



DB2 Database Converter

User's guide

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1 Welcome to DB2 Database Converter!

DB2 Database Converter is a powerful tool for migrating schema and data from any ADO-compatible database to DB2. It allows you to transfer tables, indexes, foreign key constraints. With this tool you can convert source objects directly to the target database or generate SQL scripts with objects definitions and INSERT statements to be used later.

Key features:

- Copying tables, indexes, and foreign keys
- Native support for most popular database servers
- Support for all other data sources accessible via ODBC / OLE DB
- Bulk data loading
- Flexible and customizable data type mappings
- Smart database integrity checker
- Command-line interface to automate the conversion

1.1 System Requirements

Client environment

- Pentium PC or higher;
- Windows NT4/2000/XP/Vista/Windows 7/Windows 8/Windows 10/Windows 11;
- 512 MB RAM (1 GB recommended);
- 25 MB of free hard disk space;
- SVGA-compatible video adapter;
- any DB2 client.

Server environment

- DB2 8.x-10.x.

1.2 Installation

To install **DB2 Database Converter** on your PC:

- download the DB2 Database Converter distribution package from the [download page](#) at our site;
- run setup.exe from the local folder and follow the instructions of the installation wizard;
- find the DB2 Database Converter shortcut in the corresponding program group of the Windows Start menu after the installation is completed.

1.3 How can I purchase DB2 Database Converter?

Thank you for your interest in purchasing **DB2 Database Converter**!

You can select licensing options and register DB2 Database Converter at its [on-line order page](#). It is possible to purchase on-line, by fax, mail, toll-free phone call, or place a purchase order. We send the software activation key by email within 24 hours after completion of the order process. If you have not received the activation key within this period, please contact our [sales department](#).

All our products and bundles are shipped with 12 months of free upgrades (minor and major ones) or with 36 months of free upgrades for a quite small additional fee. After this period you may renew your license for the next 12(36) months with a 50% discount.

DB2 Database Converter has a free 30-day trial. Upon purchasing the product you confirm that you have tested it and you are completely satisfied with its current version.

To obtain technical support, please visit the [appropriate section](#) on our website or contact us by email to support@sqlmaestro.com.

1.4 License Agreement

Notice to users: carefully read the following legal agreement. The use of the software provided with this agreement (the "SOFTWARE") constitutes your acceptance of these terms. If you do not agree to the terms of this agreement, do not install and/or use this software. The use of this software is conditioned upon the user's compliance with the terms of this agreement.

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1.5 About SQL Maestro Group

SQL Maestro Group is a privately-held company producing high-quality software for database administrators and developers. The united team of eminently qualified developers is pleased to create new software products for commercial, academic and government customers worldwide. We do our best to design and develop products that remove complexity, improve productivity, compress time frames, and increase database performance and availability. We are glad to realize that our products take usual chores upon themselves, so that our customers could have more time left for their creative work.

The company was founded in 2002 as an essential partner for every business that is trying to harness the explosive growth in corporate data. SQL Maestro Group employs an international team concentrating their efforts on cutting-edge DBA tools development.

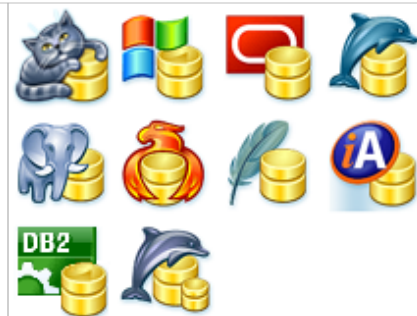
The slogan of our company is **The Shortest Path to SQL**. It is aimed to denote that we set to create easy-to-use products meant for those who appreciate comfort, friendly program interface and support when working with SQL servers.

- We are pleased to facilitate your job.
- We aim at being of considerable assistance to our clients.
- We feel contented doing our beloved work.

At present, our company offers a series of Windows GUI admin tools for SQL management, control and development of the following servers: **MySQL, Microsoft SQL Server, PostgreSQL, Oracle, SQL Anywhere, DB2, SQLite, Firebird, and MaxDB**. We also produce universal tools to be used for administering any database engine accessible via ODBC driver or OLE DB provider. Such products may be the clear-cut decision for those who constantly work with several database servers.

SQL Maestro is the premier Windows GUI admin tool for database development, management, and control.

It provides you with the ability to perform all the necessary database operations such as creating, editing, copying, extracting and dropping database objects; moreover, you can build queries visually, execute queries and SQL scripts, view and edit data including BLOBs, represent data as diagrams, export and import data to/from most popular file formats, manage users and their privileges (if possible), and use a lot of other tools designed for making your work with your server comfortable and efficient.



SQL PHP Generator is a powerful tool for creating database-driven web applications visually. It allows you to generate high-quality PHP scripts for working with tables, views and queries through the web. You needn't have any programming background to use it.



SQL Data Wizard is a high-capacity Windows GUI utility for managing your data.

It provides you with a number of easy-to-use wizards for performing the required data manipulation easily and quickly. The tool allows you to export data from DB2 tables and queries to most popular formats, import data into the tables, generate SQL dump of selected tables, and export/import BLOB fields from/to files.



SQL Code Factory is a premier GUI tool aimed at the SQL queries and scripts development.

It allows you to manage SQL queries and scripts using such useful features as code folding, code completion and syntax highlighting, build query visually, execute several queries at a time, execute scripts from files, view and edit result data with filtering, sorting and grouping abilities, export data to as many as 14 file formats including Excel, RTF and HTML, import data from Excel, CSV, XML and text files, view and edit BLOBs in various way, build diagrams based on Oracle data, and much more.



Database Converter is a user friendly tool to migrate any local or remote ADO-compatible database to DB2.

Such tools transfer database schema and data and are equipped with native support for the most popular database servers.



Data Sync is a powerful and easy-to-use tool for database contents comparison and synchronization.

Such tools can be useful for database administrators, developers and testers that need a quick, easy and reliable way to compare and synchronize their data.



The software products are constantly optimized for the latest server versions support.

You can use the following contact information if necessary:

Our web-site www.sqlmaestro.com

Postal address: **SQL Maestro Group**
140 Broadway, Suite 706
New York City, New York 10005
United States

Thank you for your interest to our company!

1.6 What's new

Please find out the latest DB2 Database Converter news at <http://www.sqlmaestro.com/products/db2/converter/news/>

2 Getting Started

To convert a database with its structure and data,

- Set connection options of [source](#)^[12] and [target](#)^[24] databases;
- [Select objects](#)^[27] to convert;
- [Adjust options](#)^[30] of the objects to create;
- [Select tables](#)^[31] for data import;
- [Specify other transfer options](#)^[33].

DB2 Database Converter allows you to save and restore all the options set during a session. You need not to specify all options each time you work with the application anew; instead you can load all settings from a project and change them if necessary. When working with a project, all the session parameters are loaded from a project file and may be edited if necessary. To run a wizard with a project, follow [More... > Load Project](#) on the first wizard step and enter the name of the project file, recently used projects are also available from this popup menu. Find out more about working with [projects](#)^[28].

2.1 Connecting to the source data

DB2 Database Converter supports native connection to [MySQL](#)^[12], [PostgreSQL](#)^[15], [Firebird](#)^[18], [MS SQL Server](#)^[18], [SQLite](#)^[21], and [Oracle](#)^[21]. To transfer schema and data from data sources accessible via ODBC driver or OLE DB provider such as MS Access, Text files, MS Excel, etc. specify the corresponding [connection string](#).

2.1.1 MySQL

Specify the following credentials to connect to MySQL.

- **Direct connection**

It is the most natural and the most preferable connection mode. Use it each time it is possible. Most of hosting companies allow direct connections to databases. However in most cases you have to go to your control panel and add your home/office computer IP address or domain name to the Access List - list of IP addresses allowed accessing from outside. [More information](#).

- **SSH tunnel connection**

If your DB2 server does not allow direct connections from your remote workstations, you can establish connection to an allowed intermediate SSH server and forward all MySQL commands through the [Secure SHell \(SSH\) tunnel](#).

- **HTTP tunnel connection**

[HTTP tunneling](#) is a technique used in conditions of restricted network connectivity including firewalled networks, networks behind proxy servers, and NATs. It is the slowest way and is recommended to use if the others are impossible.

Irrespectively of a connection mode you should specify common credentials as follows:

Host

The host name of the MySQL server.

Port number

The TCP/IP port to use (default MySQL port is 3306).

User name

The username used to connect to MySQL.

Password

The password for the user account on server.

Allow old style password

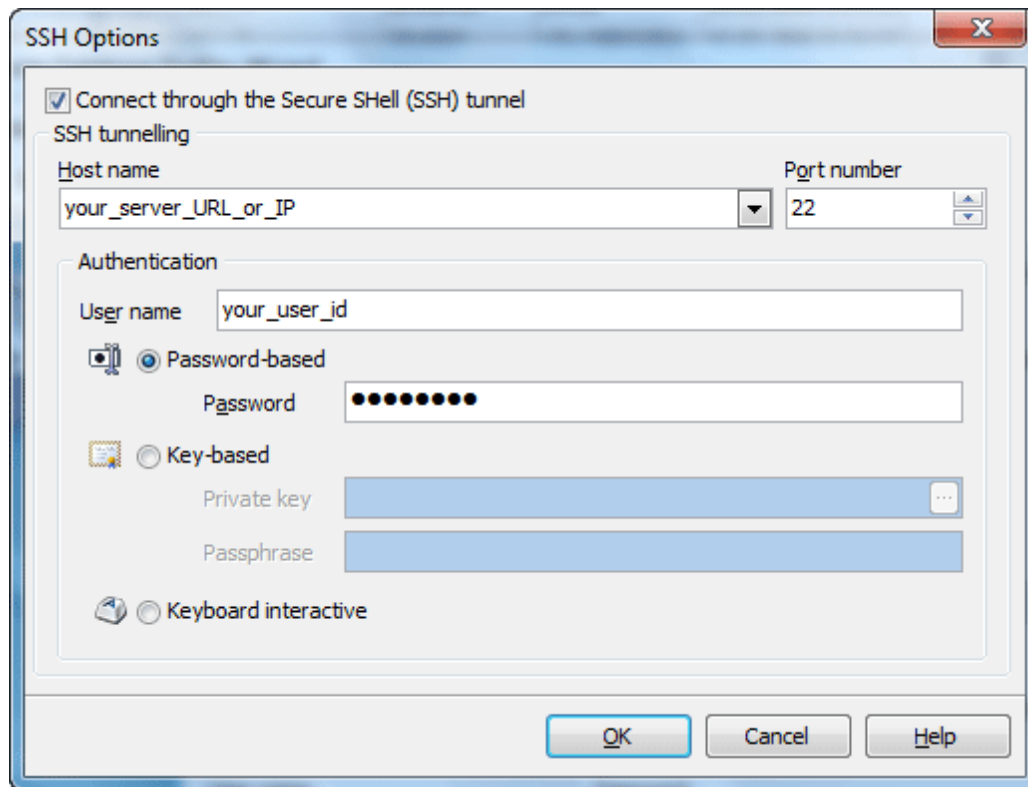
Turn this option ON only if your MySQL server still uses 16 bytes long password hashes. [More information](#).

📖 **More about SSH tunnel connection**

To establish connection to intermediate SSH server and forward all DB2 commands through the secure tunnel, you need to:

1. Check [I can connect to the server directly or via SSH tunneling](#).

2. Follow the [Configure SSH options](#) link to open the SSH Options window.



3. Check [Connect through the Secure Shell \(SSH\) tunnel](#) and complete the following fields:

Host name

Specify the host name or IP of your site. Note, that DB2 host name always should be set relatively to the SSH server. For example, if both of DB2 and SSH servers are located on the same computer, you should specify localhost as Host name instead of server's external host name or IP address.

Port number

Enter the port number for the SSH server.

4. Enter valid [User name](#) for the remote server and select the [Authentication](#) method and set corresponding credentials.

Password-based

Set the [password](#) corresponding to the specified user.

Key-based

Specify the path to the [Private key](#) file with the corresponding [Passphrase](#) to log in to the remote server. DB2 Database Converter accepts keys in **ssh.com** or **OpenSSH** formats. To convert a private key from PuTTY's format to one of the formats supported by our software, [use the PuTTYgen utility](#) that can be freely downloaded from the [PuTTY website](#).

Keyboard interactive

Keyboard authentication is the advanced form of password authentication, aimed specifically at the human operator as a client. During keyboard authentication zero or more prompts (questions) is presented to the user. The user should give the answer to each prompt (question). The number and contents of the questions are virtually not limited, so certain types of automated logins are also possible.

More about connection via HTTP tunnel

To connect to a remote server using an HTTP tunnel, you need to:

1. Upload the connection PHP script to your website. The installation folder, usually C:\Program Files\SQL Maestro Group\DB2 Database Converter, contains two scripts: *mysqli_tunnel.php* and *mysql_tunnel.php*. We would recommend you to **use the *mysqli_tunnel.php* script always if possible** as it operates through the [MySQLi PHP extension](#) (available since PHP 5) while *mysql_tunnel.php* uses the [original MySQL PHP API](#) that is deprecated as of PHP 5.5.
2. Select the [I have to use HTTP tunneling](#) radio button.
3. Enter the connection PHP script URL, e.g. [www.yoursite.com/files/sqlite_tunnel.php](#). You can test the connection before the profile is created. Just use [Test script using default browser](#) to open connection script in your browser, enter all the required connection parameters and click the [Test connection](#) button.

Connection Script

Fields marked by * are required.

Host/Server name (or IP) *:	<input type="text" value="localhost"/>
User *:	<input type="text" value="root"/>
Password:	<input type="text" value="mypass"/>
Port (if not 3306):	<input type="text"/>
Database *:	<input type="text" value="mydb"/>
	<input type="button" value="Get Database List"/>
	<input type="button" value="Test Connection"/>
	<input type="button" value="ShowTables"/>

4. In case using of a proxy server use [Configure tunnelling options](#) to open the [HTTP tunnelling options](#) window and specify your [proxy server](#) connection parameters and [HTTP authentication](#).

Note: You are actually connecting to your database through the PHP script on the

server, so in most cases the host/server name is "localhost" unless the target database server is not installed on the same computer as the Web server.

2.1.2 PostgreSQL

Specify the following credentials to connect to PostgreSQL.

- **Direct connection**

It is the most natural and the most preferable connection mode. Use it each time it is possible.

- **SSH tunnel connection**

If your PostgreSQL server does not allow direct connections from your remote workstations, you can establish connection to an allowed intermediate SSH server and forward all PostgreSQL commands through the [Secure SHell \(SSH\) tunnel](#).

- **HTTP tunnel connection**

[HTTP tunneling](#) is a technique used in conditions of restricted network connectivity including firewalled networks, networks behind proxy servers, and NATs. It is the slowest way and is recommended to use if the others are impossible.

Irrespectively of a connection mode you should specify common credentials as follows:

Host

The host name of the PostgreSQL server.

Port number

The TCP/IP port to use. Default PostgreSQL port is 5432.

Username

The username used to connect to PostgreSQL.

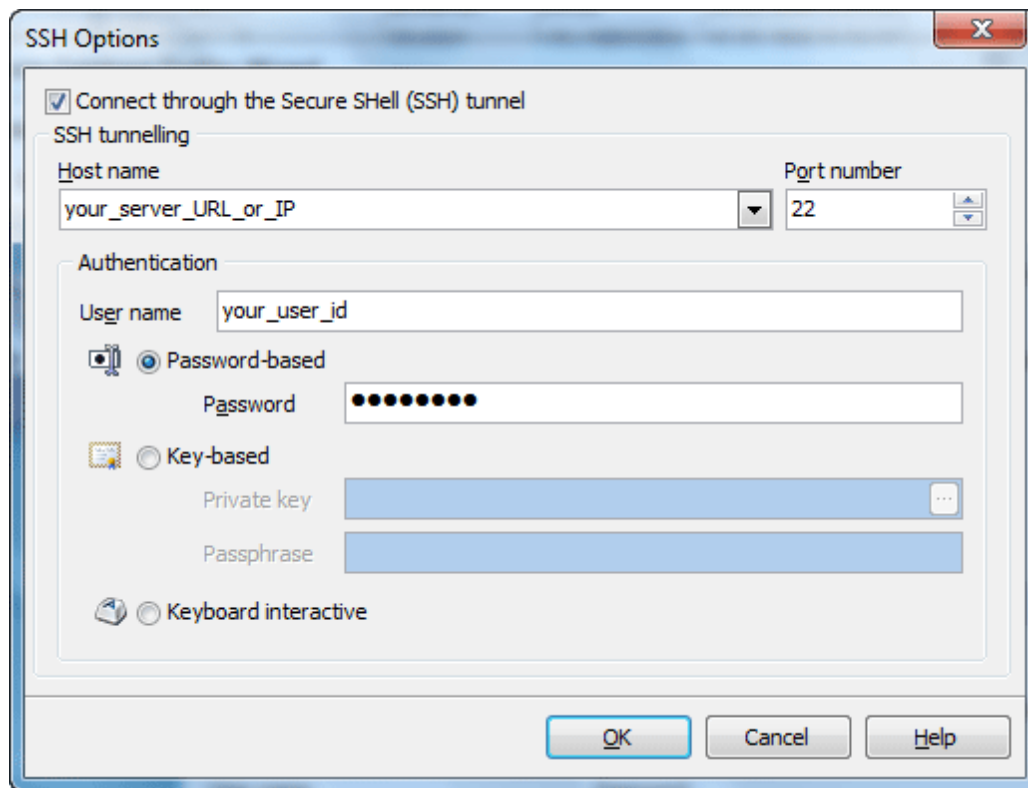
Password

The password for the user account on server.

 **More about SSH tunnel connection**

To establish connection to intermediate SSH server and forward all DB2 commands through the secure tunnel, you need to:

1. Check [I can connect to the server directly or via SSH tunneling](#).
2. Follow the [Configure SSH options](#) link to open the [SSH Options](#) window.



3. Check [Connect through the Secure Shell \(SSH\) tunnel](#) and complete the following fields:

Host name

Specify the host name or IP of your site. Note, that DB2 host name always should be set relatively to the SSH server. For example, if both of DB2 and SSH servers are located on the same computer, you should specify localhost as Host name instead of server's external host name or IP address.

Port number

Enter the port number for the SSH server.

4. Enter valid [User name](#) for the remote server and select the [Authentication](#) method and set corresponding credentials.

Password-based

Set the [password](#) corresponding to the specified user.

Key-based

Specify the path to the [Private key](#) file with the corresponding [Passphrase](#) to log in to the remote server. DB2 Database Converter accepts keys in **ssh.com** or **OpenSSH** formats. To convert a private key from PuTTY's format to one of the formats supported by our software, [use the PuTTYgen utility](#) that can be freely downloaded from the [PuTTY website](#).

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More about connection via HTTP tunnel

To connect to a remote server using an HTTP tunnel, you need to:

1. Upload the connection PHP script to your website. The script is named *sqlite_tunnel.php* and can be found under the installation folder, usually *C:\Program Files\SQL Maestro Group\DB2 Database Converter*.
2. Select the [I have to use HTTP tunneling](#) radio button.
3. Enter the connection PHP script URL, e.g. *www.yoursite.com/files/sqlite_tunnel.php*. You can test the connection before the profile is created. Just use [Test script using default browser](#) to open connection script in your browser, enter all the required connection parameters and click the [Test connection](#) button.

Connection Script

Fields marked by * are required.

Host/Server name (or IP) *:	<input type="text" value="neptun"/>
User *:	<input type="text" value="postgres"/>
Password:	<input type="password" value="••••••••"/>
Port (if not 5432):	<input type="text" value="5433"/>
Database *:	<input type="text" value="adventure"/> <input type="button" value="v"/>
	<input type="button" value="Get Database List"/>
	<input type="button" value="Test Connection"/> <input type="button" value="ShowTables"/>

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4. In case using of a proxy server use [Configure tunnelling options](#) to open the [HTTP tunnelling options](#) window and specify your [proxy server](#) connection parameters and [HTTP authentication](#).

Note: You are actually connecting to your database through the PHP script on the server, so in most cases the host/server name is "localhost" unless the target database server is not installed on the same computer as the Web server.

2.1.3 MS SQL Server

Specify the following credentials to connect to Microsoft SQL Server.

Server

The full name of SQL Server you want to connect to. Can be specified as *computer_name* (for default SQL Server instances) or as *computer_name\server_name* (for named instances). To connect to an SQL Server running on a non-default port, specify the value of this field as *computer_name,port_number* (or *computer_name\server_name, port_number*). Press the arrow button to scan for SQL Servers accessible in your network.

Provider

The application allows you to connect to SQL Server using any of SQL Server clients installed on your computer. To choose a client you want to use, select the appropriate item in the Provider combobox. The table below shows the correspondence between the value selected in this combobox and SQL Server client to be used.

Value	SQL Server client	Introduced with
SQLOLE DB	Microsoft OLE DB Provider for SQL Server (default value)	Comes with Windows
SQLNCLI	SQL Server Native Client	SQL Server 2005
SQLNCLI10	SQL Server 2008 [R2] Native Client	SQL Server 2008 [R2]
SQLNCLI11	SQL Server 2012 Native Client (recommended)	SQL Server 2012

We would recommend you to install and use **SQL Server 2012 Native Client** as it (and only it) supports [SQL Server Express LocalDB](#). Also it provides the best support for data types implemented in the recent versions of SQL Server.

Windows Authentication (more preferable)

Microsoft Windows Authentication mode allows a user to connect through a Windows user account.

SQL Server Authentication

When a user connects with a specified [Login name](#) and [Password](#) from a non-trusted connection, SQL Server performs the authentication itself by checking to see if a SQL Server login account has been set up and if the specified password matches the one previously recorded.

2.1.4 Firebird

Specify the following credentials to connect to Firebird.

- **Direct connection**

Direct connection is the most preferable connection mode.

- **SSH tunnel connection**

If your Firebird server does not allow direct connections from remote workstations, you can establish connection to intermediate SSH server and forward all Firebird commands through the [Secure SHell \(SSH\) tunnel](#).

Irrespectively of a connection mode you should specify common credentials as follows:

Protocol

Select "Standard server" to connect to a local or remote standalone Firebird server or "Embedded server 2.5-" / "Embedded server 3.0+" to use the embedded Firebird servers that come with the software (2.5 and 3.0 accordingly).

Host

The name of machine the Firebird server and database file resides on. It is usually possible to specify TCP/IP address instead of name (like 192.168.12.34), however this functionality is not built into Firebird, instead, it is provided by underlying network layer (e.g. WinSock2), and for some implementations/configurations it can be much slower than using name. In case the server is not localhost, specify the TCP/IP port as [Port number](#).

Login information

Since Firebird 2.1, Windows authentication has been used for configuring the server authentication mode along with the traditional login info, requiring users to log in using a user name and password defined in the security database. To use [Windows authentication](#), check the corresponding box. Under the right conditions, this may be the most secure way to authenticate on Windows. Otherwise, set the following server security options:

User name The username used to connect to Firebird. User names are case insensitive on the server.

Password The password for the user account on server. The server checks the user name and password against the security database. Case sensitivity is retained for the comparison. Only first 8 characters of Password are verified.

Role Specify the role that the user adopts on connection to the database or leave it blank. Regardless of role memberships granted, the user has the privileges of a role at connect time only if a [Role](#) clause is specified in the connection. The user must have previously been granted membership in the role to gain the privileges of that role.

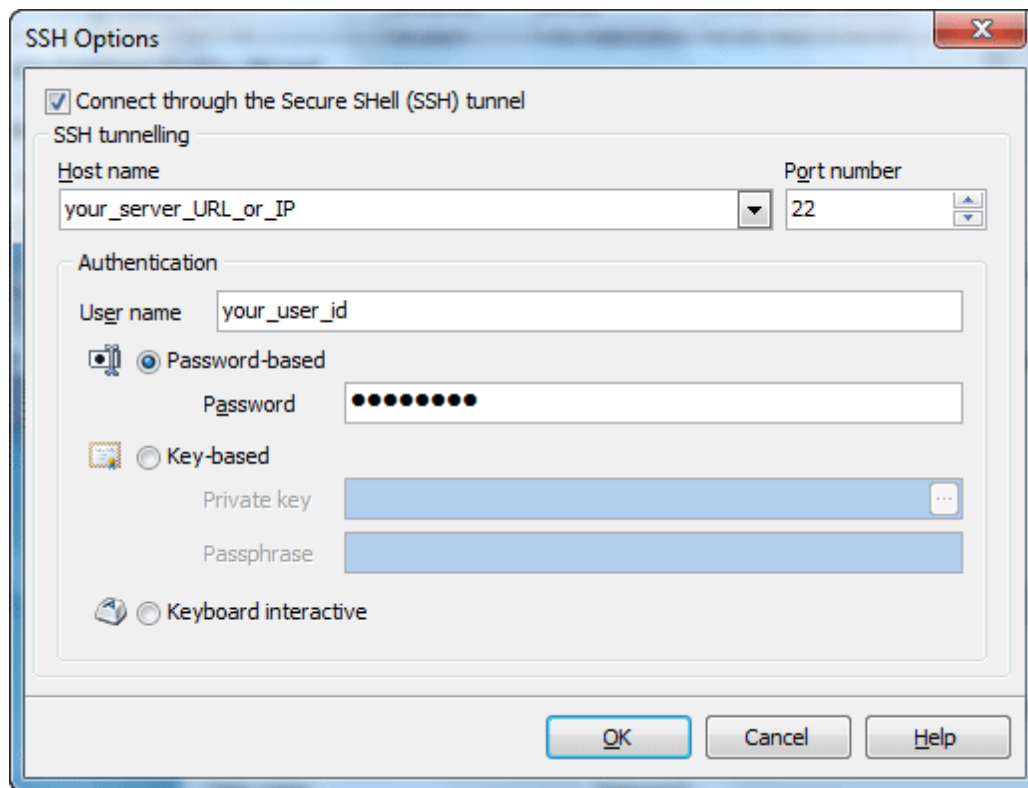
Database name

This is either a full name of the database file (as seen from the server), or an alias defined in the server's [aliases.conf](#) file.

More about SSH tunnel connection

To establish connection to intermediate SSH server and forward all DB2 commands through the secure tunnel, you need to:

1. Check [I can connect to the server directly or via SSH tunneling](#).
2. Follow the [Configure SSH options](#) link to open the [SSH Options](#) window.



3. Check [Connect through the Secure Shell \(SSH\) tunnel](#) and complete the following fields:

Host name

Specify the host name or IP of your site. Note, that DB2 host name always should be set relatively to the SSH server. For example, if both of DB2 and SSH servers are located on the same computer, you should specify localhost as Host name instead of server's external host name or IP address.

Port number

Enter the port number for the SSH server.

4. Enter valid [User name](#) for the remote server and select the [Authentication](#) method and set corresponding credentials.

Password-based

Set the [password](#) corresponding to the specified user.

Key-based

Specify the path to the [Private key](#) file with the corresponding [Passphrase](#) to log in to the remote server. DB2 Database Converter accepts keys in **ssh.com** or **OpenSSH** formats. To convert a private key from PuTTY's format to one of the formats supported by our software, [use the PuTTYgen utility](#) that can be freely downloaded from the [PuTTY website](#).

Keyboard interactive

Keyboard authentication is the advanced form of password authentication,

aimed specifically at the human operator as a client. During keyboard authentication zero or more prompts (questions) is presented to the user. The user should give the answer to each prompt (question). The number and contents of the questions are virtually not limited, so certain types of automated logins are also possible.

2.1.5 Oracle

To connect to an Oracle database with DB2 Database Converter, specify the following connection options:

User name

Use the field to specify the username to be used to connect to Oracle.

Password

Enter the password for the user account on server.

Database name

An entry from [TNSNames.ora](#).

Connect mode

Allows you to connect with required administrative privileges (SYSDBA or SYSOPER).

[More information](#).

Check [Use Operating system authentication](#) to allow Oracle to pass control of user authentication to the operating system. The technology works as follows:

- First, create an OS user (if it doesn't exist).
- Check a value of the Oracle `OS_AUTHENT_PREFIX` initialization parameter. Current value of this parameter can be retrieved using the following query:

```
SELECT VALUE FROM V$PARAMETER  
WHERE NAME = 'os_authent_prefix'
```

The default value is OPS\$. The initialization parameter can be modified with the ALTER SYSTEM command.

- Create a database user. The user must use the external identification and its name must be the prefix value concatenated to the OS username (on Windows platforms you would expect an Oracle username of "OPS\$DOMAIN\MY_USER" for the user "my_user").

2.1.6 SQLite

As SQLite is implemented as an embedded database engine contained in a single DLL, SQLite databases usually are stored locally or in the shared folders. To connect to such database, you should provide only a full database file name (e.g. C:\Data\SQLite\MyDatabase.db3) and a password (only for encrypted databases).

To read and write encrypted databases, DB2 Database Converter uses the free [wxSQLite3 library](#) that is included into the installation package. This means it can operate only with encrypted databases created by itself or by any other tool that uses the same library. Unfortunately, our software cannot connect to databases encrypted

by any other library because different SQLite security extensions use different algorithms, which are not compatible with each other.

SQLite engine does not support network connections, however DB2 Database Converter allows you to manage remote SQLite databases using the HTTP tunneling technique. For this purpose, you need to have a webserver running on a computer that stores the database file. Of course this webserver should be accessible from your workstation and you should be able to upload files there.

More about connection via HTTP tunnel

To connect to a remote SQLite database using an HTTP tunnel, you need to:

1. Upload the connection PHP script to your website. The scripts are named *sqlite_tunnel.php* and *sqlite3_tunnel.php* for SQLite databases versions 2 and 3 accordingly and can be found under the installation folder, usually *C:\Program Files\SQL Maestro Group\DB2 Database Converter*.
2. Turn ON the [I have to use HTTP tunneling](#) checkbox.
3. Enter the connection PHP script URL, e.g. *www.yoursite.com/files/sqlite_tunnel.php*. You can test the connection before the profile is created. Just use [Test script](#) using default browser to open connection script in your browser, enter all the required connection parameters and use the [Test connection](#) button.

Connection Script

Fields marked by * are required.

Database *:

ATP_Tennis.db3

Test Connection

ShowTables

Table List

COUNTRIES

PLAYERS

PLAYERSINTOUR

SURFACETYPE

TOURS

TOURSTYPE

4. In case using of a proxy server use [Configure tunnelling options](#) to open the [HTTP tunnelling options](#) window and specify your [proxy server](#) connection parameters and [HTTP authentication](#).

Note 1. Do not forget to enable read/write permissions for a database file and read/write/execute permissions for the directory where the database file is stored.

Note 2 (only for SQLite 3 databases). The webserver PDO_SQLite library must be compatible (not earlier in the most cases) with the library the database was created with. If they are not compatible, you will get an error message "Could not retrieve table list from _database_name_ ... " on getting a table list at the connection script. If you've got the message, check the PDO_SQLite library version using, for example, the *phpinfo()* function, download a compatible library from the [SQLite official website](#), get an SQL dump of the database and create a new one from the dump file with this library.

2.2 Connecting to the target database

To setup a connection to a DB2 database stored on a remote server, you need:

1. Get any DB2 client with ODBC driver installed on your computer. We recommend to use clients with the DB2 Command Line Processor (CLP) tool. It seems that IBM Data Server Runtime Client is the best solution in this situation. It is free and is not overloaded with various drivers. To obtain this client, visit the [publisher's site](#) and download *IBM Data Server Runtime Client (Windows 32-bit AMD and Intel x86)*.

2. Get this database catalogued by db2 on the client machine. The DB2 client can work only with catalogued databases assumed with cataloged nodes (servers). To work with a DB2 database with DB2 Database Converter, you have to get this database catalogued on the client machine (the operation is accomplished only once) and to specify the *name of user* registered on DB2 server and the corresponding *password*. To catalogue a DB2 database, follow the steps below:

2.1 Catalog the node of server. To get all the catalogued nodes of the client machine, enter the following command to the DB2 Command Window or similar (It's time to use DB2 Command Line Processor ;)):

```
db2 list node directory
```

To catalog a new server node, use the following command:

```
db2 catalog tcpip node <nodename> remote <hostname or ip address>
server <db2servicename> [remote <instance_name> ostype <OSname>]
```

nodename – the node name to be used on your computer

hostname or ip address – hostname/ipaddress of server storing the DB2 database

db2servicename – ServiceName or port number of db2instance (db2 get dbm cfg | grep SVCENAME)

instance_name – instance name of db2 database.

OSname – Solaris, windows, AIX, Linux etc.

Example:

```
db2 catalog tcpnode testnode remote testhost server 50000
db2 catalog tcpnode testnode remote testhost server 50000 remote db2inst1
```

2.2 Catalog the necessary database on the corresponding node. To get the list of catalogued databases, use the following command:

```
db2 list db directory
```

To add the necessary database to the catalog, enter the following command:

```
db2 catalog database <dbname> as [<db_alias>] at node <nodename>
```

dbname – database name

db_alias – optional database alias, if you want database name different on client.

nodename – nodename you created on first step

Example:

```
db2 catalog database testdb as testdb at node testnode
db2 catalog database sample at node testnode
```

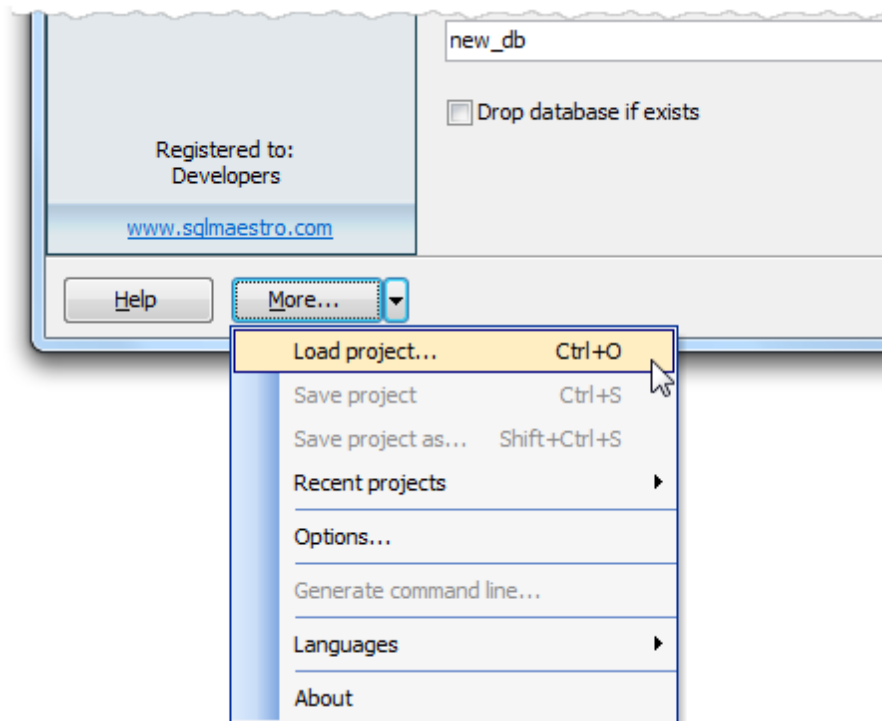
2.3 Projects

DB2 Database Converter allows you to save and restore all the options set during a session. You need not to specify all options each time you work with the application anew; instead you can load all settings from a project and change them if necessary.

Projects are very useful when working with DB2 Database Converter. If you will close the application without saving a project, all carefully adjusted settings will be lost. To set the same options next time, you'll need to repeat the process step by step again while with a project all the session parameters can be restored in a few mouse clicks.

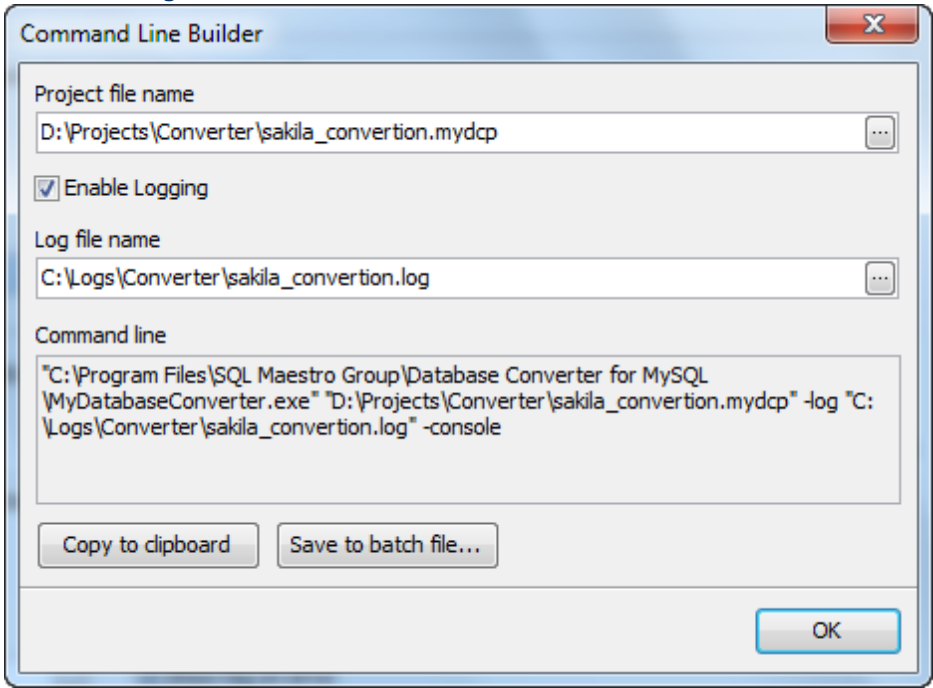
To create a project, click [More > Save Project](#). All the settings you have made will be saved to a file.

To restore previously saved settings from a project, click [More > Load Project](#) at the first wizard step. Recently used projects are available from the [More > Recent Projects](#) popup menu.



2.4 Command line options

DB2 Database Converter supports a number of command line options that make it possible to fully automate database migration. To generate the command line automatically, load the project to be used or specify the comparison options and click [More > Generate command line](#) To log the conversion process, check the corresponding option and set the Log file name.



The DB2 Database Converter command line syntax is as follows:

MyDatabaseConverter[.exe] <project_file_name> [-l|log <log_file_name>] -console

MyDatabaseConverter[.exe]	The DB2 Database Converter program file.
<project_file_name>	The project with all the task's settings.
-c console	Runs the wizard in console mode. This option is required.
-l log	Enables logging, requires the log file name.

Examples

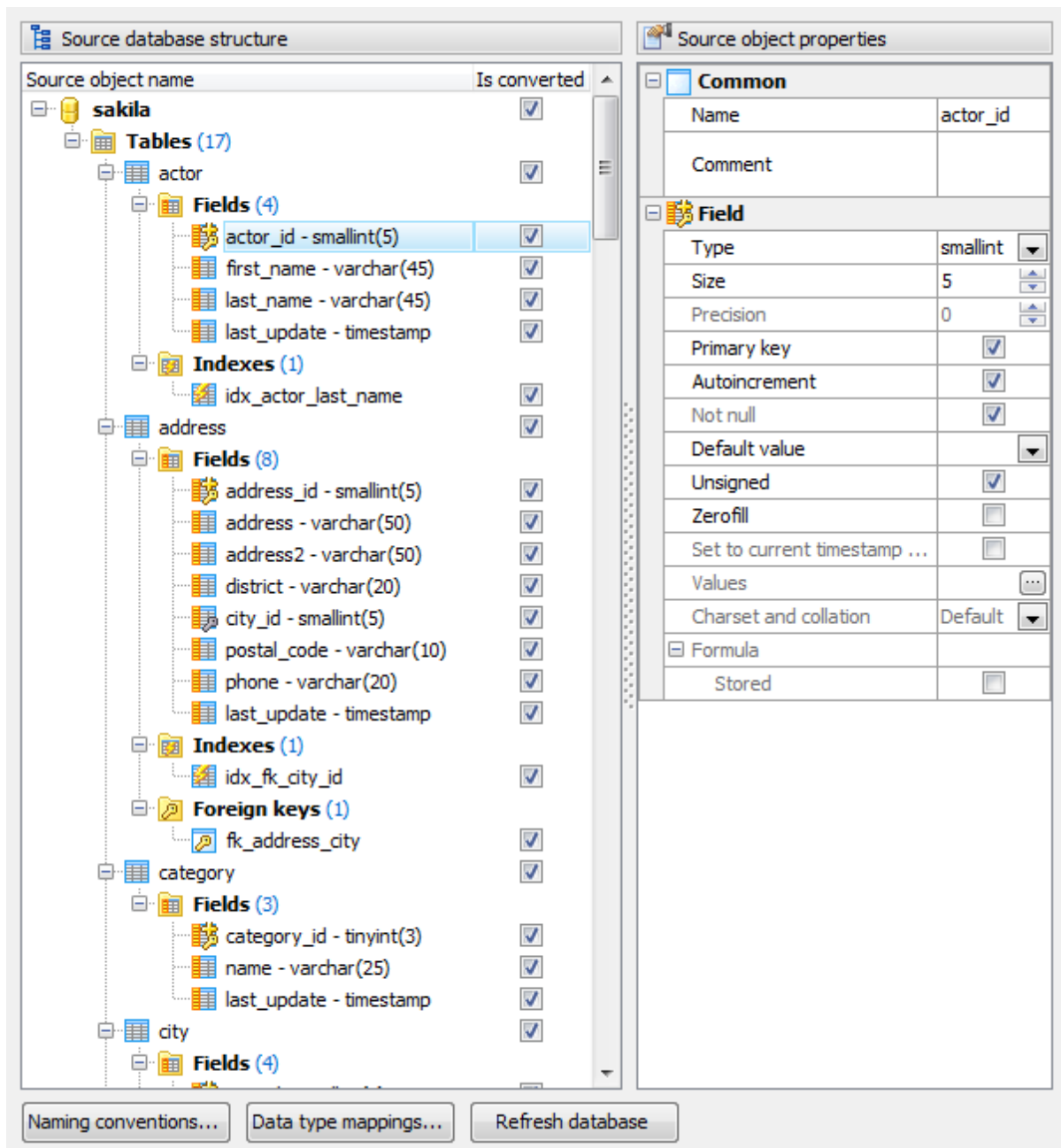
The example below assumes that you are entering the command lines in the DB2 Database Converter program directory. Don't forget to enclose all paths and filenames containing spaces in quotes.

```
"C:\Program Files\SQL Maestro Group\Database Converter for MySQL  
\MyDatabaseConverter.exe" "D:\Projects\sakila_conversion.mydcp" -console
```

3 Source objects

The [Source database structure](#) tab represents the schema of the source database and allows you to specify objects to be transferred to the target one. To include an object to the conversion process, turn on the corresponding "Is converted" option. To get the actual database objects tree, use the [Refresh database button](#). The [Source object properties](#) tab allows you to browse the selected object's options.

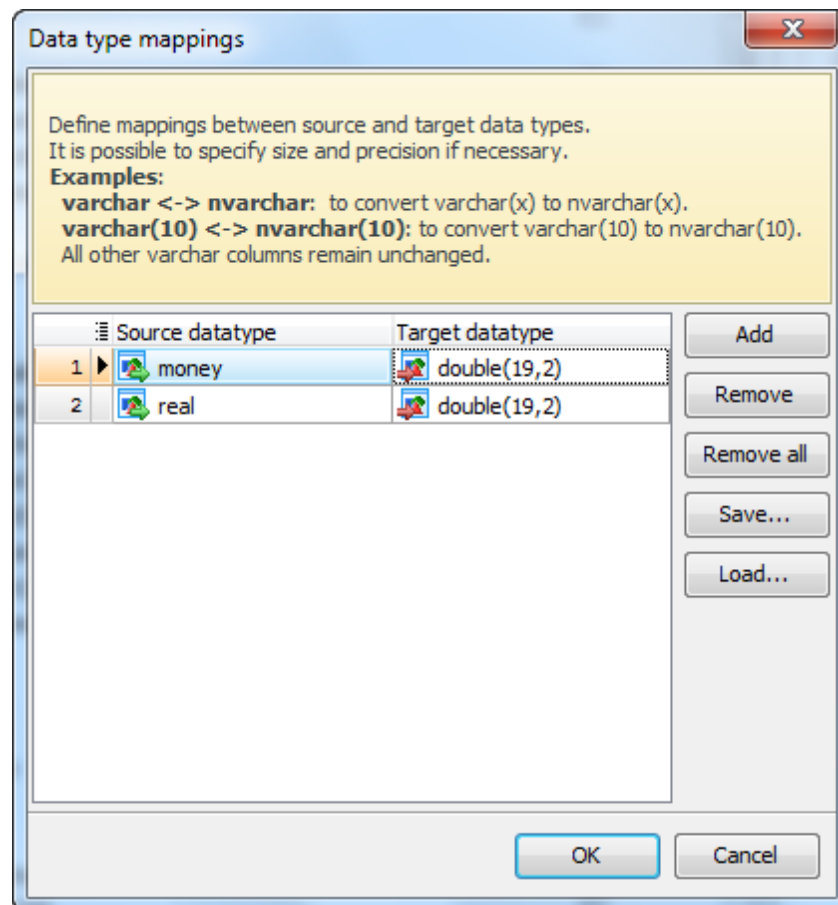
To set [rules of the data types conversion](#)^[28] and [naming conventions](#)^[29] to be applied during the schema transferring, use the corresponding windows.



3.1 Data type mappings

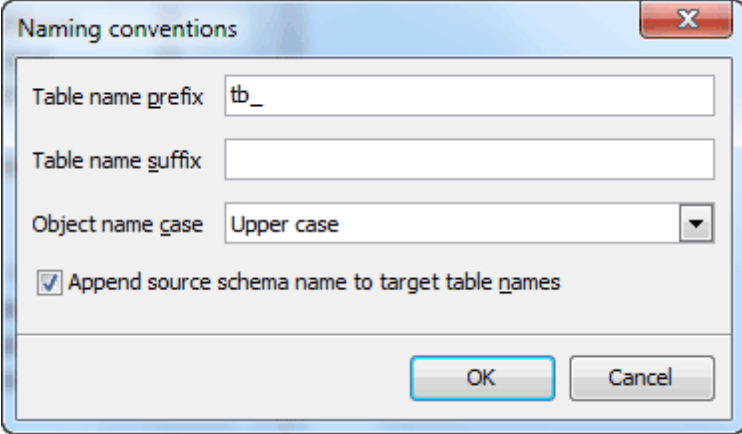
The necessary condition of successful conversion is the accurate mappings between source and target data types. To set rules of the data type conversion, use the [Datatype mapping...](#) button at the [Selecting source objects](#) step and define the rules to be used for the transferring data.

To define a mapping, use the Add button and select Source and Target datatypes from the corresponding drop-down lists. To set size and precision, type it directly to the according cell. You can also save specified mapping to a file to be used for other conversions.



3.2 Naming conventions

The [Naming conventions](#) window allows you to define rules to be applied for the names of the created objects. Here you can specify prefix and suffix for the target tables as well as the case of names of objects to be created. The [Append source schema name to target table names](#) checkbox allows you to choose whether source schema name will be added to target table names.



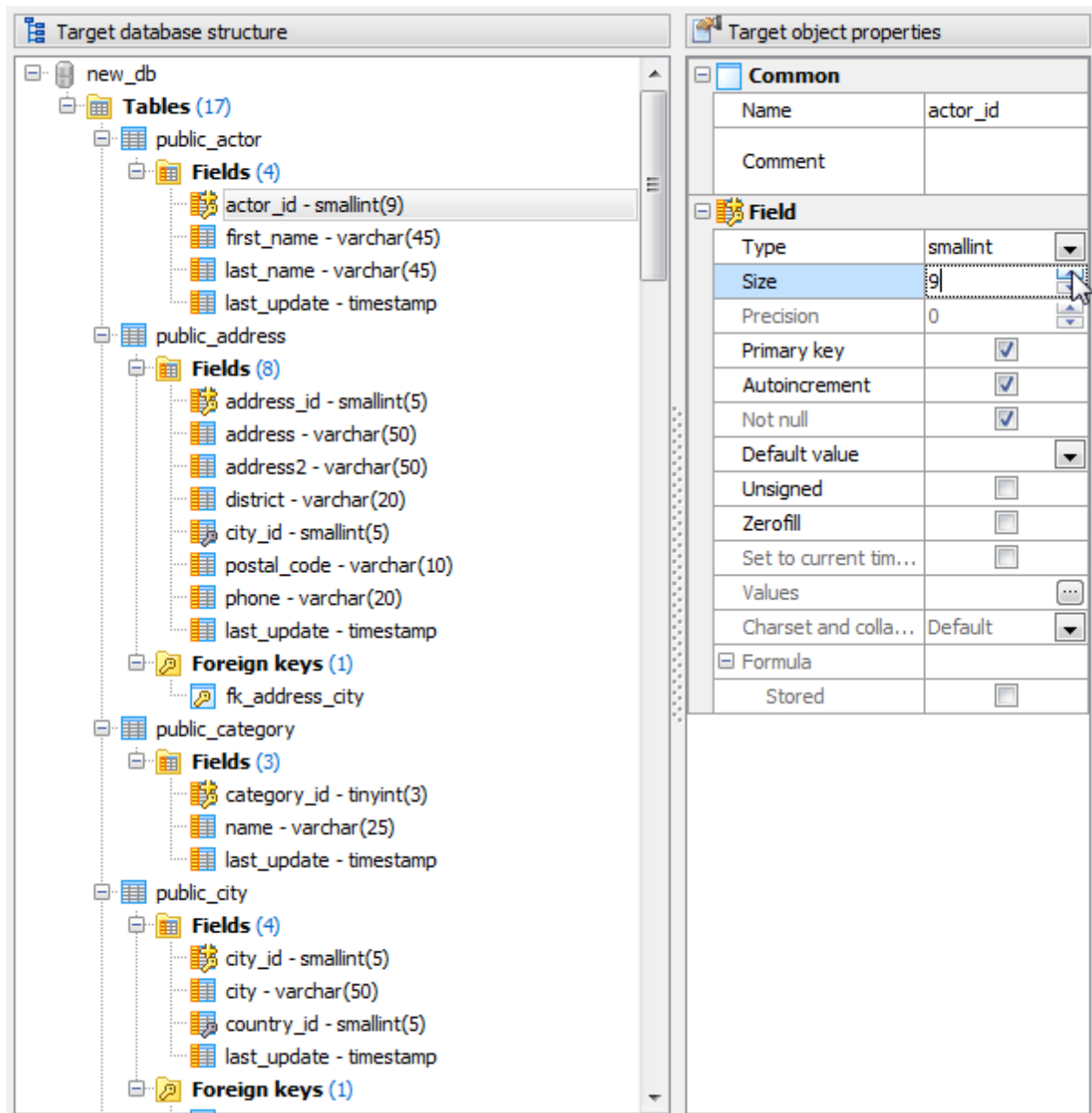
The screenshot shows a dialog box titled "Naming conventions" with a standard Windows-style title bar (minimize, maximize, close buttons). Inside the dialog, there are four input fields and one checkbox. The first field, "Table name prefix", contains the text "tb_". The second field, "Table name suffix", is empty. The third field, "Object name case", is a dropdown menu currently set to "Upper case". The fourth field is a checkbox labeled "Append source schema name to target table names", which is checked. At the bottom right of the dialog are two buttons: "OK" and "Cancel".

Table name prefix	tb_
Table name suffix	
Object name case	Upper case
<input checked="" type="checkbox"/> Append source schema name to target table names	

OK Cancel

4 Target objects

On this step you can customize the objects to be created in the target database. The [Target object properties](#) area on the right of the window allows you to change characteristics of the selected object such as name, comment, data type, etc.



To validate the integrity of the target database after all modifications, invoke the [Database integrity errors](#) dialog with the corresponding button. DB2 Database Converter recognizes if an identifier name is longer than allowed by DB2 or if a field in foreign key and referenced field have no similar data types. To define the behavior of the software in these cases, use the corresponding [application options](#) ³⁶.

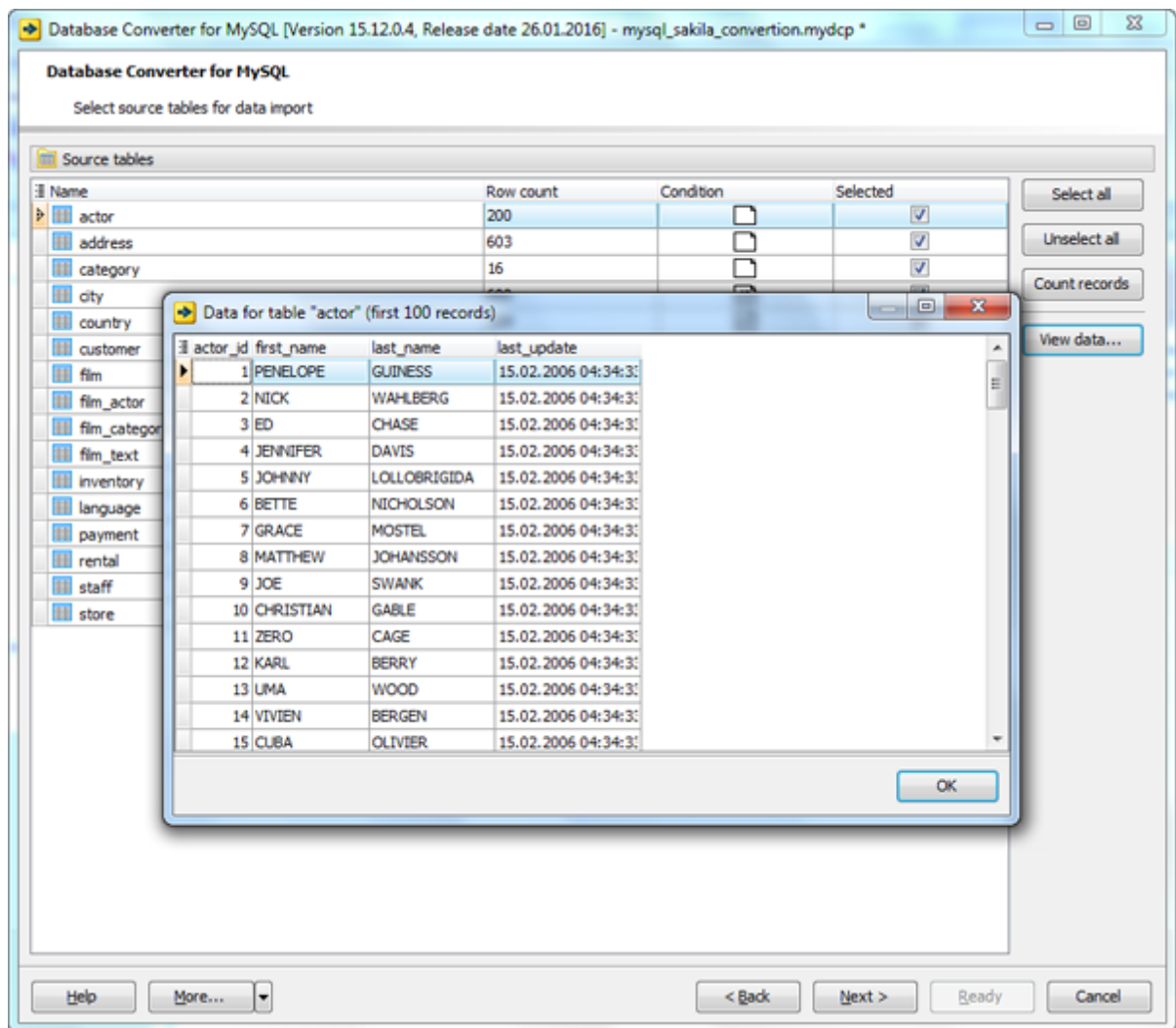
5 Data import

Use this step to setup data conversion. The Source tables
To import data from a table, turn on the corresponding **Selected** option.

By default the number of records of the source table are not displayed. To find out them, use the **Count records** button. This process may take some time especially if you have a slow database connection. You can restrict the number of transferred rows with a filter **condition**.

Source tables				
Name	Row count	Condition	Selected	
actor	200		<input checked="" type="checkbox"/>	Select all
address	603		<input checked="" type="checkbox"/>	Unselect all
category	16		<input checked="" type="checkbox"/>	Count records
city	600		<input checked="" type="checkbox"/>	View data...
country	109		<input checked="" type="checkbox"/>	
customer	599		<input checked="" type="checkbox"/>	
film	1000		<input checked="" type="checkbox"/>	
film_actor	5462		<input checked="" type="checkbox"/>	
film_category	1000		<input checked="" type="checkbox"/>	
film_text	1000		<input checked="" type="checkbox"/>	
inventory	4581		<input checked="" type="checkbox"/>	
language	6		<input checked="" type="checkbox"/>	
payment	16049		<input checked="" type="checkbox"/>	
rental	16045		<input checked="" type="checkbox"/>	
staff	2		<input checked="" type="checkbox"/>	
store	2		<input checked="" type="checkbox"/>	

The **View data** button allows you to browse the source table content.



6 Converting options

Use this step to define whether the source objects will be converted directly to the target database or/and SQL scripts with objects definitions and INSERT statements will be generated.

To generate objects directly to the target database, turn on the [Generate database objects](#) checkbox (do not activate this option if you want only to generate an SQL script). To import data to selected tables, turn the [Insert records into database](#) option "ON".

Import Data Wizard supports the LOAD DATA INFILE command to insert data to the table. This feature can speed up the import process up to 10 times so it is recommended to use it always if possible. Uncheck this option to use INSERT statements instead.

To generate SQL scripts to a file to be executed later using any appropriate software product, use the Script generation checkbox group. To save SQL definitions of the target objects to .sql file, turn on the [Save metadata script to file](#) option and specify the file path. To equip this file with insert statements, turn on the corresponding option.

Scripts


Follow the [Customize scripts](#) link to specify SQL scripts to be executed during the transfer. The scripts are executed as follows:

- *After connect*: after connecting to the target database but before creating schema objects;
- *Before data importing*: after creating schema objects but before transferring tables' data;
- *After converting*: after completing the deal.

Logging

This option group allows you to enable/disable logging of the converting process.

Projects

On this step you can save all parameters that have been set during the wizard session to a [project file](#)  for a further using. For this purpose, click the [More...](#) button and select the corresponding link.

Transferring



Allows you to transfer database schema and data (optionally) directly to the target database.

- ☒ Generate database objects
- ☒ Insert records into database
- ☐ Use LOAD DATA INFILE command

The LOAD DATA INFILE statement reads rows from a text file into a table. It is the fastest way to import data so it is not recommended to uncheck this option.

Script generation



You can generate SQL scripts for further performing data and schema transferring manually.

- ☒ Save metadata script to file
- ☐ Save insert statements to file

File name

C:\Converter\Scripts\sakila_conversion_metadata.sql



Scripts



You can execute SQL scripts before and after whole pumping process and after generating database objects.

[Customize scripts](#)

Logging



Enable this feature to get a detailed description of all the actions occurred during the pumping process.

- ☒ Enable logging

Log file name

C:\Converter\Logs\sakila_conversion.log






- ☒ Show log on error

7 Options

DB2 Database Converter allows you to customize the way it works within the [Options](#) dialog.

The window allows you to customize the options grouped by the following sections:

- [Application](#) 
General DB2 Database Converter options: environment style, confirmations, window restrictions
- [Editors & Viewers](#) 
Customizing of all the SQL editors.
- [Appearance](#) 
Customizing program interface - bars, trees, menus, etc.

It is a good idea to check through these settings before you start working with DB2 Database Converter. You may be surprised at all the things you can adjust and configure!

7.1 Application

The [Application](#) section allows you to customize common rules of DB2 Database Converter behavior. The section consists of several tabs; follow the links to find out more about each of them.

- [Common](#) ^[36]
- [Confirmations](#) ^[37]

7.1.1 Common

Use this tab to define rules to be used for converting process.

Converting error behavior

On creating

Select the action to be executed when an error occurs on creating a schema object: continue or abort objects creation.

On importing

Select the action to be executed when an error occurs during the data importing: abort importing, skip current table, or continue importing.

Action on database integrity error

Identifier name is too long

Use this option to define the application behavior in case the target schema contains an identifier which name is longer than allowed by DB2.

- Select [Ignore](#) to use this name in the object definition. In this case this identifier will be included into the SQL definition with the specified name.
- Use [Set name manually](#) to enter a new name allowed by server in the [Database integrity errors](#) ^[30] dialog window or in the [Target object properties](#) ^[30] tab.
- If the [Define name automatically](#) option is selected, a name like "Table01", "Index03", and so on will be assigned for this object by the server.

Field in foreign key and referenced field have no similar data types

This option defines whether the application will change the data type of the foreign field to the data type of the referenced field automatically or will ignore this integrity error.

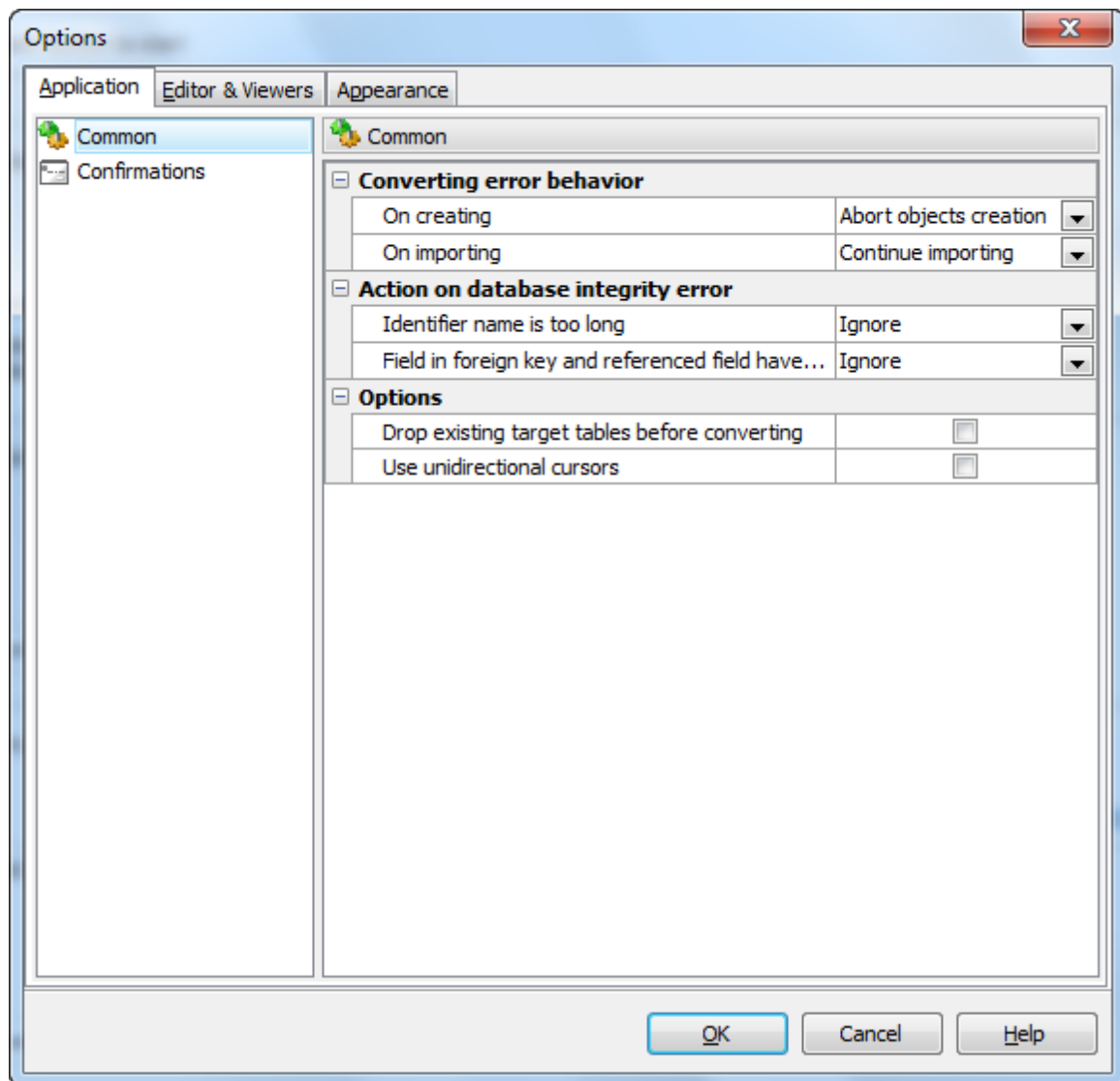
Options

☒ [Drop existing target tables before converting](#)

Check this option to recreate existing target tables.

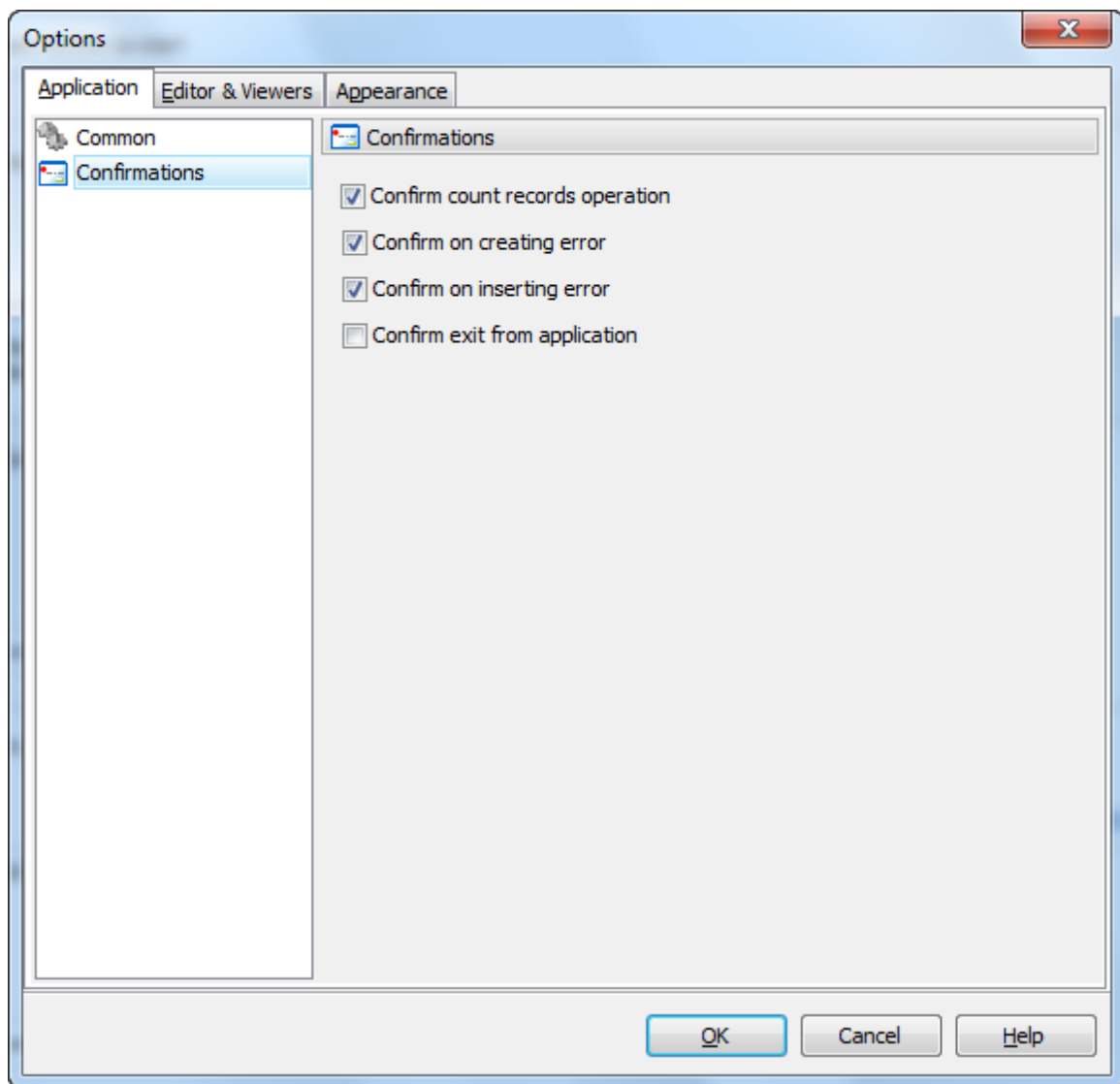
☒ [Use unidirectional cursors](#)

To improve data import performance, set this option to true, restricting a cursor to forward movement through a result set.



7.1.2 Confirmations

Use this tab to manage application confirmations.



☒ **Confirm count records operation**

If this option is checked, the program asks you to confirm for [count records](#) operation.

☒ **Confirm on creating error**

If this option is checked, the program requires confirmation each time an error occurs during schema creating.

☒ **Confirm on inserting error**

If this option is checked, the program requires confirmation each time an error occurs during data inserting.

☒ **Confirm exit from application**

If this option is checked, the program requires confirmation when you want to exit <% PRODUCT_NAME%.

7.2 Editors & Viewers

The [Editors & Viewers](#) section allows you to set the parameters of viewing and editing the SQL statements within DB2 Database Converter.

- [General](#) ³⁹
- [Display](#) ⁴⁰
- [SQL highlight](#) ⁴¹
- [PHP highlight](#) ⁴³
- [XML highlight](#) ⁴²
- [Code Insight](#) ⁴⁴
- [Code Folding](#) ⁴⁵

7.2.1 General

If the [Auto indent](#) option is checked, each new indentation is the same as the previous when editing SQL text.

☒ [Insert mode](#)

If this option is checked, insert symbols mode is default on.

☒ [Use syntax highlight](#)

Enables syntax highlight in the object editor window.

☒ [Always show links](#)

If this option is checked, hyperlinks are displayed in the editor window. To open a link click it with the **Ctrl** button pressed.

☒ [Show line numbers](#)

If this option is checked, line numbers are displayed in the editor window.

☒ [Show special chars](#)

If this option is checked, special chars (like line breaks) are displayed in the editor window.

☒ [Use smart tabs](#)

With this option on the number of tab stops is calculated automatically, depending on the previous line tab.

☒ [Convert tabs to spaces](#)

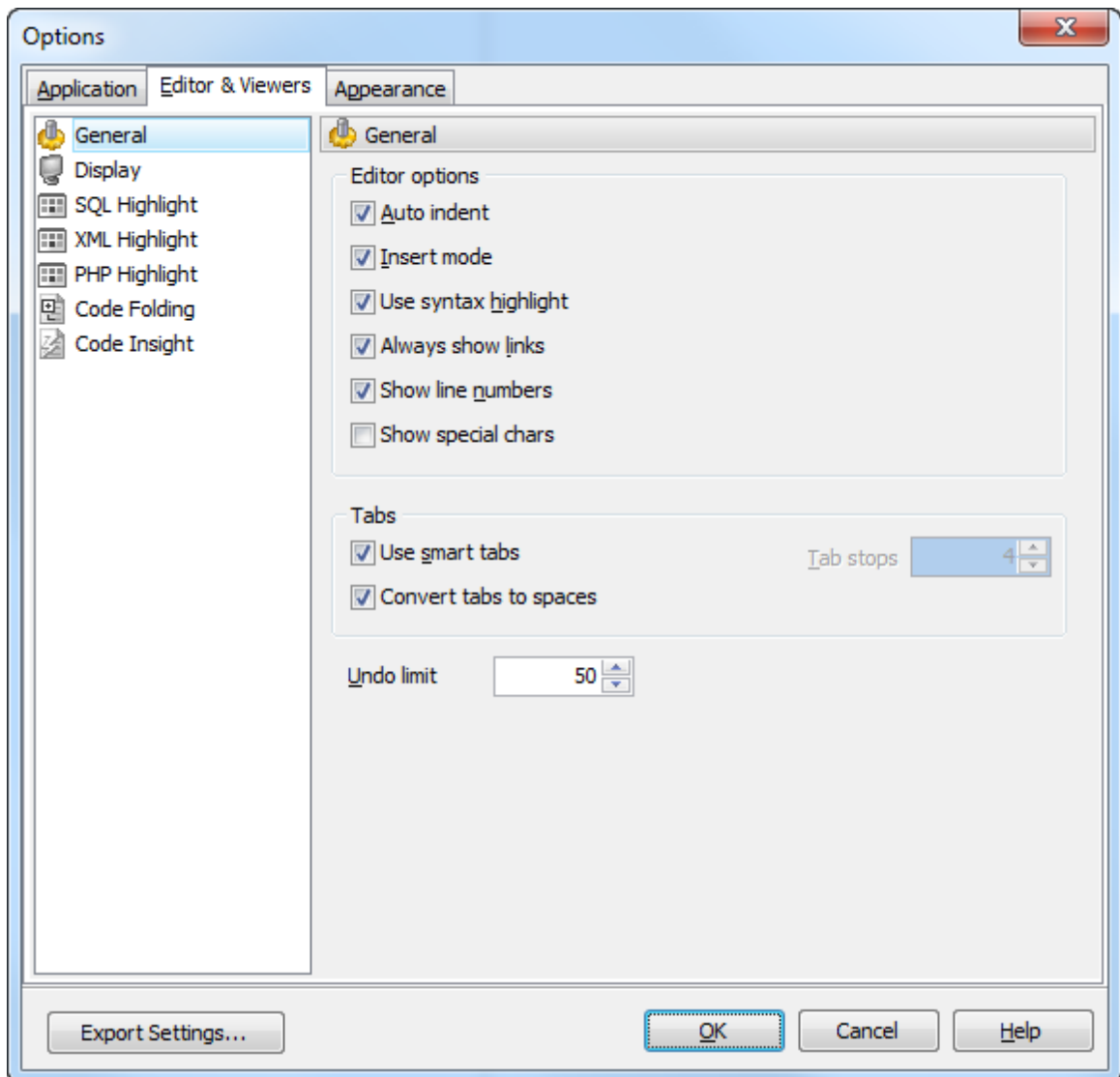
If this option is checked, each time you press the Tab key, the appropriate number of spaces will be added to the edited text.

[Tab Stops](#)

Defines the tab length, used when editing text.

[Undo Limit](#)

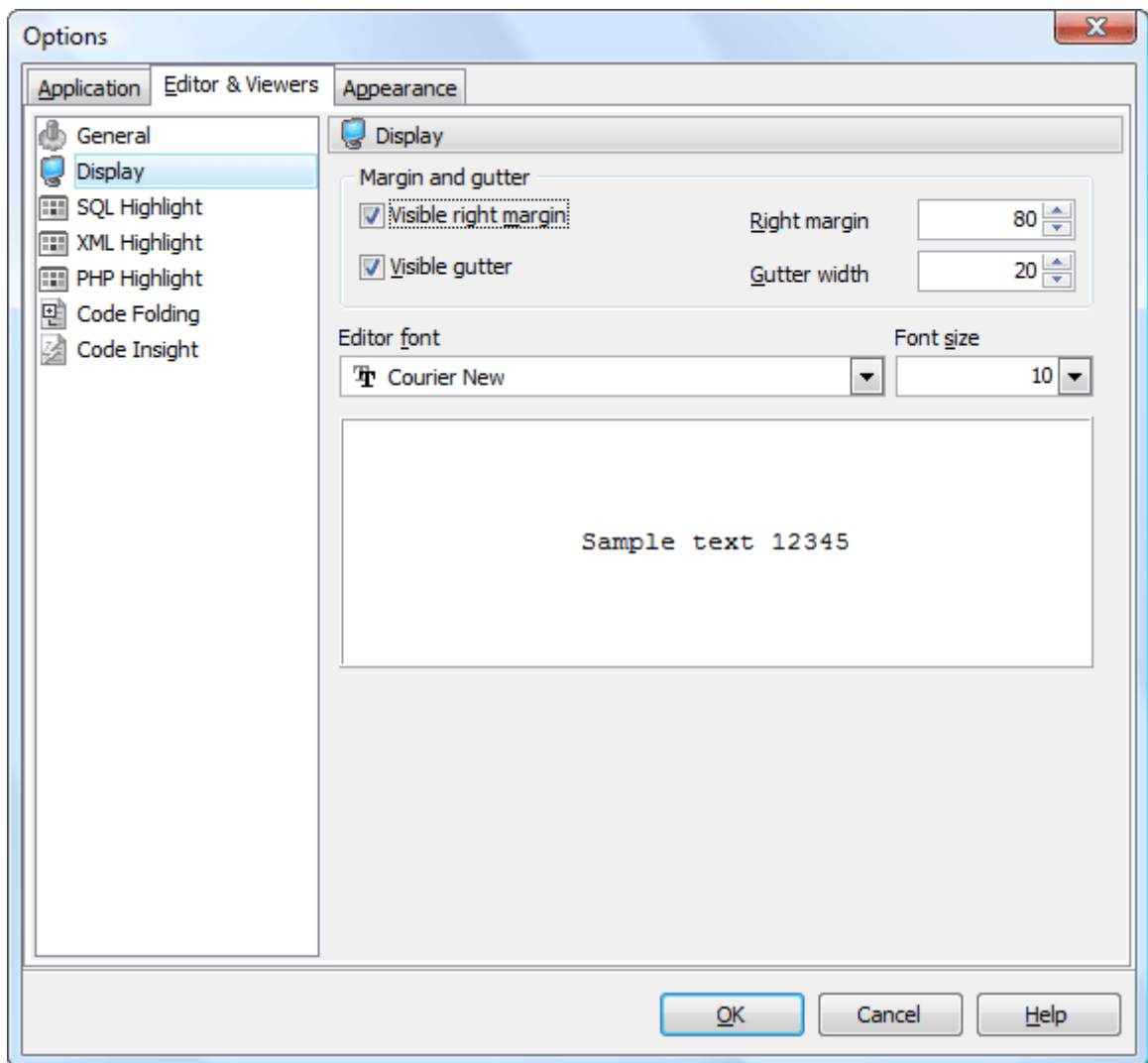
Defines the maximum number of changes possible to be undone.



7.2.2 Display

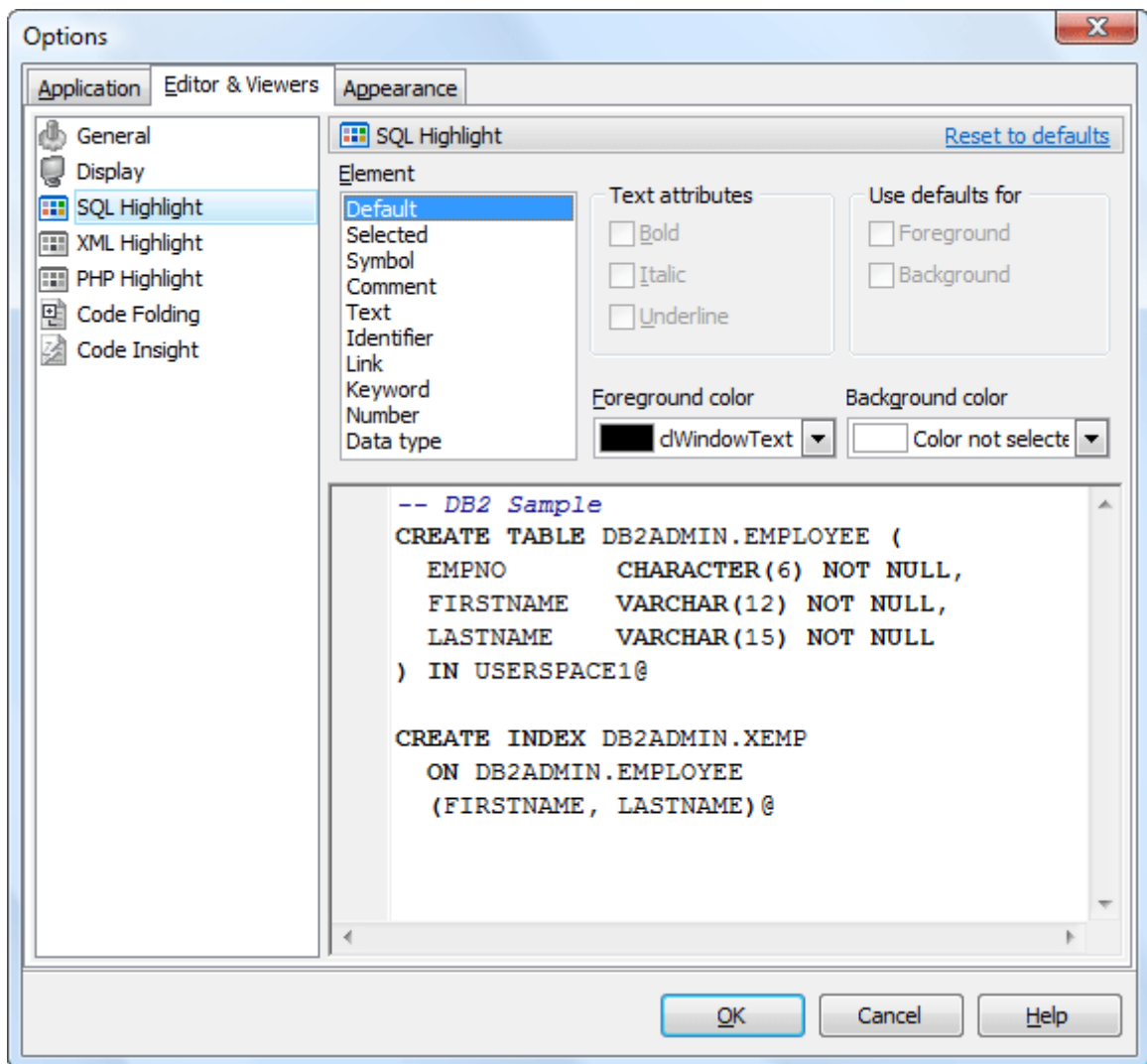
You can disable/enable the right text margin and the gutter of the editor area, set the position of the right text margin as [Right margin](#), and [the Gutter width](#).

Use the [Editor font](#) and [Font size](#) to define the font used in all program editors and viewers. The panel below displays the sample of the selected font.



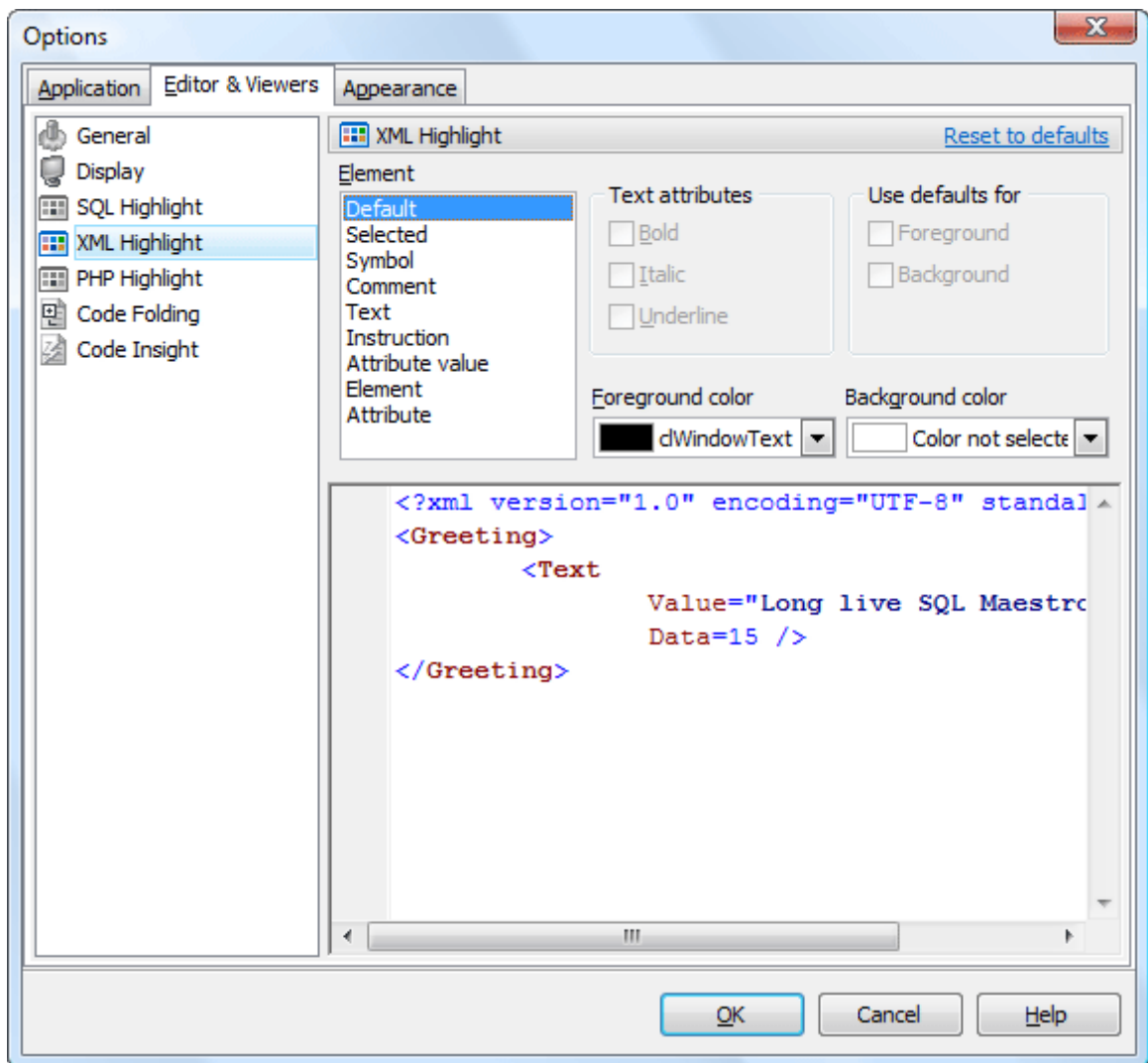
7.2.3 SQL highlight

Use the [SQL highlight](#) item to customize syntax highlight in all SQL editors and viewers. Select the text element from the list, e.g. *comment* or *SQL keyword* and adjust its foreground color, background color and text attributes according to your preferences.



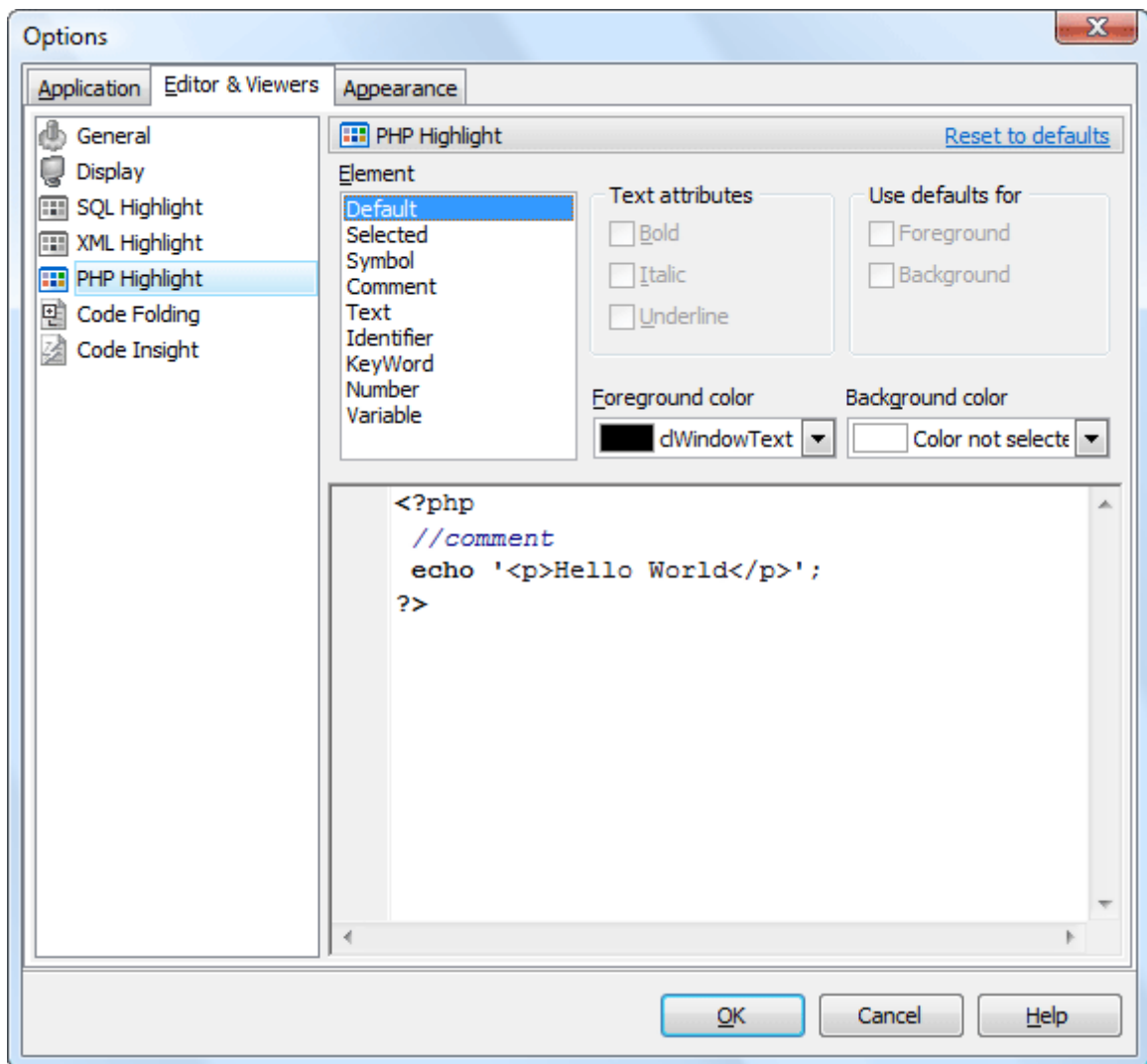
7.2.4 XML highlight

Use the [XML highlight](#) item to customize XML syntax highlight for the text representation of BLOBs. Select the text element from the list, e.g. attribute or attribute value and adjust its foreground color, background color and text attributes according to your wishes.



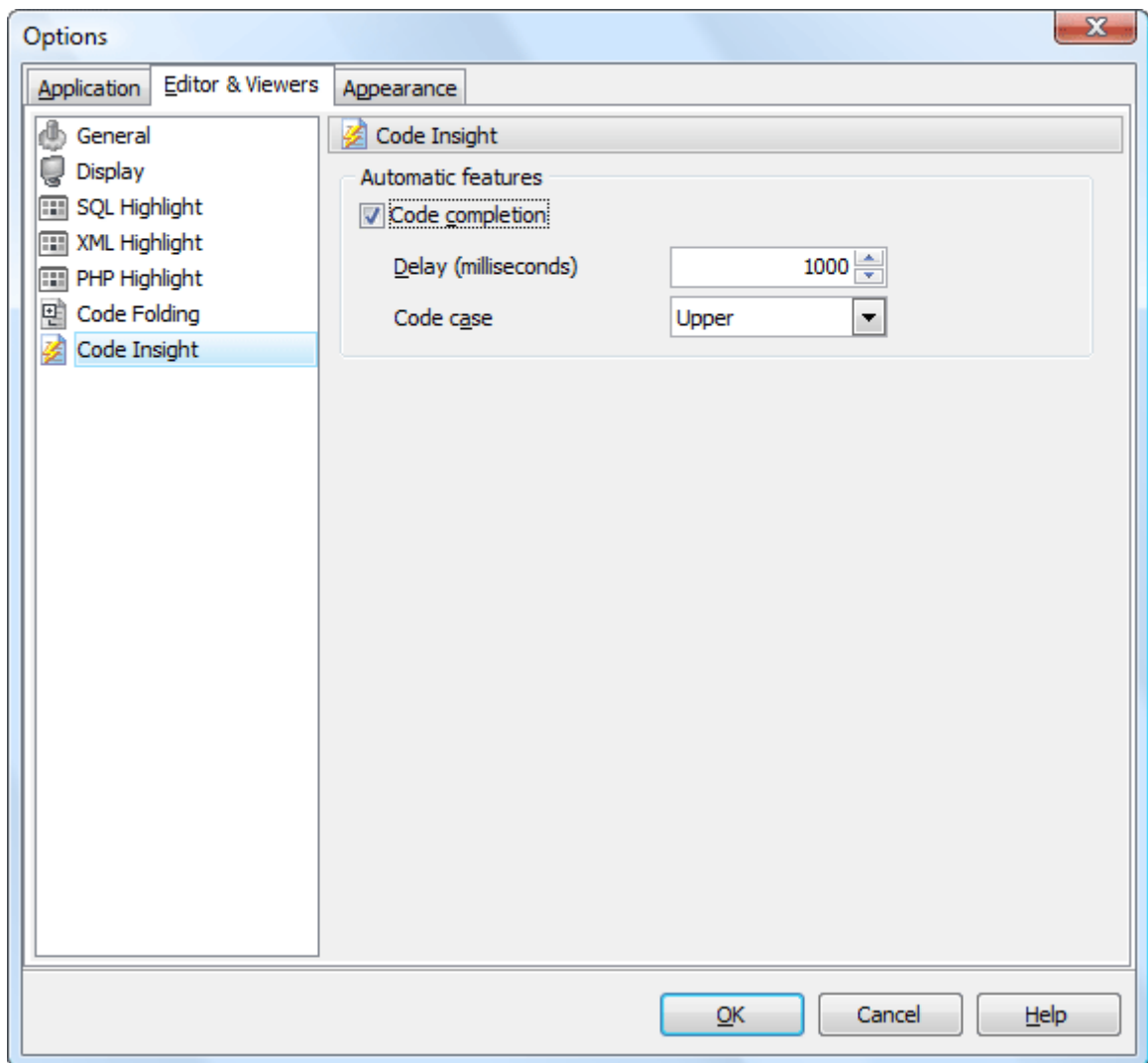
7.2.5 PHP highlight

Select the text element from the list (e.g. Keyword, Comment, Identifier), and adjust its foreground color, background color and text attributes according to your wishes.



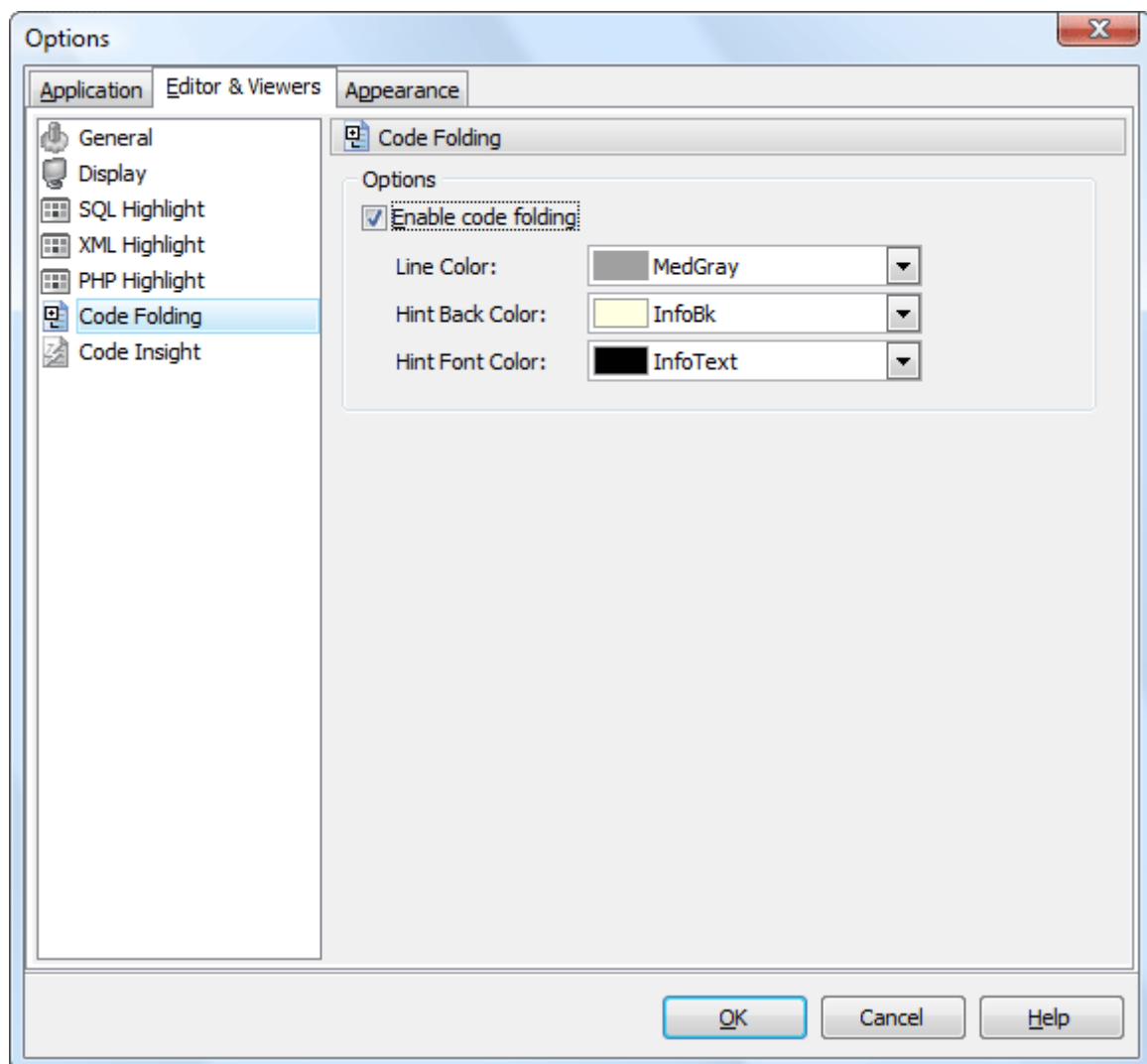
7.2.6 Code Insight

You can disable/enable the code completion with the corresponding option and also set the time it appears as *Delay*, and case of words inserted automatically.



7.2.7 Code Folding

The [Code Folding](#) item group makes it possible both to view the whole text and to divide it into logical parts (regions). Each part can be collapsed and extended. In extended mode the whole text is displayed (set by default), in collapsed mode the text is hidden behind one text line denoting the first line of the collapsed region.



You can enable/disable code folding in SQL editors and viewers and customize the colors of its items.

7.3 Appearance

The [Appearance](#) section allows you to customize the application interface style to your preferences.

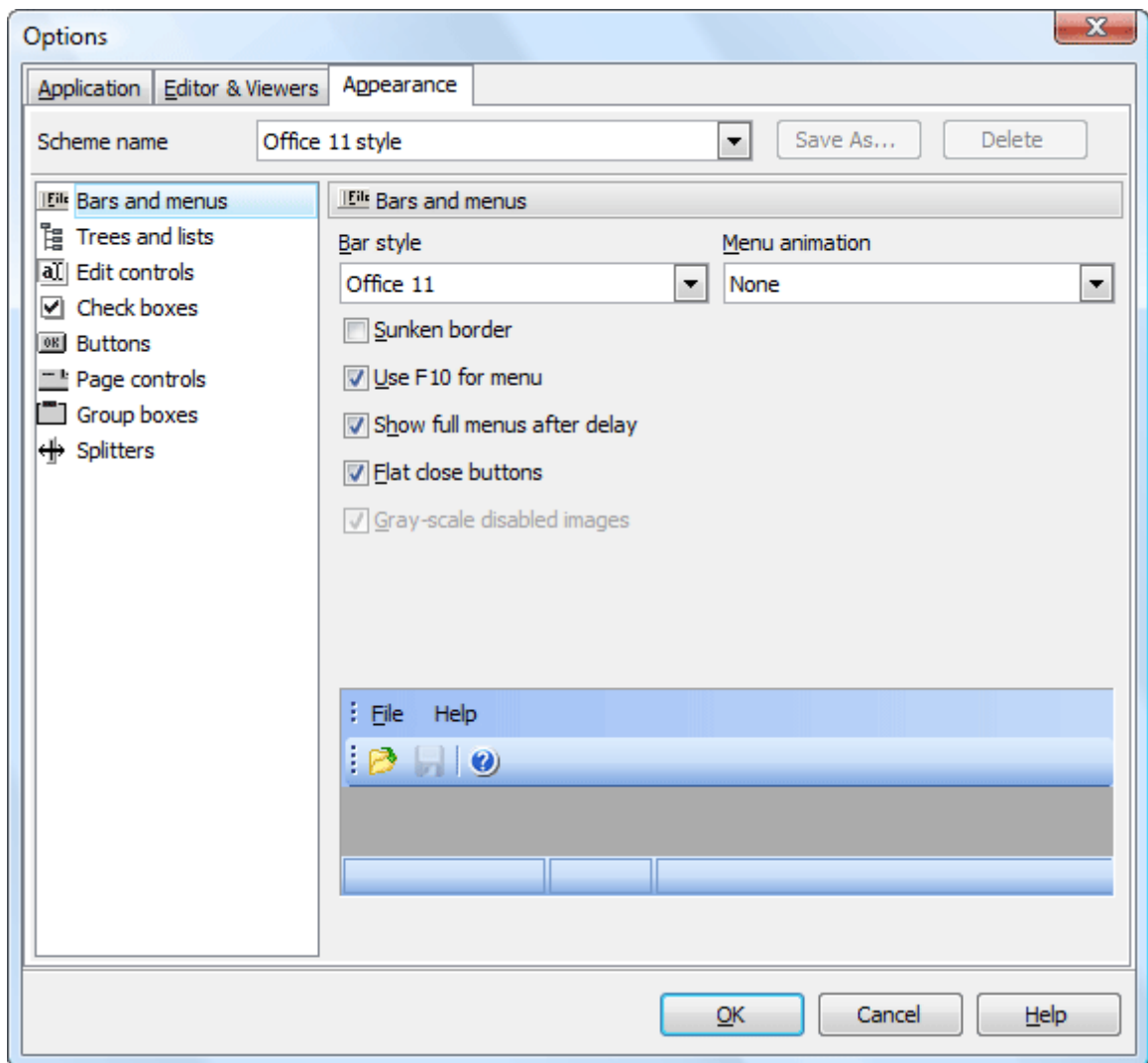
Use the [Scheme name](#) box to select the interface scheme you prefer: *Office XP style*, *Windows XP native style*, etc. You can create your own interface schemes by customizing any visual options ([Bars and menus](#), [Trees and lists](#), [Edit controls](#), [Check boxes](#), [Buttons](#), etc.) and clicking the [Save As](#) button. All the customized options are displayed on the sample panel.

- [Bars and menus](#) 
- [Trees and lists](#) 
- [Edit controls](#) 
- [Check boxes](#) 
- [Buttons](#) 
- [Page controls](#) 
- [Group boxes](#) 
- [Splitters](#) 

7.3.1 Bars and menus

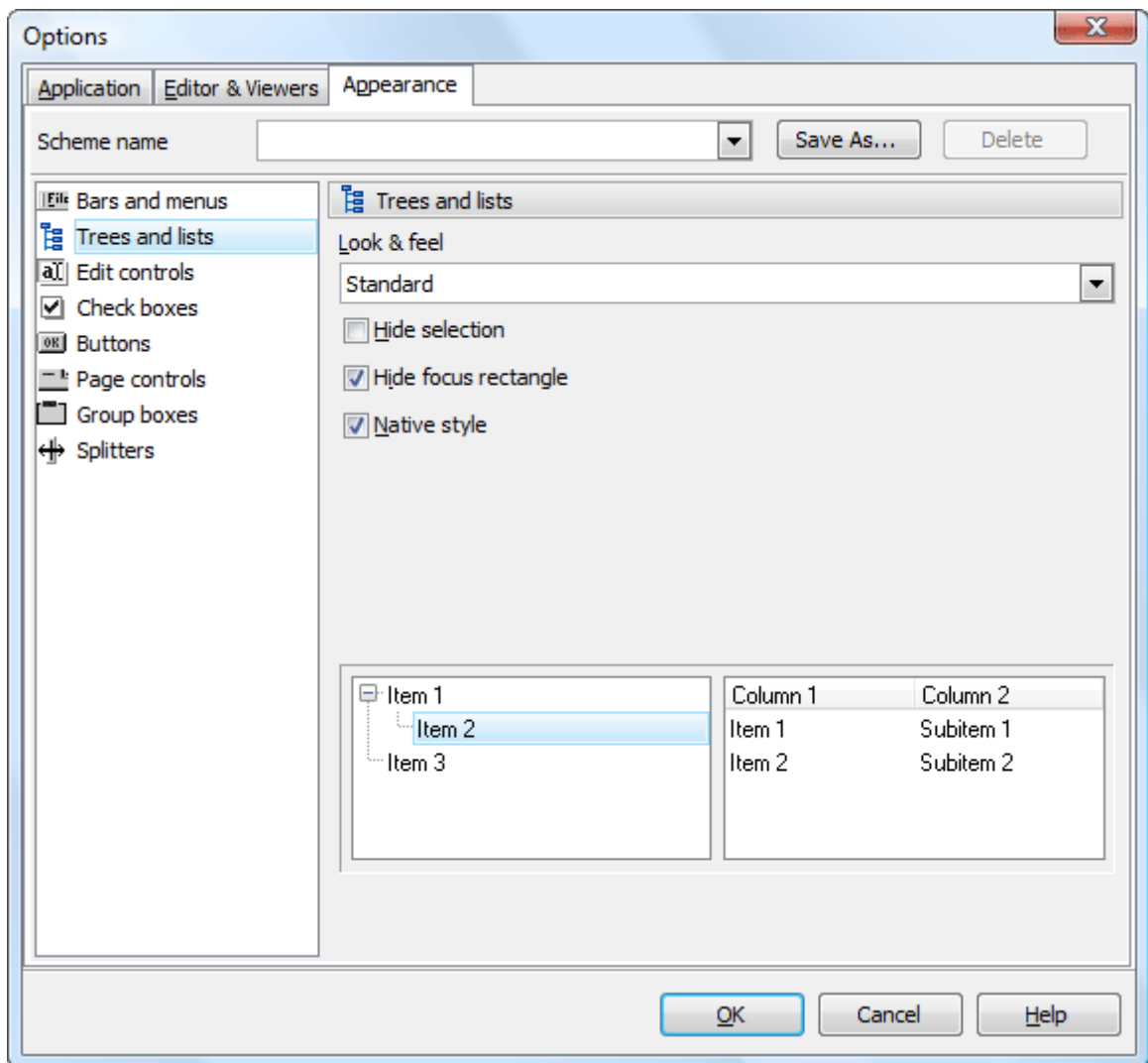
Use the [Bars and menus](#) item to customize DB2 Database Converter toolbars style and menu animation.

The item allows you to select Bar style and menu animation from the corresponding drop-down lists and to enable or disable such options as sunken border, F10 key for opening menu, viewing full menus after delay, flat close buttons, gray-scale images.



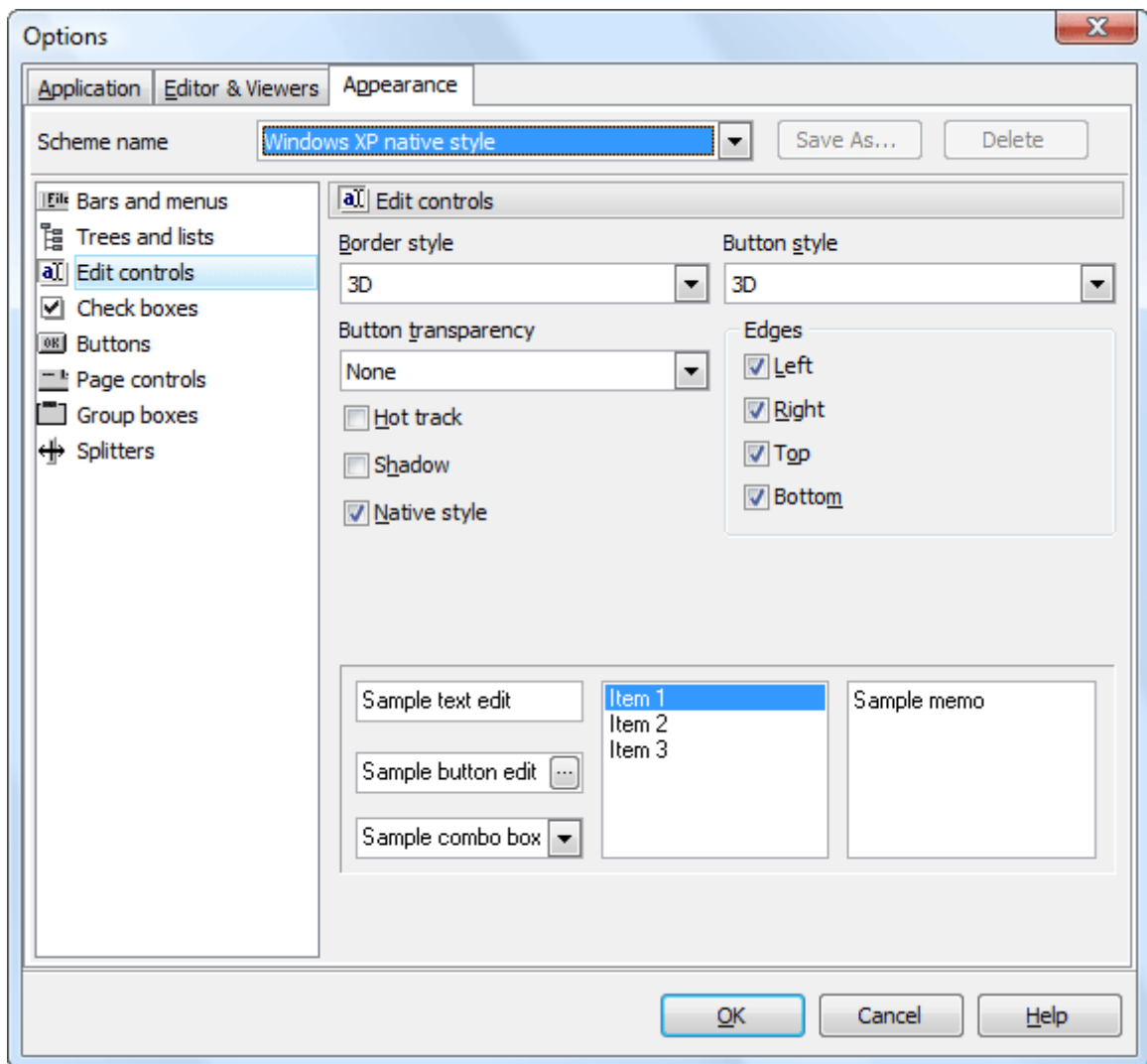
7.3.2 Trees and lists

Use the **Trees and lists** item to select various tree view options. Use the item to select *standard*, *flat* or *ultraflat* styles, check or uncheck the *hide selection*, *hide focus rectangle* and *native style* options.



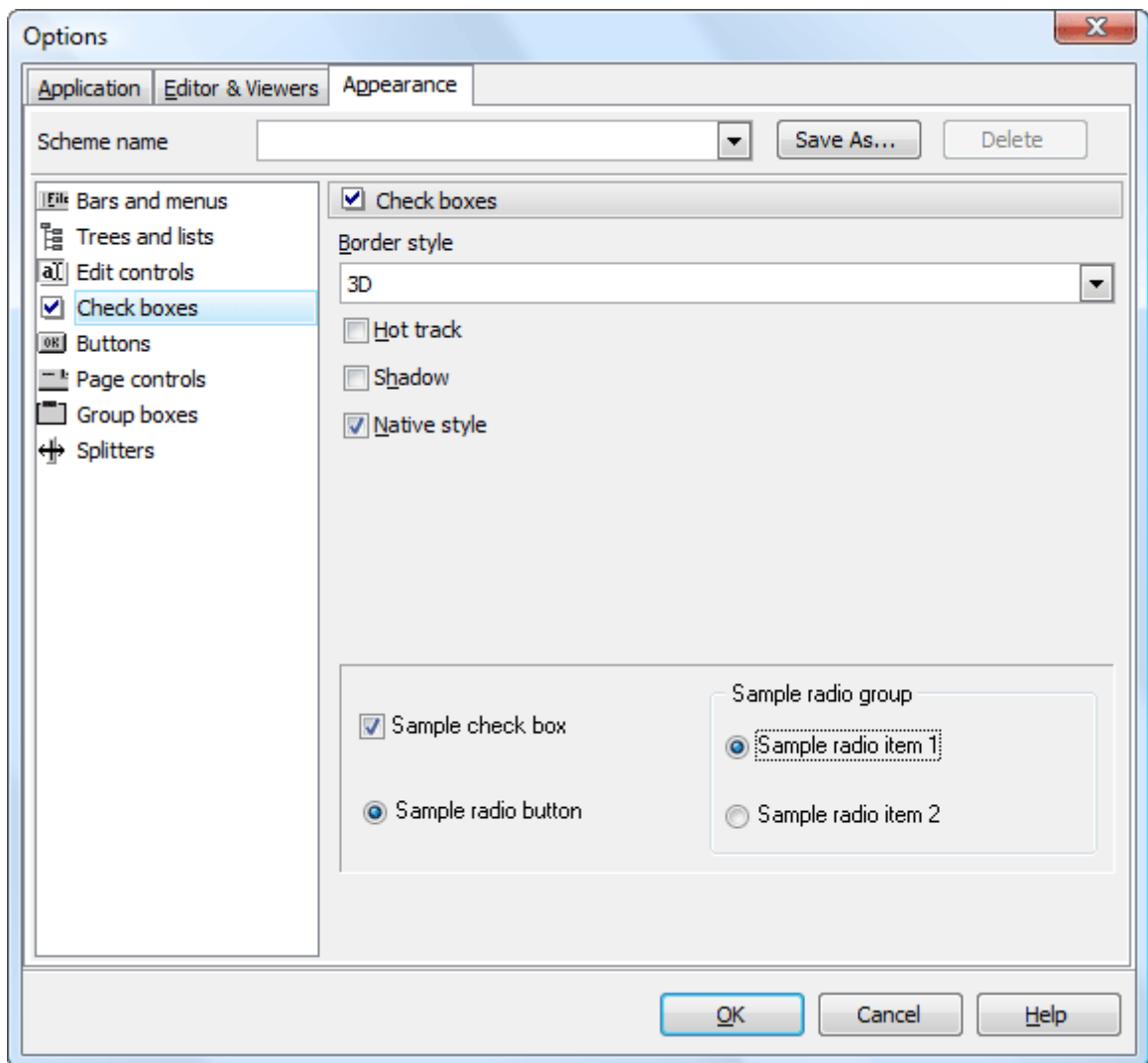
7.3.3 Edit controls

Use the [Edit controls](#) item to customize the appearance of different DB2 Database Converter edit controls. The tab allows you to select the edit controls border style, button style and transparency, enable/disable hot tracks, shadows, native style and customize edges. It is also possible to define samples for the text edit, button edit and combo box controls.



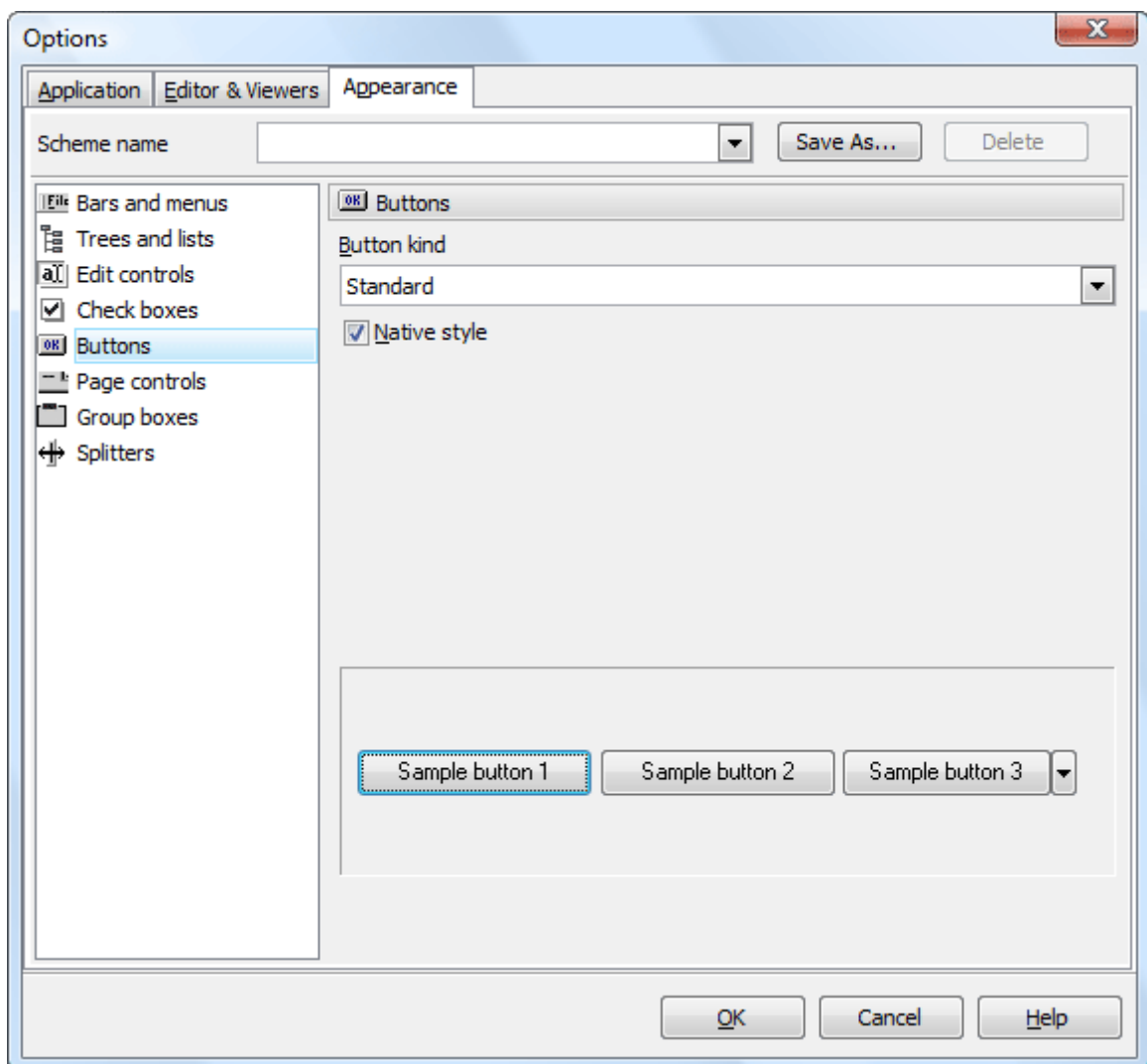
7.3.4 Check boxes

The [Check boxes](#) item allows you to customize the appearance of check boxes and radio buttons. The tab allows you to customize the appearance of check boxes: set border style, enable/disable hot tracks, shadows, native style. It is also possible to define samples for check boxes and radio buttons.



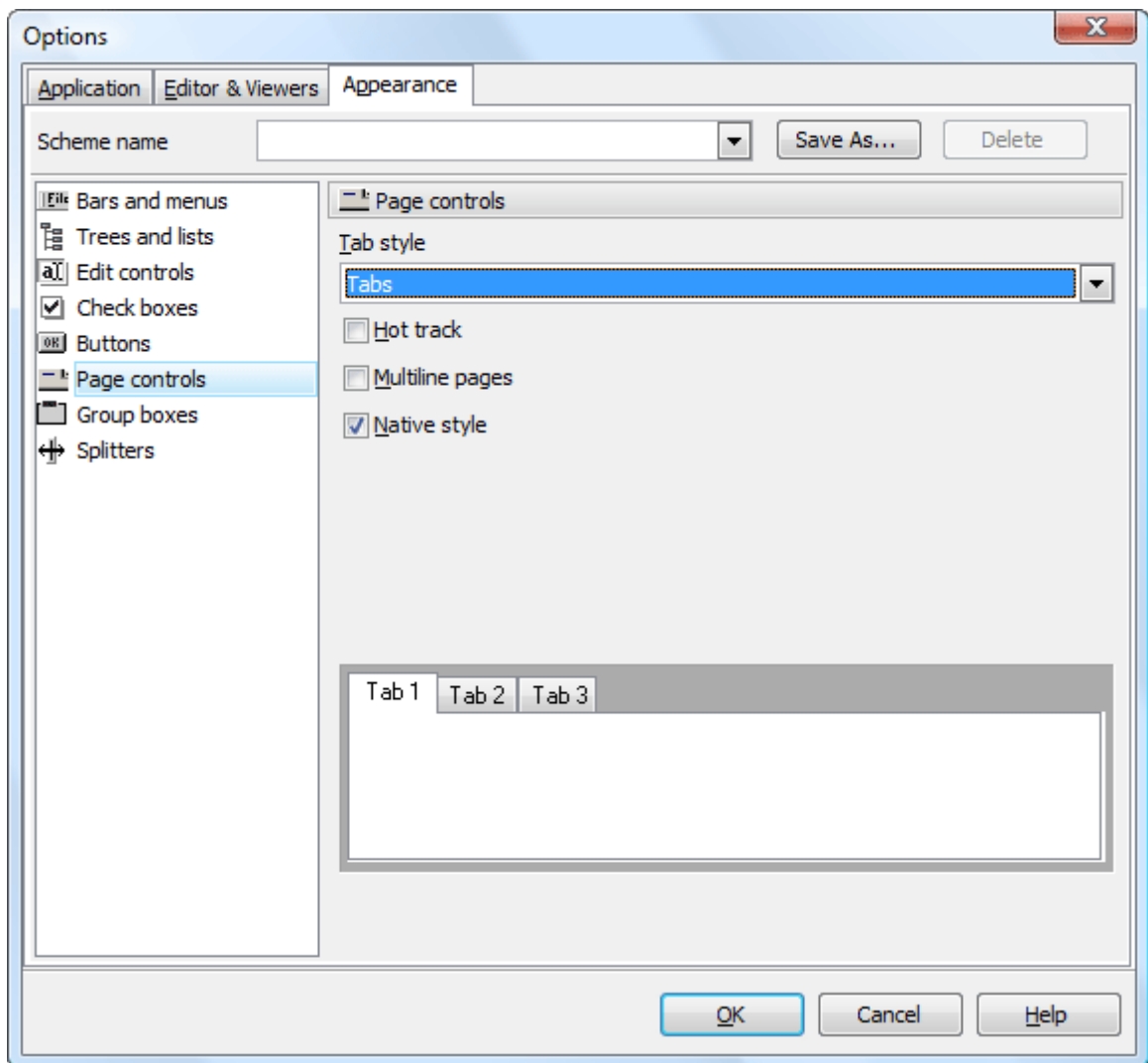
7.3.5 Buttons

Use the [Buttons](#) item to customize DB2 Database Converter buttons. The tab allows you to adjust the appearance of buttons and define sample buttons as well.



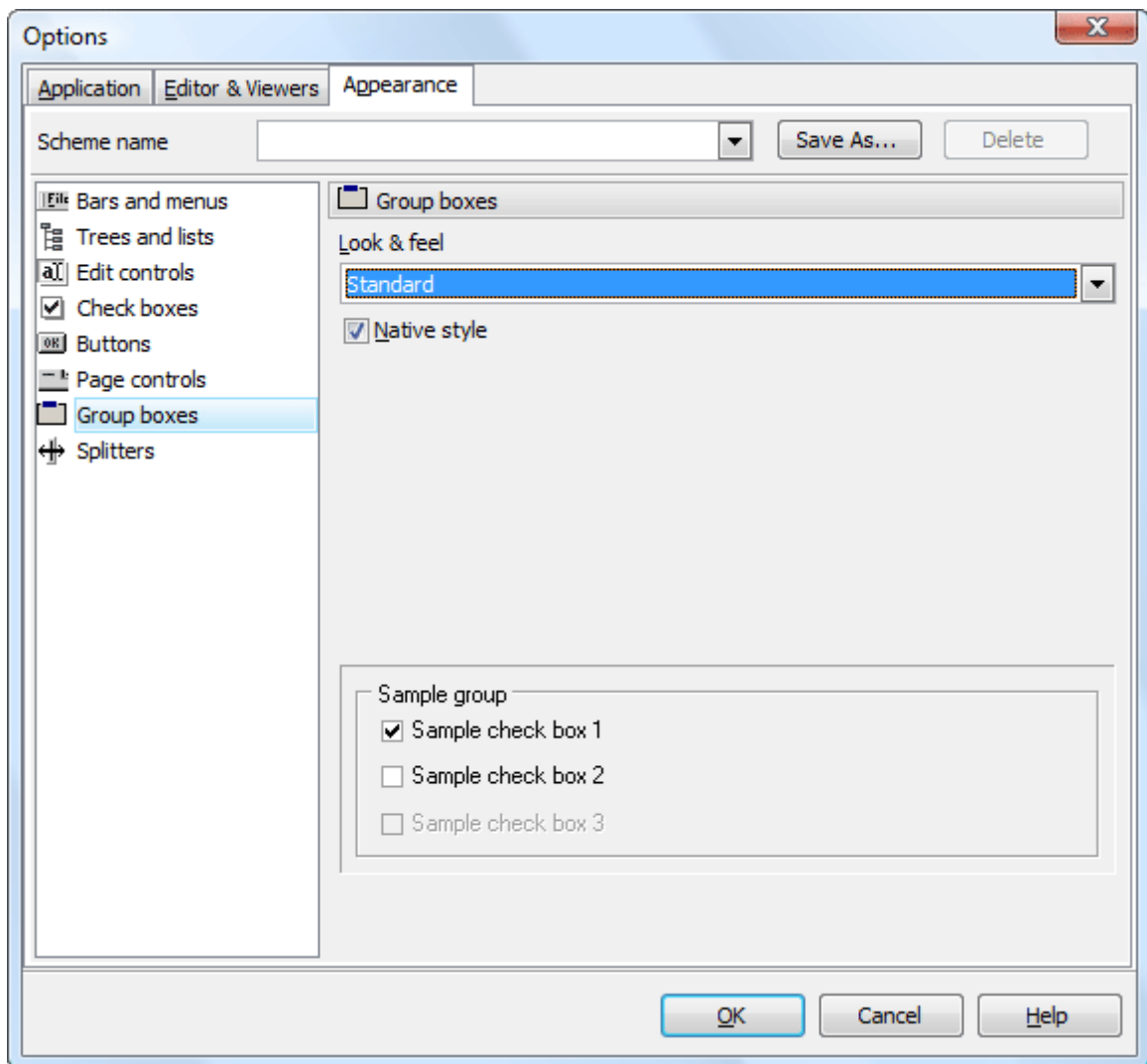
7.3.6 Page controls

The [Page controls](#) item allows you to customize the style of all DB2 Database Converter page controls. The tab allows you to select tab styles, enable/disable hot track, multi-line pages and native style.



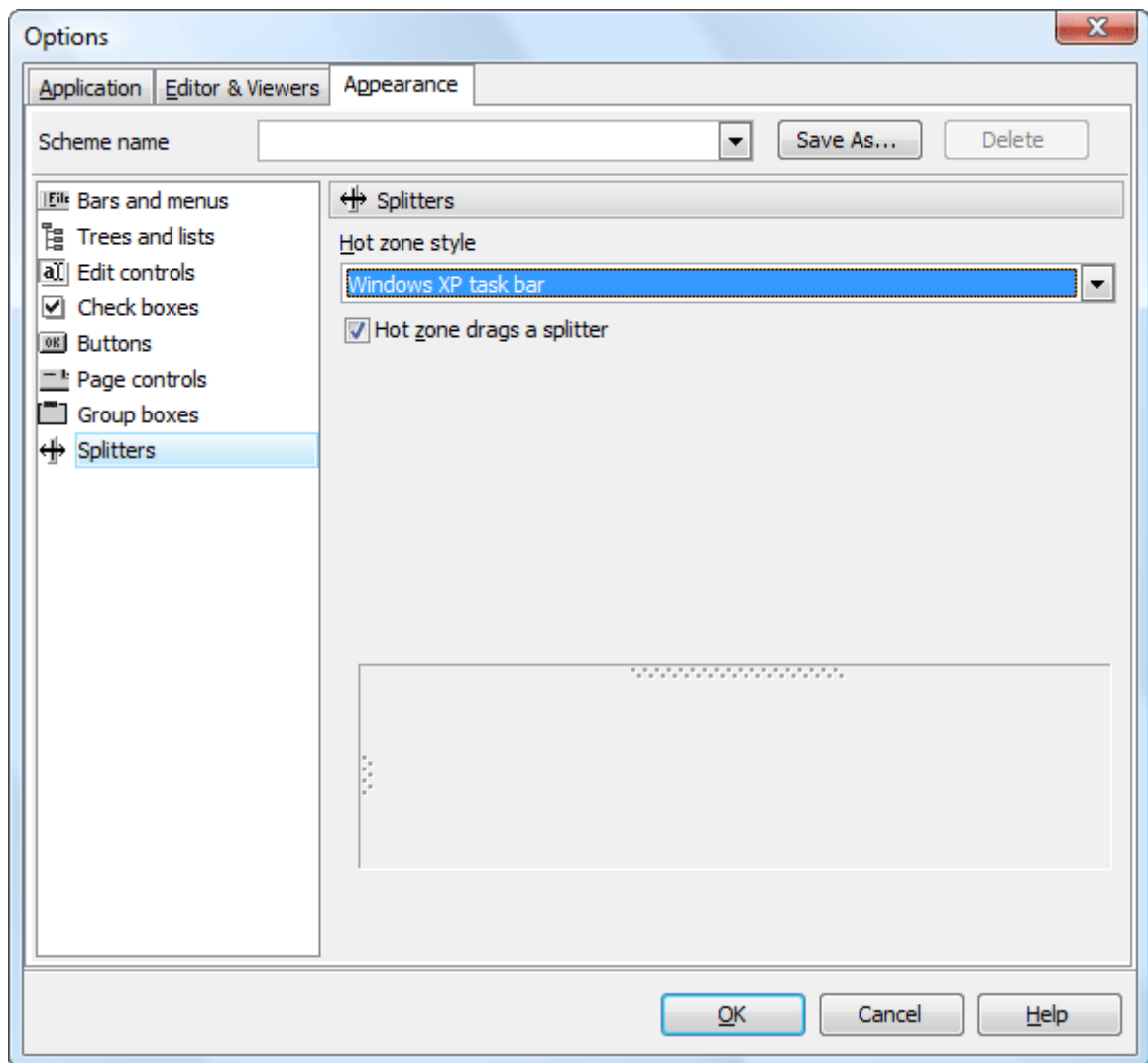
7.3.7 Group boxes

Use the [Group boxes](#) item to customize all DB2 Database Converter group boxes according to your preferences. Use tab to apply styles for group boxes, enable/disable native style and define samples.



7.3.8 Splitters

Use the [Splitters](#) item to customize all DB2 Database Converter splitters according to your preferences. Use the tab to select hot zone style (*Windows XP task bar*, *Media Player 8*, *Media Player 9*, *Simple* or *none*) and specify the [Hot zone drags a splitter](#) option.



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