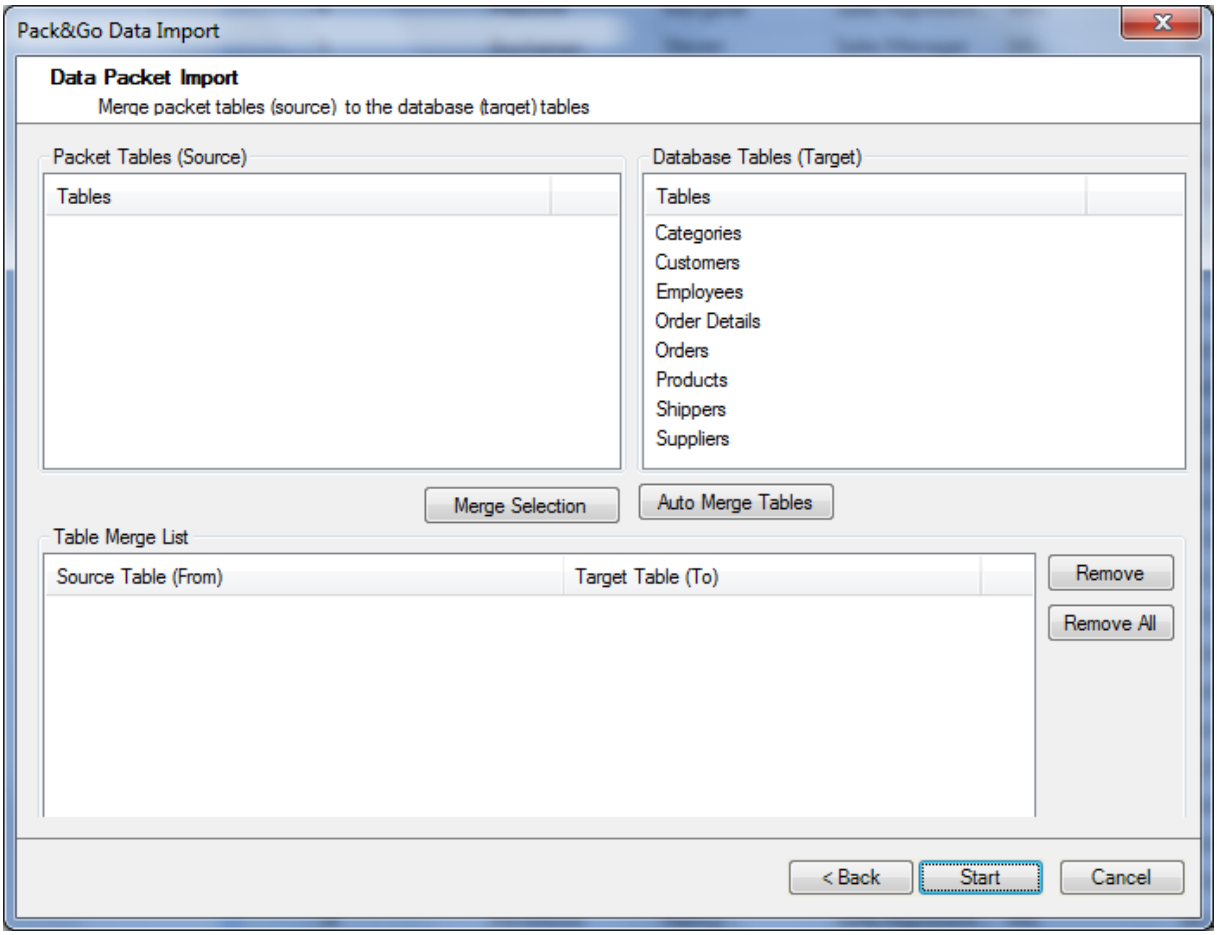
Data Package Data Package Export Dialog

21.2 Importing Data Package

The data packages can be imported from the same or different databases. To import a data package, you should first browse the package and assign the source-target tables. They will be automatically assigned when you browse the package. If the data package encrypted with a password, you need to enter the password first then browse the package file.

Why should I assign the source/target tables?

Data Package import feature allows you to import data from different tables. This means that the target and source table names must not be the same but their table structures must be the same, otherwise data will not be imported.



Data Package Data Package Import Dialog

Assigning Target and Source Tables

This list is used to import data between values in the source tables and the relevant tables in the target database. To assign a source table to a target table, select a value from the **source table** list on the left and the relevant target table from the list on the right and click the ***Assign Selected Tables*** button. To remove a relation, select an item from the right list and click the **Remove** button.

22 Options

The Options feature allows the user to customize the BI Studio. It provides the following options:

22.1 General Options

22.1.1 List View

The List View setting is for the manager windows (Table Manager, View Manager, etc.).

22.1.2 Data Paging Counter

The data counter is the number of rows in the table data view. When the user clicks the "View Data" button in the Table Manager, the table data will be viewed but the view wouldn't include all of the data in the database table. So the number of data rows viewed can be set here. The default value is 500.

22.2 User Interface Options

User interface options allow you tochange the look and feel of the BI Studio. You can change and customize the GUI style with these options.

23 Purchasing

Purchase your BI Studio license online at:
http://www.nucleonsoftware.com/

Purchased licenses are delivered by email. [Be sure to include share-it.com in your approved senders list so that your license will bypass mail filters.]After receiving the license to complete your registration, click Help->Activate BI Studio and enter your license.

24 Further Help

If you want more information or help for BI Studio or want to submit some feedback, there are some alternatives:

Use the following information for further help:
Support: **support@nucleonsoftware.com**
Web: http://www.nucleonsoftware.com

24.1 Bug Reports

If you find that **BI Studio** isn't working correctly or just crashing, you probably encountered a bug. First check if you have the latest version, because on every release of **BI Studio** will many contain improvements and bugs fixes.

Please make sure that you are using the latest version of **BI Studio** and that you have carefully read this help file.

For Bug (Error) reports please use the following e-mail: **support@nucleonsoftware.com**

24.2 Feature Requests

If you have a (very) good idea on how to improve BI Studio, you can request a feature using the following e-mail:
support@nucleonsoftware.com