

PHP Generator for MySQL

User's guide

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1 Welcome to PHP Generator for MySQL

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

Key features:

- Support for updatable SQL queries 24
- Master-detail presentations 4
- Event-driven content management 461
- Client-side data validation
- Custom pagination (display partitioning) [53]
- Data export to PDF, XML, CVS, Excel and Word
- Support for hard-coded, table-based, and database server user authentication shaped
- Record-level security (8)
- Color schemes 70

1.1 System Requirements

Client environment

- Pentium PC or higher;
- Windows 9x/ME/NT4/2000/XP/2003/Vista/Windows 7;
- 64 MB RAM (128 MB recommended);
- 10 MB of free hard disk space;
- SVGA-compatible video adapter;
- Internet Explorer 4.0 or higher.

Server environment

- MySQL server version from 3.23 to 6.0;
- Linux/Unix or Windows Web Server;
- PHP 5.

1.2 Installation

To install **PHP Generator for MySQL** on your PC:

- download the PHP Generator for MySQL distribution package from the <u>download page</u> at our site;
- run setup.exe from the local folder and follow the instructions of the installation wizard;
- find the PHP Generator for MySQL shortcut in the corresponding program group of the Windows Start menu after the installation is completed.

1.3 How can I purchase PHP Generator for MySQL?

Thank you for your interest in purchasing PHP Generator for MySQL!

You can select licensing options and register PHP Generator for MySQL at its <u>on-line order page</u>. 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.

PHP Generator for MySQL 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 <u>appropriate_section</u> on our website or contact us by email to <u>support@sqlmaestro.com</u>.

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 9, Microsoft SQL Server 7, PostgreSQL 11, Oracle 8, SQL Anywhere 9, DB2 10, SQLite 12, Firebird 11, and MaxDB 13.



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

MS SQL Maestro gives you wide opportunities 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 Microsoft SQL Server users and their privileges, add jobs and alerts, and use a lot of other tools implemented to make your work with Microsoft SQL Server highly enjoyable and efficient.

Easy installation and intuitive interface in combination with support of all Microsoft SQL Server latest features make it an irreplaceable tool for Microsoft SQL Server on the web or at your local desktop.



MS SQL Data Wizard is a powerful Windows GUI utility for managing your Microsoft SQL data.

MS SQL Data Wizard provides you with a number of easy-to-use wizards for performing the required data manipulation easily and quickly. MS SQL Data Wizard allows you to generate PHP scripts for the selected tables and queries, convert any ADO-compatible database to your MS SQL

database, export data from MS SQL tables and queries to most popular formats, and import data into the tables.



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

MS SQL Code Factory 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 MS SQL data, and much more.



<u>Oracle_Maestro</u> is the premier Windows GUI admin tool for Oracle databases management, control and development.

Oracle Maestro provides you with a number of tools allowing to perform all the necessary database operations such as creating, editing, and duplicating database objects; moreover, you can build queries visually, execute and optimize SQL queries and SQL scripts, view and edit data including BLOBs, represent data as diagrams, export and import data to/ from most popular file formats, analyze your data summarized into multidimensional views and hierarchies (OLAP cubes), and use a lot of other tools implemented to make your work with Oracle server comfortable and efficient.



Oracle Data Wizard is a powerful Windows GUI utility for managing your Oracle data.

Oracle Data Wizard provides you with a number of easy-to-use wizards for performing the required data manipulation easily and quickly. Oracle Data Wizard allows you to generate PHP scripts for the selected tables and queries, convert any ADO-compatible database to the Oracle database, export data from Oracle tables and queries to most popular formats, and import data into the tables.



<u>Oracle_Code_Factory</u> is a premier Oracle GUI tool aimed at the SQL queries and scripts development.

Oracle Code Factory 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.



SQL_Maestro_for_MySQL is the premier Windows GUI admin tool for MySQL Server management, control and development.

SQL Maestro for MySQL 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 MySQL users and their privileges, and use a lot of other tools designed for making your work with MySQL server comfortable and efficient.



<u>Data Wizard for MySQL</u> is a powerful Windows GUI utility for managing your MySQL data.

Data Wizard for MySQL provides you with a number of easy-to-use wizards for performing the required data manipulation easily and quickly. The wizards allow you to generate PHP scripts for the selected tables and queries, convert any ADO-compatible database to your MySQL database, export data from MySQL tables and queries to most popular formats, and import data into the tables.



<u>Code Factory for MySQL</u> is a premier MySQL GUI tool aimed at the SQL queries and scripts development.

Code Factory for MySQL 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 MySQL data, and much more.



<u>Service Center for MySQL</u> is a multi-functional Windows GUI utility for MySQL server maintenance and data reservation.

Service Center for MySQL allows you to create tasks for backing your data into a script, restoring data from a script, analyzing, checking, repairing and optimizing database tables. In addition to these functions, Service Center for MySQL provides you with a powerful task scheduler, an ability of using scenarios and other useful features.



ASA Maestro is the premier Windows GUI admin tool for Sybase SQL Anywhere databases management, control and development.

ASA Maestro provides you with a number of tools allowing to perform all the necessary database operations such as creating, editing, and duplicating database objects; moreover, you can build queries visually, execute and optimize SQL queries and SQL scripts, view and edit data including BLOBs, represent data as diagrams, export and import data to/ from most popular file formats, analyze your data summarized into multidimensional views and hierarchies (OLAP cubes), and use a lot of other tools implemented to make your work with SQL Anywhere server

comfortable and efficient



ASA Data Wizard is a powerful Windows GUI utility for managing your Sybase SQL Anywhere data.

ASA Data Wizard provides you with a number of easy-to-use wizards for performing the required data manipulation easily and quickly. ASA Data Wizard allows you to generate PHP scripts for the selected tables and queries, convert any ADO-compatible database to the SQL Anywhere database, export data from SQL Anywhere tables and queries to most popular formats, and import data into the tables.



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

ASA Code Factory 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 SQL Anywhere data, and much more.



<u>DB2 Maestro</u> is the premier Windows GUI admin tool for DB2 databases management, control and development.

DB2 Maestro provides you with a number of tools allowing to perform all the necessary database operations such as creating, editing, and duplicating database objects; moreover, you can build queries visually, execute and optimize SQL queries and SQL scripts, view and edit data including BLOBs, represent data as diagrams, export and import data to/ from most popular file formats, analyze your data summarized into multidimensional views and hierarchies (OLAP cubes), and use a lot of other tools implemented to make your work with DB2 server comfortable and efficient.



DB2 Data Wizard is a powerful Windows GUI utility for managing your DB2 data.

DB2 Data Wizard provides you with a number of easy-to-use wizards for performing the required data manipulation easily and quickly. DB2 Data Wizard allows you to generate PHP scripts for the selected tables and queries, convert any ADO-compatible database to the DB2 database, export data from DB2 tables and queries to most popular formats, and import data into the tables.



DB2 Code Factory is a premier DB2 GUI tool aimed at the SQL queries and scripts development.

DB2 Code Factory 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 DB2 data, and much more.



<u>PostgreSQL_Maestro</u> is the premier Windows GUI admin tool for PostgreSQL server management, control and development.

PostgreSQL Maestro allows you to create, edit, copy, extract and drop all the database objects such as *schemas*, *tables*, *views*, *functions*, *domains*, *rules*, *sequences*, *languages*, *operators*, etc., 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 PostgreSQL roles, users, groups and their privileges, and use a lot of other tools designed for the easiest and most efficient work with PostgreSQL Server.

You are welcome to enjoy the abilities offered by a number of implemented tools providing excellent performance for all the necessary database operations.



<u>PostgreSQL Data Wizard</u> is a powerful Windows GUI utility for managing your PostgreSQL data.

PostgreSQL Data Wizard provides you with a number of easy-to-use wizards for performing the required data manipulation easily and quickly. PostgreSQL Data Wizard allows you to generate PHP scripts for the selected tables and queries, convert any ADO-compatible database to your PostgreSQL database, export data from PostgreSQL tables and queries to most popular formats, and import data into the tables.



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

PostgreSQL Code Factory 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 PostgreSQL data, and much more.



<u>Firebird_Maestro</u> is the premier Windows GUI admin tool for Firebird Server management, control and development.

Firebird Maestro allows you to create, edit, copy, extract and drop all the database objects such as tables, views, procedures, domains, generators, etc., 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 Firebird users, and their privileges, and use a lot of other tools designed for the easiest

and most efficient work with Firebird Server.



Firebird Data Wizard is a powerful Windows GUI utility for managing your Firebird data.

Firebird Data Wizard provides you with a number of easy-to-use wizards for performing the required data manipulation easily and quickly. Firebird Data Wizard allows you to generate PHP scripts for the selected tables and queries, convert any ADO-compatible database to your Firebird database, export data from Firebird tables and queries to most popular formats, and import data into the tables.



<u>Firebird Code Factory</u> is a premier Firebird GUI tool aimed at the SQL queries and scripts development.

Firebird Code Factory 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 Firebird data, and much more.



SQLite Maestro allows you to create, edit, copy, extract and drop all the database objects such as tables, views, 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, and use a lot of other tools designed for the easiest and most efficient work with SQLite server.

SQLite Maestro is designed to meet the requirements of SQLite users and to make the work with the server simpler and more comfortable. Friendly user graphical interface, handy realization of the client application and stable running are evident advantages of using SQLite Maestro.



SQLite Data Wizard is a powerful Windows GUI utility for managing your SQLite data.

It provides you with a number of easy-to-use wizards for performing the required data manipulation easily and quickly. SQLite Data Wizard allows you to generate PHP scripts for the selected tables and queries, convert any ADO-compatible database to your SQLite database, export data from SQLite tables and queries to most popular formats, and import data into the tables.



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

SQLite Code Factory 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 SQLite data, and much more.



<u>MaxDB Maestro</u> is the premier Windows GUI admin tool for MaxDB Server management, control and development.

You are welcome to appreciate the brilliant performance of MaxDB Maestro. It is implemented with a number of tools allowing you 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, and use a lot of other tools implemented to make your work with MaxDB server comfortable and efficient.



<u>MaxDB Data Wizard</u> is a powerful Windows GUI utility for managing your MaxDB data.

MaxDB Data Wizard provides you with a number of easy-to-use wizards for performing the required data manipulation easily and quickly. MaxDB Data Wizard allows you to generate PHP scripts for the selected tables and queries, convert any ADO-compatible database to the MaxDB database, export data from MaxDB tables and queries to most popular formats, and import data into the tables.



<u>MaxDB_Code_Factory</u> is a premier MaxDB GUI tool aimed at the SQL queries and scripts development.

MaxDB Code Factory 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 MaxDB data, and much more.

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

inew fork city, new fork 1000

United States

Thank you for your interest to our company!

1.6 What's new

Please find out the latest PHP Generator for MySQL news at http://www.sqlmaestro.com/products/mysql/phpgenerator/news/

2 Getting started

Connection properties

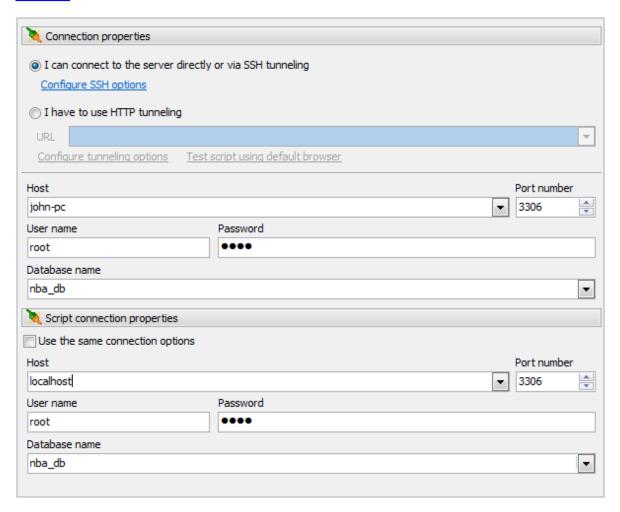
Set the <u>connection parameters</u> for the database you want the PHP scripts to work with.

Script connection properties

Specify here connection parameters for MySQL server relatively to the webserver. For example, if your webserver and MySQL server are installed on the same computer, set Host as localhost.

Projects

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 19.



2.1 How to connect to MySQL

PHP Generator for MySQL allows you to connect to MySQL servers directly, via Secure SHell (SSH) tunnel or HTTP tunnel.

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 Access List - list of IP addresses allowed accessing from outside.

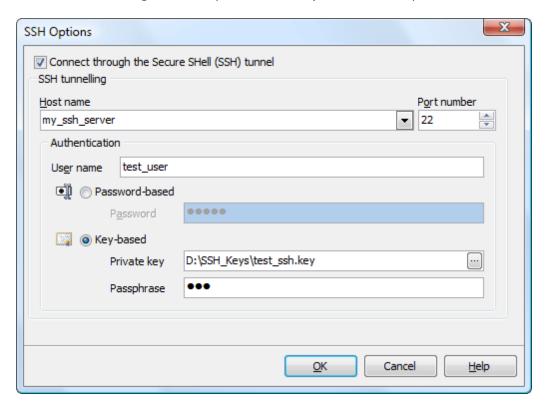
SSH tunnel connection

If your MySQL 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.

More about SSH tunnel connection

To establish connection to intermediate SSH server and forward all MySQL 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.

Port number

Enter the port number for the SSH server.

Enter valid User name for the remote server, select the authentication type: by password or by private key and set the Password or the path to the Private key file with the corresponding Passphrase to log in to the remote server.

Note: MySQL host name always should be set relatively to the SSH server. For example, if both of MySQL 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.

HTTP tunnel connection

<u>HTTP_tunneling</u> 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.

■ 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\PHP Generator for MySQL*.
- 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 use the Test connection button.

Connection Script

Fields marked by * are required.

Host/Server name (or IP) *:	localhost	
User*:	root	
Password:	mypass	
Port (if not 3306):		
Database *:	mydb	Get Database List
	Test Connection	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 server is not installed on the same server as the Web server.

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 if server is not localhost.

User name

The username used to connect to MySQL.

Password

The password for the user account on server.

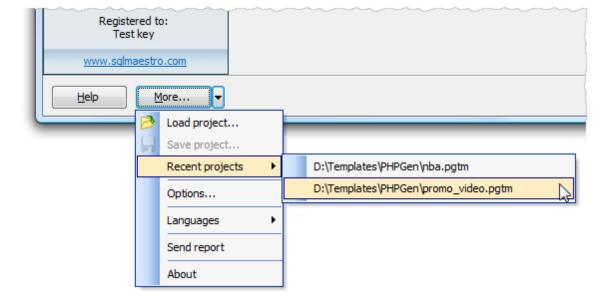
2.2 Projects

PHP Generator for MySQL 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 PHP Generator. 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, configure datasources and click More > Save Project at any next step. 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.



2.3 Command line options

PHP Generator for MySQL supports a number of command line options that make it possible to fully automate PHP scripts creation.

The PHP Generator for MySQL command line syntax is as follows:

MyPHPGenerator[.exe][<project_file_name>] [-o|output<output_directory>] [-g|generate][-h|help]

MyPHPGenerator[. exe]	The PHP Generator for MySQL program file.
<pre><pre><pre><pre>project_file_name</pre></pre></pre></pre>	The project 19 with all the task's settings.
<pre><output_directory></output_directory></pre>	A directory where file are generated to.
-g generate	Generate without running the GUI application.
-h help	Show help information.

Examples

The examples below assume that you are entering the command lines in the PHP Generator for MySQL program directory. Don't forget to enclose all paths and filenames containing spaces in quotes.

- myphpgenerator "C:\Templates\PHP_GENERATOR\MySQL\NBA_db.pgtm"
- fbphpgenerator "C:\Templates\PHP_GENERATOR\Firebird\online_store.pgtf" -g -o "C:\webserver\localhost"

3 Configuring datasources

PHP Generator for MySQL allows you to create PHP scripts based on one or more MySQL tables, views and/or queries. By default, each script has settings defined by the application_options
The course, you can change them later, but it's useful to setup the generation rules in accordance of settings of the most webpages to reduce further adjustments.

Adding tables and views

You can add a table/view within the Select object window.

Adding queries

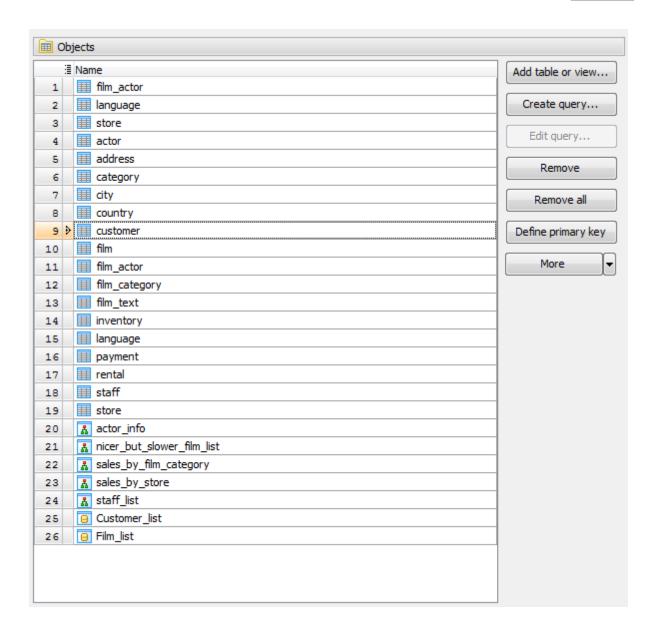
You can add a query from .sql file (More > Load query from file...) or type the query text in the Query editor [24].

Query repository

PHP Generator for MySQL allows you to store all queries used in a project to a single file. This feature can be extremely useful if you need to share a set of the same queries between several different projects. To save/load queries to/from a single file, use Save all queries as repository / Load query repository items from the More button menu accordingly.

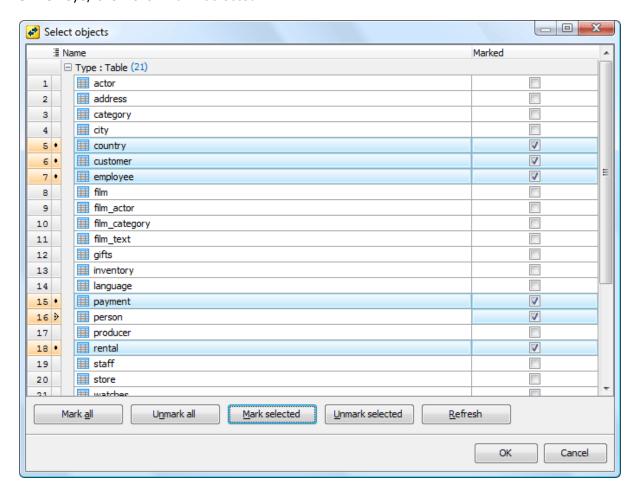
Define primary key

Specify a single column or a set of columns that uniquely identifies each record in the view/query to expedite the work of the generated application. It's optional but preferable.



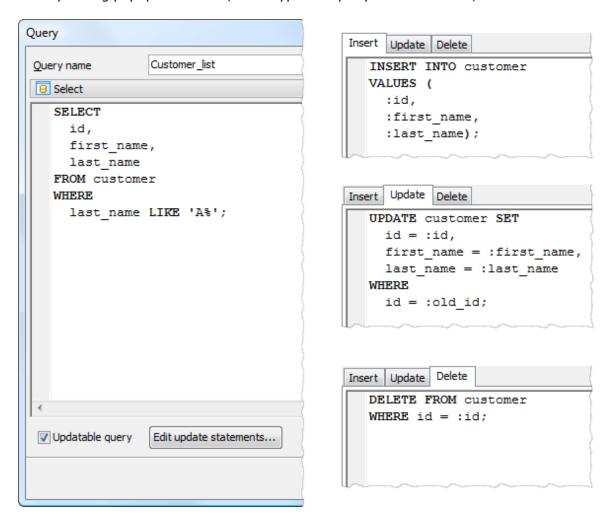
3.1 Tables and views

To specify source database objects for working through the web, pick the objects in the Select objects tab. To choose several objects at a time, select them using **Ctrl** and **Shift** keys, then click Mark selected.



3.2 Custom SQL queries

To add a query within the editor, use the Create Query button or select the corresponding popup menu item, then type the guery name and text, and click OK.



Creating updatable datasets (For Professional Edition Only)

To get an updatable dataset based on an SQL query, you have to provide up to three SQL queries: UPDATE, INSERT, and DELETE to be able to modify, add and remove records accordingly. The first query provides an UPDATE statement for modifying existing records; the second query provides an INSERT statement to add a new record to the tables; and the third one provides a DELETE statement to remove the records. Each of these queries can contain several parameterized statements that use parameters like : field name.

Example

Assume that we have the following SELECT statement:

```
SELECT id, first name,
```

```
last_name
FROM customer
WHERE last_name LIKE 'A%'
```

To create an updatable dataset based on this query, INSERT, UPDATE and DELETE statements can be specified as follows:

4 Customizing web pages

Pages

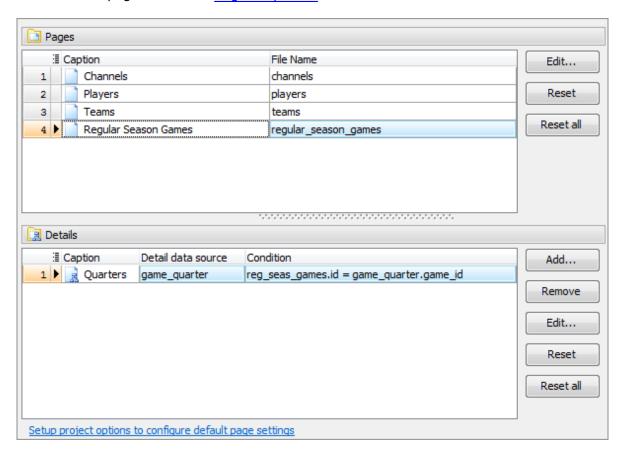
This tab contains the list of webpages to be created. Each page is based on a datasource defined on previous steps and is created with default settings defined by the application options 2. Use the Edit button to edit settings of a concrete webpage with the Page_editor 2. To exclude a webpage from the navigation menu of generated pages, uncheck the Include into menu option. Note, that the pages will be displayed at the navigation menu on the generated pages in the same order as they are disposed in the grid. To reorder the webpages, use the corresponding link of the popup menu. The Reset and Reset all buttons allow you to setup webpages properties according to the generation rules 3.

Details

This tab contains <u>detail presentations</u> for the page selected at the Pages tab. The detail presentations are created according to the master-detail relationships (if <u>Setup details by foreign key option</u> is enabled). Use the Reset and Reset all buttons to setup detail pages properties according to the <u>project options</u>.

Project Options

To specify <u>default setting</u> to be applied to each generated page, follow the Setup project options to configure default page settings link. This properties may be edited for the concrete page within the <u>Page Properties</u> window.



4.1 Page Editor

Columns 27

Use this tab to setup columns to be included into the result pages (List, View, Edit, Insert, etc.), column captions, data representation on viewing and editing, lookup options and more.

Details 4

Use this tab to adjust the page detail presentations and setup detail pages properties.

Events 46

Set here the fragments of PHP code to be executed before or after a record was added, edited, deleted, etc.

Filter 51

Use this tab to reduce the number of records available at the generated page.

Use the <u>Page Properties</u> window to setup common page properties such as view/edit/delete/filter/export abilities, pagination options, page header, and more.

The <u>Data Partitioning</u> wizard allows you to create a custom pagination i.e. split the records on the generated page by a specified criteria.

4.1.1 Columns

For each datasource PHP Generator for MySQL creates a bunch of presentations: the List presentation (data grid), the View presentation (on a record viewing), the Edit presentation (on a record editing), etc. The Columns tab of Page Editor allows you to adjust the presentations' appearance.

The General tab allows you to configure column properties for all the presentations. The properties for a concrete presentation can be specified at the corresponding tab.

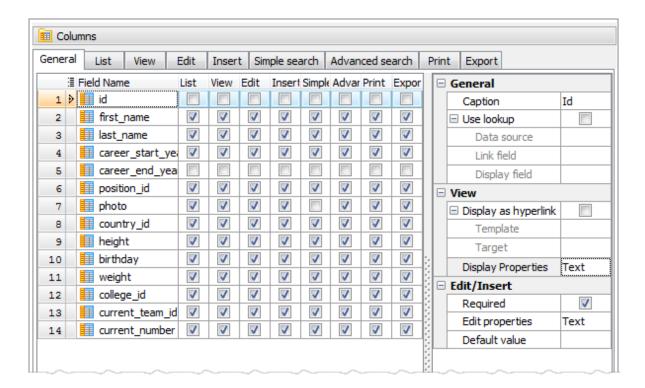
Include/exclude columns to/from a concrete presentation (List, View, Edit, etc.) using corresponding boxes. Use Include into all presentations / Exclude from all presentations command from the tab's popup menu to get the column listed/unlisted on all generated pages.

To restore default column options, use the Reset column link from the tab's popup menu.

Specify the column caption and set a <u>lookup editor</u> for the column if necessary. By default, PHP Generator for MySQL enables a lookup editor for columns linked by a foreign key with a single column from another table (if <u>Setup lookups by foreign key option</u> is enabled).

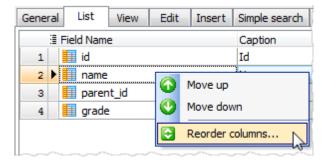
The <u>View</u> properties determine how the column is displayed on the List, View, Print and Export pages.

The **Edit** 3 properties define how the column is represented on the Edit and Insert pages.



The <u>Inline Edit</u>, <u>Inline Insert</u> properties determine whether the column will be available for inline adding/editing and how it will be represented.

To reorder columns, use the grid's popup menu of a concrete presentation.



4.1.1.1 Setting a lookup editor

Lookup editors are used in case you want to select for a field a value that corresponds to a pre-defined value e.g. a record of another dataset. PHP Generator for MySQL provides you with two types of lookup editors: Radio group or Combo box. Select Radio group as the column's Edit properties if the number of the column values is quite little.

Setting a lookup editor bound to a data source (table, view, query)

If you create a PHP script for taking orders, the 'Orders' table will generally have a field hosting a number indicating the customer who made the order. Working directly with the customer number is not the most natural way; most users will prefer to work with customer names. However, in the database the customers' names are stored in a different table to avoid duplicating the customer data for each order by the same

customer. To get around such a situation, you can enable a lookup editor:

- check the Use lookup box;
- select the foreign table/view/query as Data Source;
- specify the field with the same data as Link field;
- set the field with data to appear in the lookup editor as Display field;

By default, PHP Generator for MySQL enables a combo box lookup editor for a column linked by a foreign key with a single column from another table (if <u>Setup_lookups_by</u> foreign key option 3 is enabled).

To create a lookup editor represented data of several columns, create a query with all the necessary data concatenated into a single column and specify the query as Data Source. A complete example can be found below.

Example

Suppose we have three tables: 'employee' with a list of office employees, 'job' with employees' job titles and salaries, and 'department' with a list of office departments.

See definitions here

```
CREATE TABLE employee (
 EMP_NO
             integer NOT NULL PRIMARY KEY,
  FIRST_NAME varchar(15) NOT NULL,
 LAST_NAME varchar(20) NOT NULL,
  JOB CODE integer NOT NULL,
 DEPT_NO
             integer NOT NULL
CREATE TABLE job (
  JOB_CODE integer NOT NULL PRIMARY KEY,
  JOB_TITLE varchar(25) NOT NULL, SALARY real NOT NULL
  )
CREATE TABLE department (
  DEPT_NO integer NOT NULL PRIMARY KEY,
  DEPARTMENT varchar(20) NOT NULL,
 HEAD_DEPT integer,
 MNGR_NO integer,
 BUDGET
            real,
 LOCATION integer,
  PHONE NO char(20)
)
```

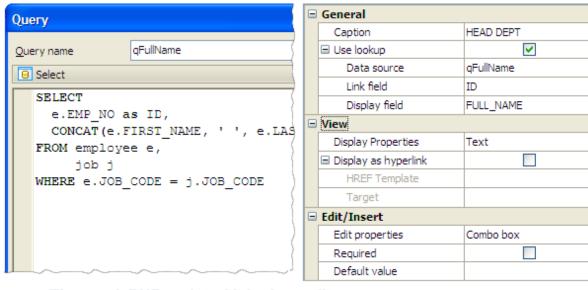
To enable a lookup editor for the 'HEAD_DEPT' field of the 'department' table representing first name, last name, and job title of the employee, follow the steps above with the following query text:

SELECT

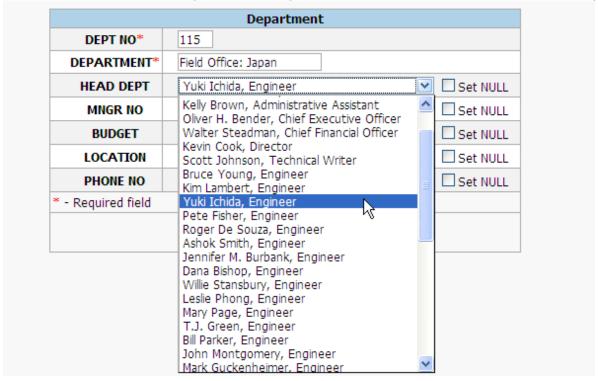
```
e.EMP_NO as ID,
   CONCAT(e.FIRST_NAME, '', e.LAST_NAME, ', ', j.JOB_TITLE) as FULL_NAME
FROM employee e,
        job j
WHERE e.JOB CODE = j.JOB CODE
```

Adding a query

Setting lookup properties



The result PHP script with lookup editor



Setting a lookup editor bound to a custom value list

To create a lookup editor bound to a custom value list i.e. to a list of values that are not stored in a database table and cannot be retrieved by a query, process as follows:

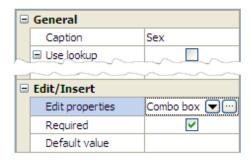
- Click the ellipsis button next to the "Edit properties";
- Enter the list of the allowed values in pairs
 an_allowed_value=value_to_be_represented
 separated by a comma (Example: 1=One,2=Two).

By default, PHP Generator for MySQL creates lookup editors described above for columns based on enumeration data types.

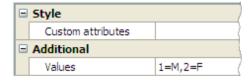
Source table



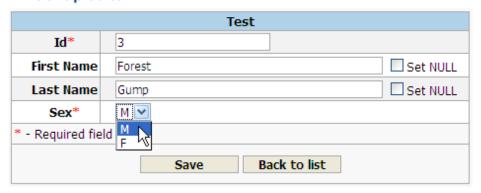
Page Editor



Setting edit properties



Lookup editor



4.1.1.2 View properties

Use the Display properties to define the way the column data to be represented on the List, View, Print and Export pages and set additional options within the dialog opened by the ellipsis button next to the Display properties.

Use **Style attributes** to specify the alignment of data, and define Custom attributes. For example, to set the background color of the column, enter *style="background-color: yellow"* as Custom attributes.

Fixed column width

To set a fixed width of the grid, check the Fixed width, specify the Width, and select the Units.

Units	Meaning
em	The 'font-size' of the relevant font.
рх	(pixels) Relative to the viewing device.
in	(inches) 1 inch is equal to 2.54 centimeters.
cm	Centimeters
mm	Millimeters
pt	(points) The points used by CSS 2.1 are equal to 1/72nd of an inch.
рс	(picas) 1 pica is equal to 12 points.

Additional format-specific options

Text Use the Max length field to limit the visible signs on the result page. If the text length is greater than this value, the residual text will be hidden under the More... link and the full text is displayed in the special window.

Check the Replace CR+LF by
 box to allow line breaks in the represented text.

Check off the Allow HTML option to make the HTML tags visible on the generated page.

Image If BLOB data will be represented as images, specify the size of all the column images with Resize type and Height and Width fields. Image hints are set with templates 40.

File If BLOB data will be represented as file downloads, set a Download file name downloa and a Content type using templates 4. The Content type value is optional.

Checkbo PHP Generator for MySQL provides you with three display types of boolean data: check box controls, custom images, custom text values. Select the necessary option and specify the custom information (TRUE/FALSE captions or images).

External To represent data in such a way, specify the Source prefix and Source suffix file/

External

Example

Suppose there is a 'product' column with such data: sqlite_maestro, firebird_maestro

There are image files with the following paths: D:\Images\sqlite_maestro_600x400.jpg D:\Images\firebird maestro 600x400.jpg

To represent these images at the 'product' column on the generated page, Select External Image as View Properties and set

image

Source prefix = D:\Images\ Source suffix = 600x400.jpg

Data Format

By default, the format of the column's data is the same as it is set at the <u>Project options</u> T4. To change data format of the current column, select the corresponding data type as Type, check off the Default format box, and make the necessary modifications.

Display as hyperlink

To represent the column's data as hyperlink, check the Display as hyperlink option and specify the HREF Template 10. Target controls where the new document is displayed when a user follows the link.

_blank	opens the new document in a new window.
_parent	is used in the situation where a frameset file is nested inside
	another frameset file. A link in one of the inner frameset
	documents which uses "_parent" will load the new document where
	the inner frameset file had been.
_self	puts the new document in the same window and frame as the
	current document. "_self" works the same as if you had not used
	TARGET at all.
_top	loads the linked document in the topmost frame that is, the new
	page fills the entire window.

Use the Header hint field to specify the the column caption's hint. By default, it is a comment to the table/view column.

4.1.1.3 Edit properties

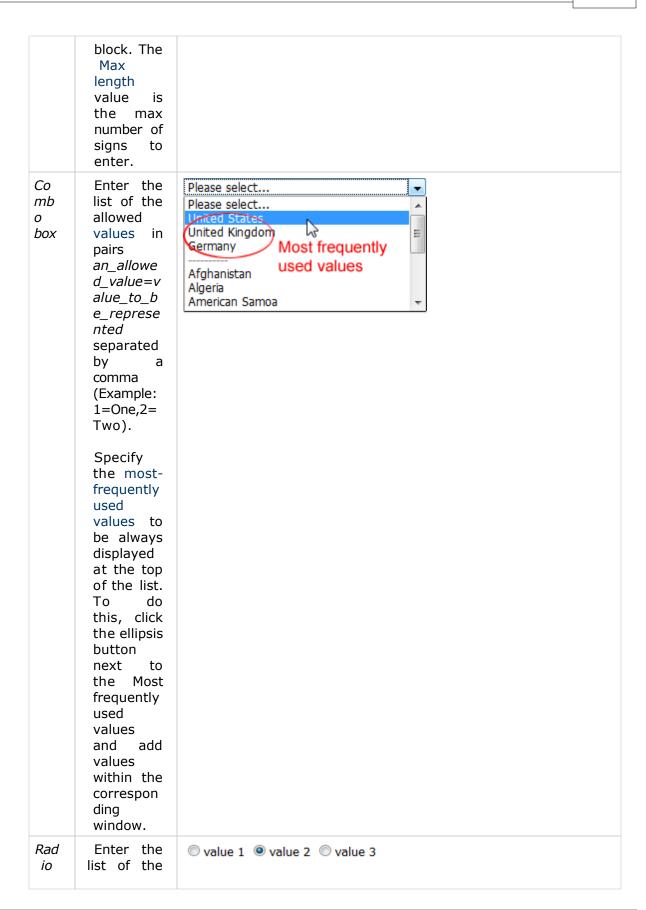
Use the Edit properties to define the way the column data to be represented on the Edit and Insert pages and set additional options within the dialog opened by the ellipsis button next to the Edit properties.

Use **Style custom attributes** to specify the appearance of inserting data. For example, to set the font color of the column, enter *style="color : red;"* as Custom attributes.

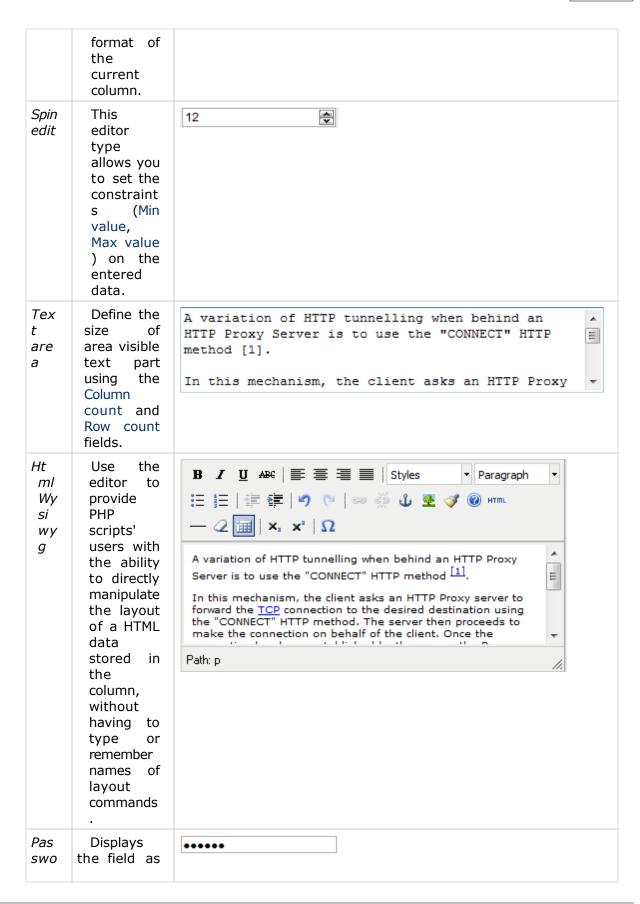
The Read only fields cannot be modified. However, a user can tab to it, highlight it, and copy the text from it. Check the Required box if the field is mandatory. Set also the Default value for the column (for adding new record only). PHP Generator for MySQL supports some environment valiables such as CURRENT_USER_ID, CURRENT_USER_NAME, UNIQUE_ID.

Additional format-specific options

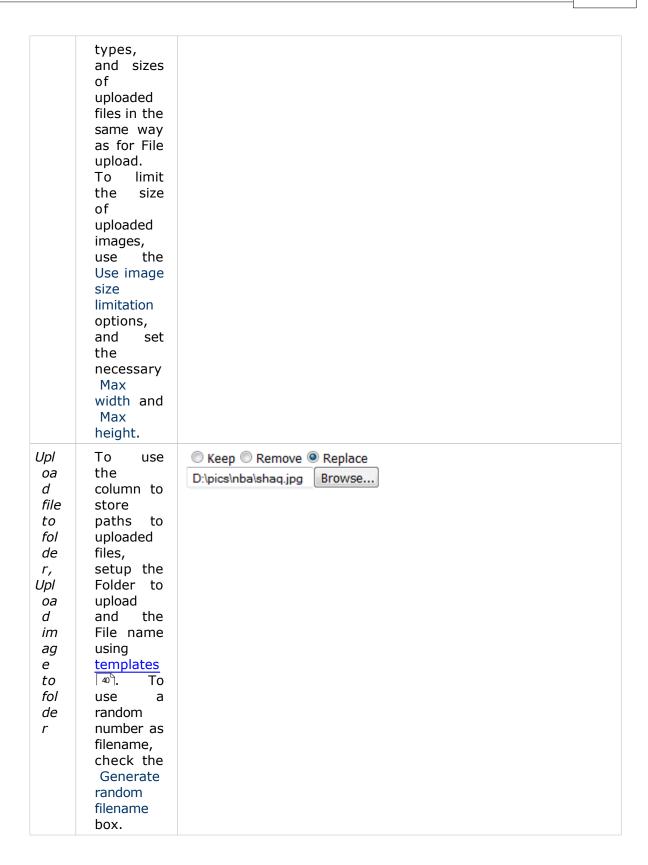
Ava ila ble edi tor s	Additional options	Editor appearance
Tex t	Set the Size of the text	Sara Connor



gr ou p	allowed values in the same way as for Combo box editor.	
Aut oco mpl ete edit or	Use this editor type as lookup editor to work with a quantity of records.	
Che ck box	The editor is set for boolean columns by default.	
Che ck box gro up	Enter the list of the allowed values in the same way as for Combo box editor.	✓ value 1 □ value 2 ✓ value 3 ✓ value 4
Dat eTi me	Check off the Show time box to represent the only date. By default, the format of the column's data is the same as it is set at the Project options 74 . Use the DateTime format field to setup	2010-11-29 13:59:00 Su Mo Tu We Th Fr Sa 28 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 5 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 Today 16 \$\hfrac{1}{2}\$ 56 \$\hfrac{1}{2}\$



rd	a masked textbox.	
File uplo ad	If BLOB data will be edited with such editor, you can limit the size of an uploading file with the Use file size limitation option and the Max file size field. To store names, types, and sizes of uploaded files, specify the proper columns as File name field, File type field, and File size field respective ly.	© Keep © Remove @ Replace C:\Data\result.txt \textit{Browse}
Ima ge uplo ad	If BLOB data will be edited as Image uploads, you can limit the size of an uploading file, specify columns to store names,	© Keep © Remove © Replace Browse



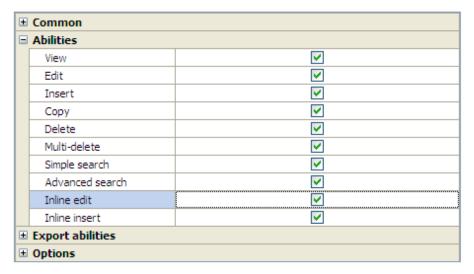
4.1.1.4 Inline Insert and Inline Edit

The Inline Insert/Inline Edit features allow a user to add/edit the content of the generated page quickly without having to switch modes or screens. All work is done on the same interface which helps the user maintain context.

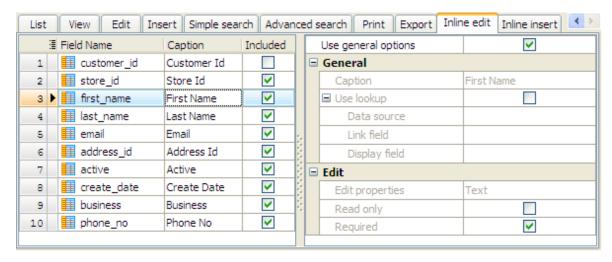
To enable the inline inserting/editing:

- Make sure that the Inline Insert (Inline Edit) option is ON at the <u>Page properties</u>
- Specify the columns to be available for inline inserting(editing) at the Inline Insert (Inline Edit) tab of the Page Editor (Inline Edit) tab of tab
- If necessary define the way the column data to be represented on inserting/ editing. By default, it is represented as it is set at the Edit/Insert properties of the General tab.

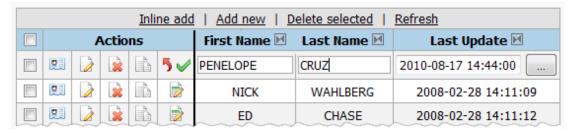
Page Properties



Page Editor



Inline editing



4.1.1.5 Templates

String templates are used by PHP Generator for MySQL on setting HREF templates, hints, etc. The strings may contain column names enclosed by %.

Examples:

1. Suppose a table 'team' stores various info about NBA teams. The table has 'caption' column with such data:

maverics cavaliers

To create links to the team home pages:

http://www.nba.com/maverics/ http://www.nba.com/cavaliers/

set the HREF template http://www.nba.com/%caption%/

2. Suppose there is a table 'employee' storing employee info. The table has 'first_name' and 'last name' columns with such data:

Forest Gump Sara Connor

To add such hints to their photos on the generated webpage: Forest Gump Photo

Sara Connor Photo

Specify the hint template: %first_name% %last_name% Photo

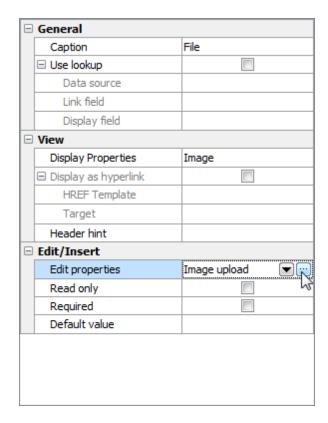
4.1.1.6 Uploading files to webserver

There are two ways to store files on a webserver:

- 1. Store files directly in the database (in BLOB columns).
- 2. Store files on a disk. Database stores the paths to the files in this case.

Uploading files to be stored in a database

To allow the uploading of files and images to a BLOB column, select File Upload or Image Upload at the column's Edit properties and Click the ellipsis button next to Edit properties and set the additional parameters of the uploading.



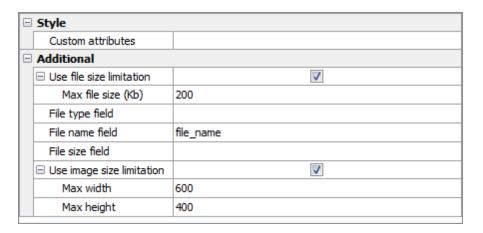
To limit the size of uploading files, check the Use file size limitation option and specify the Max file size.

To store original names, types, and sizes of the uploaded files, specify the proper columns as File name field, File type field, and File size field respectively. (Optional)

For image uploads you can limit the dimensions of uploaded images. For this purpose, check the Use image size limitation options, and set the necessary Max width and Max height.

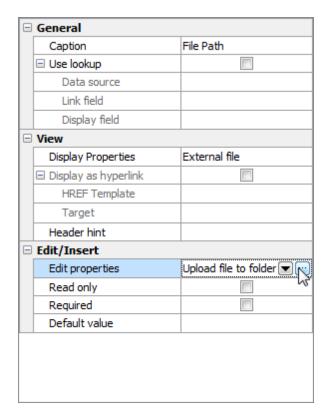
Example

To allow uploading images which size is not greater than 200Kb, width is not greater than 600px and height is not greater than 400px and to save the original file names to the *file name* column, specify the Edit properties as follows:



Uploading files to be stored on a disk

To allow the generated PHP script to upload files to your webserver and save their paths in your database, select Upload file to folder or Upload image to folder at the column's Edit properties and click the ellipsis button next to Edit properties and set the additional parameters of the uploading.

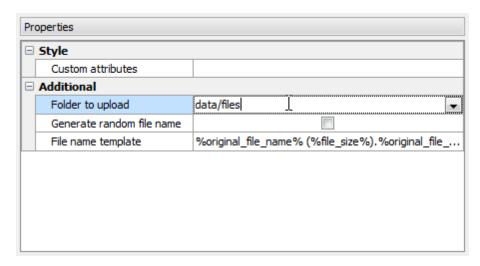


Specify the folder to upload and names for uploaded files: a random number or a new name composed of original file name, original file extension and the size of original file.

Example:

Suppose we have files: sqlite_maestro.exe (14563609 Bytes) mysql_maestro.exe (27241901 Bytes) To upload them using the generated PHP script to the *data/files/* folder as sqlite_maestro (14563609).exe mysql_maestro (27241901).exe

Specify the Edit properties as follows:

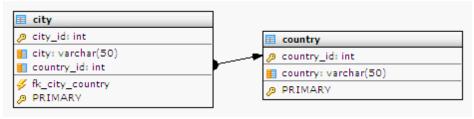


4.1.2 Master-Detail Presentations

Master-detail presentations are used to display a list of detail (child) records related to a selected record on the page (master record).

Example

Suppose, we have two tables 'city' and 'country' linked with foreign key 'fk_city_country':



See definitions here

```
CREATE TABLE country (
  country_id integer NOT NULL,
  country varchar(50) NOT NULL,
  /* Keys */
  PRIMARY KEY (country_id)
);

CREATE TABLE city (
  city_id integer NOT NULL,
  city varchar(50) NOT NULL,
  country_id integer NOT NULL,
  /* Keys */
  PRIMARY KEY (city_id),
```

```
/* Foreign keys */
CONSTRAINT fk_city_country
    FOREIGN KEY (country_id)
    REFERENCES country(country_id)
);
```

Output script with the enabled master-detail representation is as follows:

Country Advanced search *					
Add new Delete selected Refresh					
	View	City	Country Id	<u>Country</u>	
	<u>View</u>	± City	101	United Arab Emirates	
	<u>View</u>	± City	102	United Kingdom	
	<u>View</u>	⊡ <u>Cit</u> y	103	United States	
	etail preview: City own first 20 of 35 records (<u>full view</u>)				
C	ity Id		City	Country Id	
	11 Akron		United States		
	33 Arlington 41 Augusta-Richmond County			United States	
				United States	
10 Aurora United State			United States		

By default, the **Details** tab contains detail presentations created according to the master-detail relationships (if <u>Setup details by foreign key option</u> is enabled). You can create your own detail presentations manually and edit existing ones within Detail relation editor (the Add or Relation properties links at the popup menu of the tab area respectively).

Detail relation editor

Specify here the data source for detail presentation and set the relationship between the master and detail data.



To customize the appearance of the detail records, follow the Edit link of popup menu to open the Detail page editor - the same window as Page_editor but without Details tab.

Use the Reset and Reset all links of popup menu to setup detail pages properties according to the generation rules 3.

4.1.3 Events

Event is a fragment of PHP/Javascript code executed before or after a record was added, edited, or deleted, etc. Therefore events allow you to define some actions that will be activated when certain conditions are met. All events are grouped into 2 categories: Client side events and Server side events. Client side events are written on Javascript and executed by browsers while Server side events are written on PHP and executed by webserver.

Working with events

To add/edit an event handler, select the necessary event in the list and double-click the Code column or use **Ctrl+Enter.** Then type PHP code in the Event Editor window.

To temporarily disable/enable an event, select the appropriate line in the list and uncheck/check the corresponding Enabled box.

Using variables

PHP Generator for MySQL supports some environment variables (such as CURRENT_USER_ID, CURRENT_USER_NAME, UNIQUE_ID) in events. To obtain a complete list of supported variables, uncomment the *define('SHOW_VARIABLES', 1);* line in the generated settings.php file and open any generated web page. The following example demonstrates how to use variables within the *OnBeforeInsertRecord* event.

Example:

```
$rowData['ip_address'] = $this->GetEnvVar('REMOTE_ADDR');
$userName = $this->GetEnvVar('CURRENT_USER_NAME');
if ($userName!= 'admin')
$rowData['changed_by'] = $userName;
```

PHP Generator for MySQL supports the following events:

Client side events:

OnBeforePageLoad

Occurs before page loading. Allows you to declare functions and global variables.

OnAfterPageLoad

Occurs after page has been fully rendered. This event does not get triggered until all assets such as images have been completely received and DOM hierarchy has been fully constructed.

OnInsertFormValidate

Occurs before submitting the insert form. This allows

errors to be detected on the client before the form is submitted, thus avoiding the round trip of information necessary for server-side validation.

Parameters:

fieldValues- associative array of values contains user input.

errorInfo - object that provides interface (the SetMessage method) to set a validation error message.

Example:

```
if (fieldValues['percents'] < 0 || fieldValues['percents']
> 100)
{
    errorInfo.SetMessage('Percent value should be
between 0 and 100.');
    return false;
}
```

OnEditFormValidate

Occurs before submitting the edit form. This allows errors to be detected on the client before the form is submitted, thus avoiding the round trip of information necessary for server-side validation.

Parameters:

fieldValues- associative array of values contains user input.

errorInfo - object that provides interface (the SetMessage method) to set a validation error message.

Example:

```
if (fieldValues['percents'] < 0 || fieldValues['percents']
> 100)
{
    errorInfo.SetMessage('Percent value should be
between 0 and 100.');
    return false;
}
```

Server side events:

OnBeforePageExecute

Occurs before all page events has been declared. Allows to create global objects, declare functions, and include third-party libraries.

Example:

Suppose we decided to implement a syntax highlighting using the <u>GeSHi_library</u> somewhere in the generated application. To implement such a feature, we need (among other things) to include the main library file into the generated scripts:

include_once '../geshi/geshi.php';

OnCustomRenderColumn

Occurs before column rendering. Allows to replace cell content. It is an extremely useful event for conditional rendering or embedding third-party components to extend standard functionality.

Parameters:

```
$fieldName - field name of currently processed cell.

$fieldData - data of currently processed cell.

$rowData - associative array of values that

corresponds currently processed row.

$customText - a string to replace original cell content.
```

Example:

Suppose a table 'employee' has a column storing data about the employee's sex in that way that '1' corresponds to male and '2' to female. Our goal is to represent the employees sex as 'M' and 'F' for men and women accordingly. To do so, you could specify the OnCustomRenderColumn event handler as follows:

```
if ($fieldName == 'sex') {
    $customText = $rowData['sex'] == 1 ? 'M' : 'F';
    $handled = true;
}
```

OnCustomHTMLHeader

Occurs when generating the head section of the page. Use this event to provide additional information for the HEAD section of the page (such as keywords, author, or description).

Parameters:

```
$page - the page raised the event.$customHtmlHeaderText - a string to place into the head section.
```

Example:

```
$customHtmlHeaderText = '<meta name="copyright" content="SQL
Maestro Group"/>';
```

OnExtendedCustomDrawRow

Occurs when rendering a grid row (advanced features). It is an extremely useful event for conditional formatting such as changing font color, font styles, row background color, cell background color, etc.

Parameters:

\$rowData - associative array of values that corresponds currently processed row.

\$cellStyles - associative array of styles. Each field name is associated with its style string.

\$rowStyles - use this string to modify styles of a whole row.

This event (as well as OnCustomDrawRow) is used for conditional formatting. The only difference between two these events is that OnCustomDrawRow has a more understandable parameter list while OnExtendedCustomDrawRow provides more flexible abilities.

Example:

Please find below an example of the conditional row formatting from <u>our online demo</u>. We need to display winning team score in red and losing team score in black; moreover, both scores should be in bold and displayed by a 16pt font.

```
$rowCellStyles['home_team_score'] = 'font-size: 16pt;font-weight:
bold;';
$rowCellStyles['away_team_score'] = 'font-size: 16pt;font-weight:
bold;';
if ($rowData['home_team_score'] > $rowData['away_team_score'])
$rowCellStyles['home_team_score'] .= 'color: #F65317;';
else
$rowCellStyles['away_team_score'] .= 'color: #F65317;';
```

OnCustomDrawRow

Occurs when rendering a grid row (basic features). It is an extremely useful event for conditional formatting such as changing font color, font styles, row background color, cell background color, etc.

Parameters:

\$rowData - associative array of values that corresponds currently processed row.

\$cellFontColor, \$cellFontSize, \$cellBgColor, \$cellItalicAttr, \$cellBoldAttr - associative arrays of cell attributes.

This event (as well as OnExtendedCustomDrawRow) is used for conditional formatting. The only difference between two these events is that OnCustomDrawRow has a more understandable parameter list while OnExtendedCustomDrawRow provides more flexible abilities.

Example:

Please find below an example of the conditional row formatting from <u>our online demo</u>. We need to display winning team score in red and losing team score in black; moreover, both scores should be in bold and displayed by a 16pt font.

```
$cellFontSize['home_team_score'] = '16pt';
$cellBoldAttr['home_team_score'] = true;
$cellFontSize['away_team_score'] = '16pt';
$cellBoldAttr['away_team_score'] = true;
if ($rowData['home_team_score'] > $rowData['away_team_score'])
$cellFontColor['home_team_score'] = '#F65317';
else
$cellFontColor['away_team_score'] = '#F65317';
```

OnBeforeUpdateRecord

Occurs when the Update command is executed, but before the actual update. This event is often used to cancel the update operation.

Parameters:

\$rowData - associative array of values that corresponds currently processed row.

\$cancel - value indicating whether the operation should be canceled. \$message - message string that is displayed after the operation is completed (or canceled)

Example:

```
$cancel = true;
$message = 'Updating is disabled.';
```

OnBeforeDeleteRecord

Occurs when the Delete command is executed, but before the actual deletion. This event is often used to cancel the delete operation.

Parameters:

\$rowData - associative array of values that corresponds currently processed row.

\$cancel - value indicating whether the operation should be canceled. \$message - message string that is displayed after the operation is completed (or canceled)

Example:

```
$cancel = true;
$message = 'Deleting is disabled.';
```

OnBeforeInsertRecord

Occurs when the Insert command is executed, but before the actual insertion. This event is often used to cancel the insert operation.

Parameters:

\$rowData - associative array of values that corresponds currently processed row.

\$cancel - value indicating whether the operation should be canceled. \$message - message string that is displayed after the operation is completed (or canceled)

Example:

```
$cancel = true;
$message = 'Inserting is disabled.';
```

OnAfterLogin

Occurs after a successful login. This event can be used to track user activity.

Example:

```
$connection->ExecSQL("INSERT INTO log(user_name, log_date)
VALUES ('$userName', CURRENT_TIMESTAMP)");
```

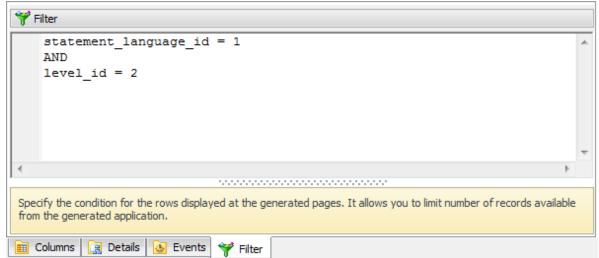
Events specified as project options will be used for all generated web pages.

4.1.4 Filter

To reduce the number of records available at the page, specify the Filter condition. This condition corresponds to the WHERE clause of the query returned page data (you must not add the WHERE keyword to beginning of the condition).

Example 1

There is a table with test questions of a Web programming course. To display only questions of the 'Beginner' level (level_id = 2) concerning to PHP (statement_language_id = 1), set the filter condition as follows:



Example 2

You can use subqueries in the filter expression. For example, to display the list of channels that hosted even if a single game, specify the Filter condition as follows:

```
(channel.id > 0) AND channel.id IN
(
   SELECT game.channel_id
   FROM game
)
```

4.1.5 Page Properties

The Page Properties window allows you to define the general properties of the generated page. To open Page properties, use the Page Properties button of the Page Editor ...

Basic HTML elements

Specify here the Caption of the generated HTML page and set the File name (if the file name extension is not specified, it will be the same as at the application output options \(\bar{\mathbb{T}} \)). Short Caption is a text of the link representing the page at Navbar. To add a text to be displayed at the top of the page, use the Page Header field or open the Page Header window with the ellipsis button (for details see the screenshot below).

Default sort order

To set the default sort order of the generated page data, check the Default ordering box, specify the name of the column the data to be sorted according with and select the sort order.

Fixed width of the grid

To set a fixed width of the grid, check the Grid fixed width, specify the Width, and select the Units.

Units	Meaning
em	The 'font-size' of the relevant font.
рх	(pixels) Relative to the viewing device.
in	(inches) 1 inch is equal to 2.54 centimeters.
cm	Centimeters
mm	Millimeters
pt	(points) The points used by CSS 2.1 are equal to 1/72nd of an inch.
рс	(picas) 1 pica is equal to 12 points.

Creating RSS feeds

The <u>Use RSS</u> options group allows you to create an RSS feed based on the current table.

Opening search page at first

For tables storing a lot of data it's reasonable to allow users to work only with a necessary piece of data. For this purpose, check the Open search page at first box and the generated page will be opened with a search page.

The other properties are set in accordance with the <u>project options</u> 2. To change the properties, check off the Use default options box and enter the new value in the

corresponding field.



4.1.6 Data Partitioning

The Data Partitioning wizard allows you to create a custom pagination i.e. split the records on the generated page by a specified criteria.

Select the type of data partitioning on the first wizard step:

Range partitioning

Selects a partition by determining if the partitioning expression value is inside a certain range.

List partitioning

A partition is assigned a list of values. If the partitioning expression value has one of these values, the partition is chosen. For example, all rows where the column 'Country' is either Iceland, Norway, Sweden, Finland or Denmark could build a partition for the 'Nordic countries'.

Custom partitioning

Create your own partitioning with fill partitions and build conditions functions.

• To disable data partitioning, select **None**.

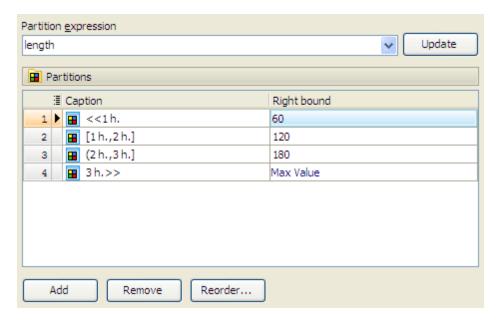
Example 1 (Range partitioning)

There is a table storing information about films such as title, release year, and length. See definition here

```
CREATE TABLE film (
film_id integer NOT NULL,
title varchar(255) NOT NULL,
release_year integer,
length integer UNSIGNED,
```

```
/* Keys */
PRIMARY KEY (film_id)
);
```

To create a pagination by the film length, select Range partitioning at the first wizard step, choose 'length' as partition expression and set the partitioning ranges as follows:

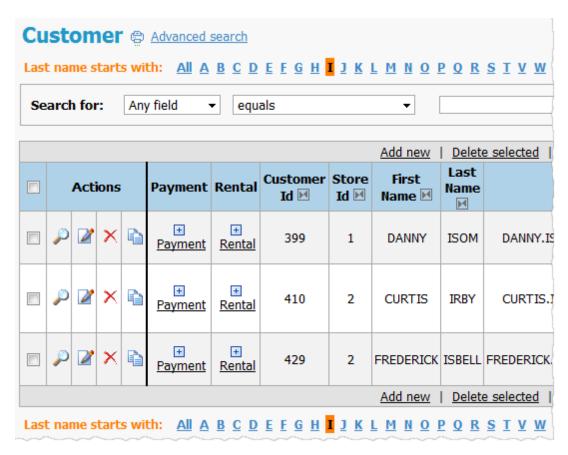


Here you can see the result PHP script:



Example 2 (Custom partitioning)

Assume that a table 'customer' contains the 'last_name' column. Our goal is to group customers by the first letter of their last name as displayed below.



To get around such a situation, select Custom partitioning and define functions as follows:

4.1.7 RSS

With PHP Generator for MySQL you can create full-fledged RSS feeds based on MySQL tables. To create an RSS document, open the Page Properties dialog and complete the

Use RSS options group.

Check the Use RSS box first and specify the following options:

Channel title

Defines the title of the channel.

Channel link

Defines the hyperlink to the channel.

Channel description

Describes the channel.

Item title template 40

Defines the title of the item.

Item link template 40

Defines the hyperlink to the item.

Item description template 40

Describes the item.

Item publication date field

This field is optional. Defines the last publication date for the content of the feed.

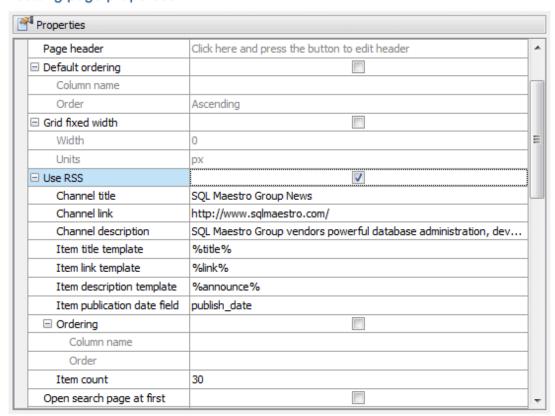
For more details see the RSS specification.

The screen below provides you with a simple example.

Source table

200		:	id 🕌	publish	_date		title	announce
	1	١	1	19.07.	2010	6:00:00	A new article on PHP Generator has been published.	The article provides you with
	2		2	06.07.	2010	5:00:00	AnySQL Maestro 10.7 released.	New version comes with dat
	3		3	03.08.	2010	17:17:48	PHP Generator 10.8 released.	New version comes with Inlin

Setting page properties



RSS reader

SQL Maestro Group News



4.2 Project Options

PHP Generator for MySQL allows you to adjust default settings to be applied to each generated page. The options are grouped to several tabs. The **Page** tab provides you with abilities to manage appearance of generated pages. The **Export** tab contains list of available data formats to export data from the generated pages into. Use the **Abilities** tab to setup what actions will be executed on the created page: Multi-delete, Advanced search, Inline edit, etc. Use **Display** formats tab's fields to adjust the display data formats in the way you need. You can also specify **Events** to be executed after login, before update/insert/delete records.

By default, these options have the same values as the application options 2.

5 Security settings

Check the Enable security option to supply the generated application with a login page to request user name and password when someone attempts to access your script. PHP Generator for MySQL provides you with the following authorization types:

• Hard-coded authorization of

Select this option to incorporate the authorization procedure directly into the PHP code of the generated application.

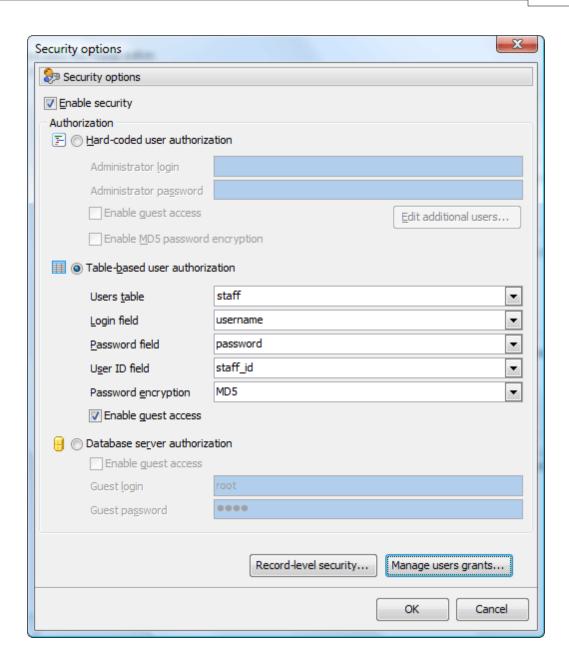
• Table-based authorization 3

Select this option to authorize a user of the web application by a login/password combination stored in a database table.

• Database server authorization 65

Select this option to accomplish the authorization by MySQL server.

See also: User permissions 66

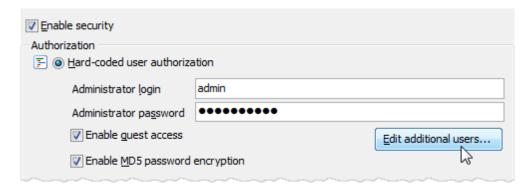


5.1 Hard-coded authorization

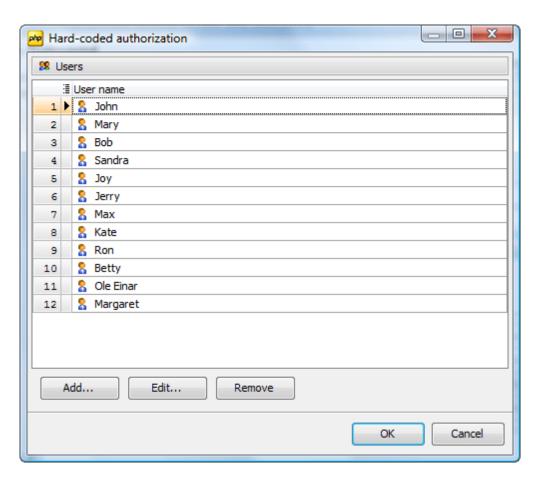
To set the hard-coded authorization, fill in the Administrator login and Administrator password fields and add as many additional users as you need. Check the Enable guest access option to allow an anonymous user to access the generated app without completing the authentication procedure.

Note: To allow guest access, specify also the corresponding guest's permissions ...

Turn Enable MD5 password encryption 'ON' to store user passwords encrypted with the MD5 algorithm.



To add an application user, open the Hard-coded authorization window with the Edit additional users button and open the User editor by the corresponding button or the corresponding link at the tab's popup menu.



Enter the user name and password, and check the necessary options to grant the corresponding permissions to the user.



To learn how to specify permissions of the created users, see the $\underline{\text{User_permissions}}$ section.

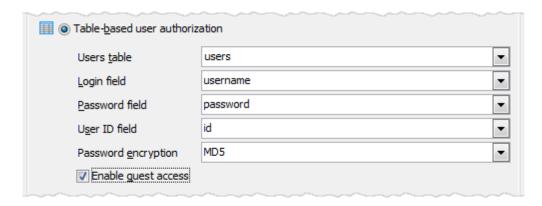
5.2 Table-based authorization

To set table-based authorization, select an existing database table containing login name and password information as Users table and set the table columns with user names and passwords to be used for authentication as Login field and Password field. If the passwords are encrypted, select the corresponding encryption algorithm in the Password encryption field (MD5, SHA1, PHPass algorithm).

To enable guest access, check the corresponding option.

To allow the <u>record-level security</u> at the generated application, specify User ID.

To learn how to specify permissions of users, see the User permissions section.

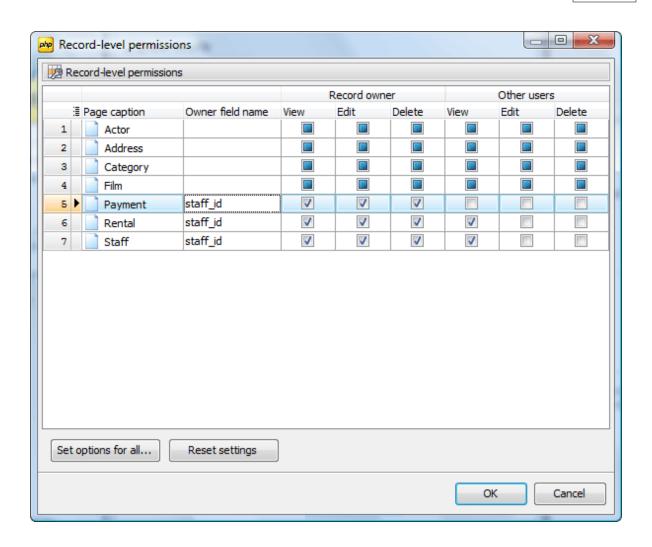


5.2.1 Record-level security

Use the Record level permissions window to let each user access only to his own data. To implement the row level security,

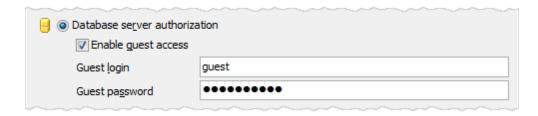
- The table must have an additional column, to hold the user ID.
- Select the User ID column as Owner field name and set permissions for the record owner and other users.
- For table-based authorization specify the User ID column at the Security Option window, for hard-coded authorization user name will be used as User IDs. This is not applicable for the database server authorization, in that case the grants should be set with the server facilities.

See <u>the corresponding article</u> for details on how to implement the row level security in MySQL 5.0 and higher using such MySQL features as views and triggers.



5.3 Database server authorization

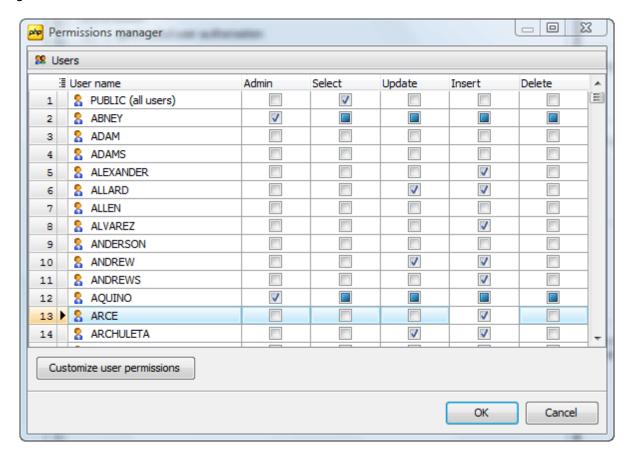
This kind of authorization forces you to create and manage users permissions with the server facilities. To allow access without entering a password, you need have a guest account on the server and specify the guest credentials at the corresponding fields.



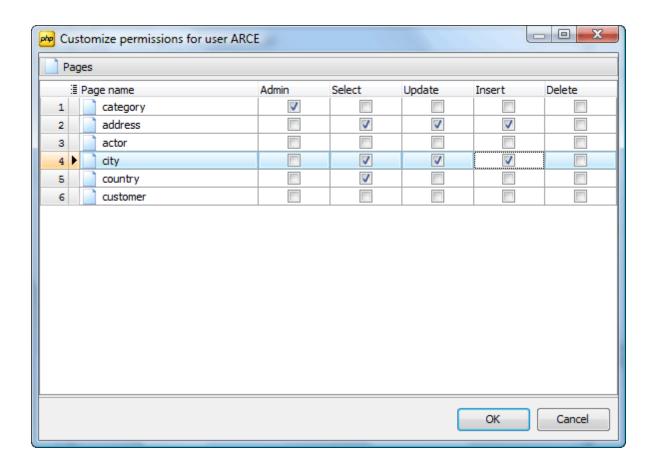
5.4 User permissions

PHP Generator for MySQL allows you to manage user permissions of the generated application. You can adjust basic permissions (permissions on some specific actions such as Select, Insert, Update, and Delete) as well as page-level permissions and <u>record-level permissions</u> [8].

To set **Basic permissions**, press the Manage permissions button to open Permission manager. This is not applicable for the database server authorization, in that case the grants should be set with the server facilities.



To set **Page-level permissions**, open Permissions manager and customize permissions for each user.



6 Advanced generation options

To specify a header and a footer of the result file, complete fields of the **Header and Footer** window.

Access driver

There are several PHP drivers to communicate with database servers and PHP Generator for MySQL allows you to select a driver to be used by the generated web application. Note that the corresponding set of PHP functions should be available on your web server.

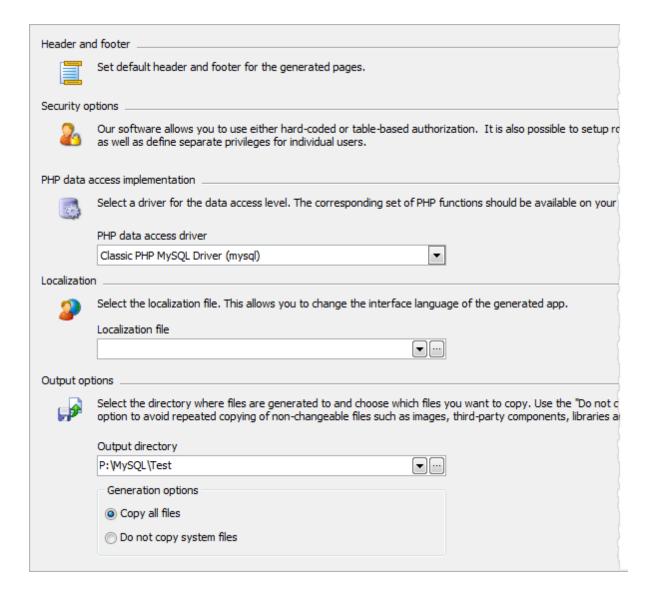
Localization

Use this field to specify the localization file. This allows you to change the interface language of the generated application. PHP Generator for MySQL provides you with a number of localization files (lang.en.php, lang.fr.php, and others) that can be found under the installation folder, usually *C:\Program Files\SQL Maestro Group\PHP Generator for MySQL*.

Output Generation Options

Set the output directory for generated files. You can also select which files you want to copy. Use the "Do not copy system files" option to avoid repeated copying of non-changeable files such as images, third-party components, libraries and so on.

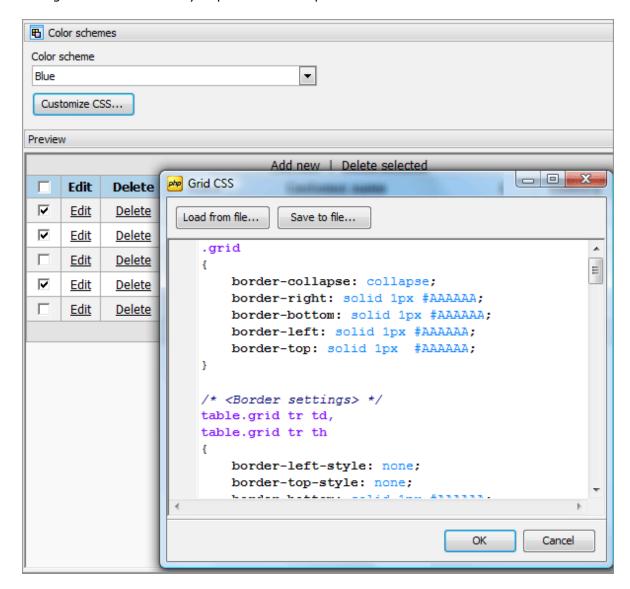
Note: These options are saved and restored to/from a template file. By default, they are set in accordance with the application output options কি.



6.1 Working with color scheme

With these options you can change appearance of result webpages. You can select a standard HTML template or create your own style with CSS file.

To customize HTML appearance with CSS, use the corresponding button to open the Grid CSS window and edit the file directly or load the content of CSS from file. All changes will be accurately repeated on the preview.



7 Options

PHP Generator for MySQL allows you to customize the way it works within the Options dialog. To open the dialog, use the More button and select Options at the drop-down list.

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

- Application 2
 General PHP Generator for MySQL options: generation rules, default page options, and display data formats.
- Editors & Viewers (77)
 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 PHP Generator for MySQL. 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 PHP Generator for MySQL behavior. The section consists of several tab; follow the links to find out more about each of them.

- Page 72
- Generation defaults 3
- Display formats 74
- Output 75

7.1.1 Page

Page navigator

Use the field to enable/disable pagination, and to set the position of the page navigator. You can also specify the number of records per page.

Content encoding

Allows to define the encoding of data to display.

Control buttons position

Defines the position of Edit, View, Delete, and Copy buttons.

Detail buttons position

Defines the position of buttons opening detail pages.

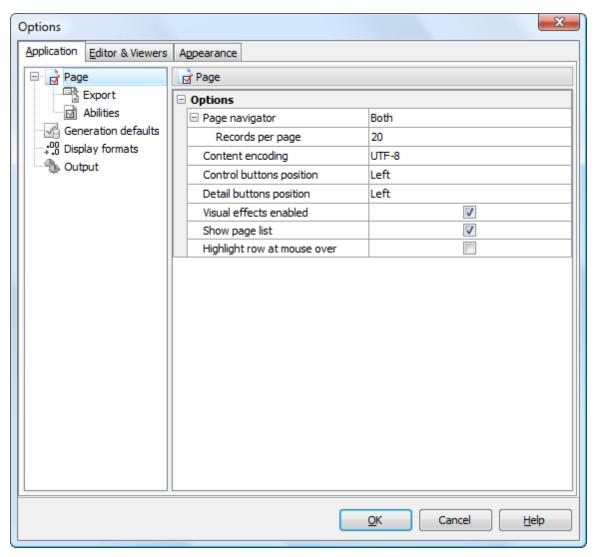
Visual effects enabled

If the option is 'OFF', all the javascript animation is disabled.

You can also disable/enable the displaying of page list at the Navigation bar and the highlighting of rows at mouse over with the corresponding options.

Use the Export tab to allow data export to available formats.

The Abilities tab allows you to disable such actions as View, Add, Copy, etc. for execution on the generated page.

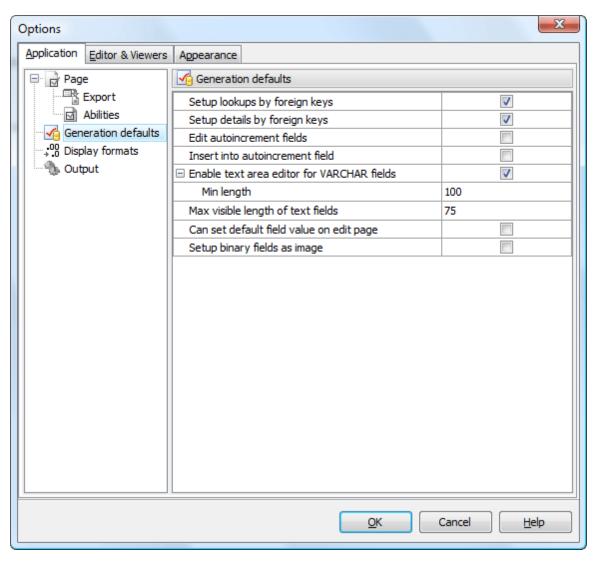


7.1.2 Generation defaults

Use this tab to define the rules to be used for the page generation. These options allow you to enable the setting of lookups and details by foreign keys, the editing of autoincrement fields and inserting data into them, setting binary fields as images, and allow setting the default field values on editing.

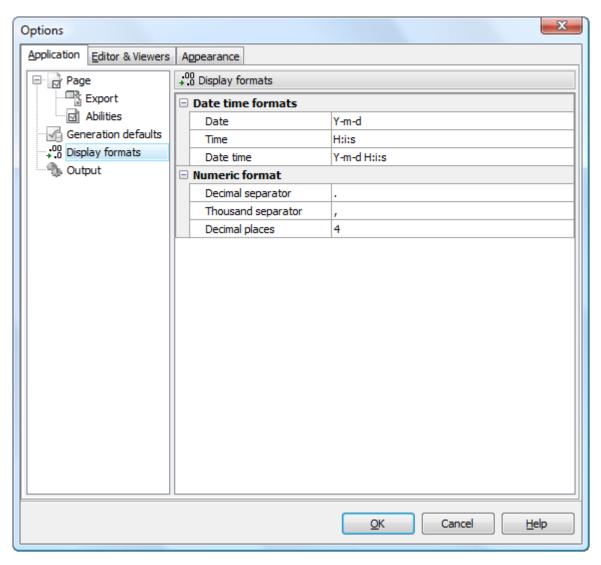
You can enable text area area for VARCHAR fields if their length is greater than Min length value.

Specify here the Max visible length of text fields value. If the text length is greater than this value, the residual text will be hidden under the More... link on the generated page. Full text can be displayed in the special window in this case.



7.1.3 Display formats

Use this tab's fields to adjust the display data formats in the way you need.



7.1.4 Output

Use this tab to specify the default values for advanced options.

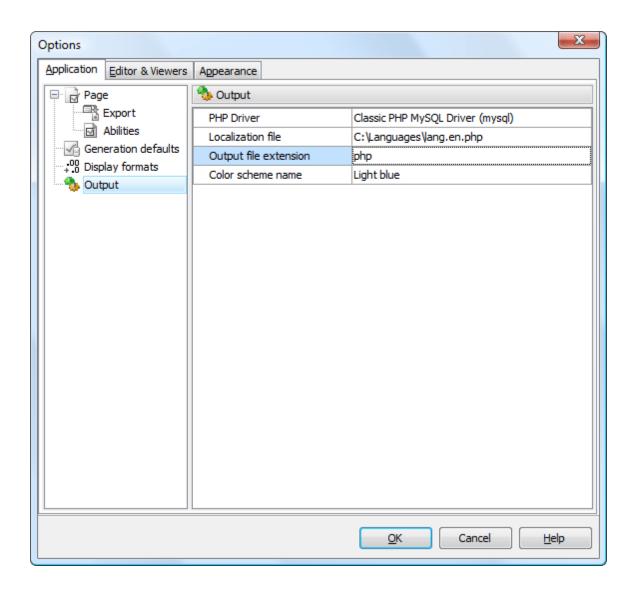
PHP Driver

There are several PHP drivers to communicate with database servers and PHP Generator for MySQL allows you to select a driver to be used by the generated web application. Note that the corresponding set of PHP functions should be available on your web server.

Localization file

Use this field to specify the localization file. This allows you to change the interface language of the generated application. PHP Generator for MySQL provides you with a number of localization files (lang.en.php, lang.fr.php, and others) that can be found under the installation folder, usually C:\Program Files\SQL Maestro Group\PHP Generator for MySQL.

You can also set here the output file extension and the default color scheme for the generated pages.



7.2 Editors & Viewers

The Editors & Viewers section allows you to set the parameters of viewing and editing the SQL statements within PHP Generator for MySQL.

- General 77
- Display 78
- SQL highlight 79
- PHP highlight 81
- XML highlight 80
- Code Insight 8
- Code Folding 85

7.2.1 General

If the Auto indent option is checked, each new indention 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 SQL text editor window.

✓ Use smart tabs

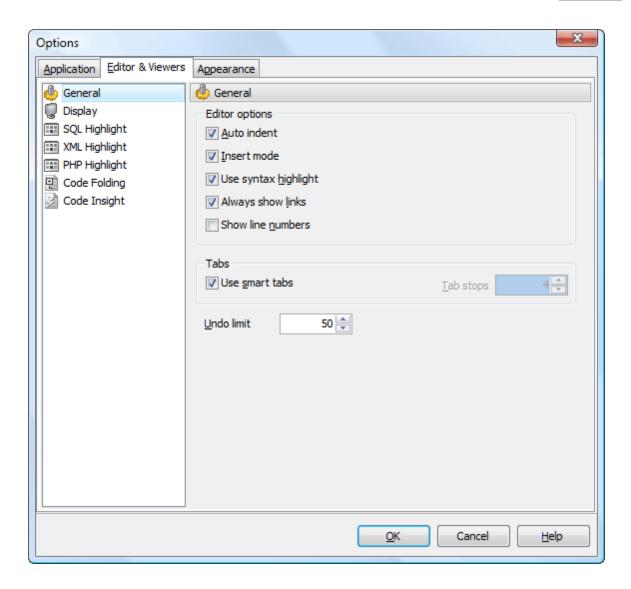
With this option on the number of tab stops is calculated automatically, depending on the previous line tab.

Tab Stops

Defines the tab length, used when editing text.

Undo Limit

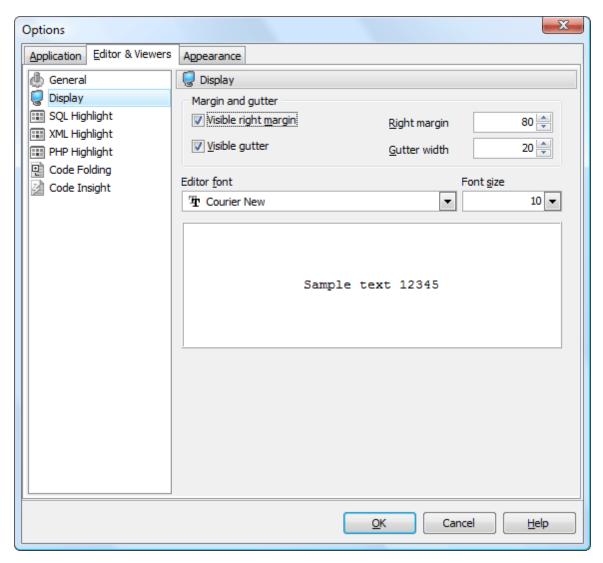
Defines the maximum number of changes possible to be undone.



7.2.2 Display

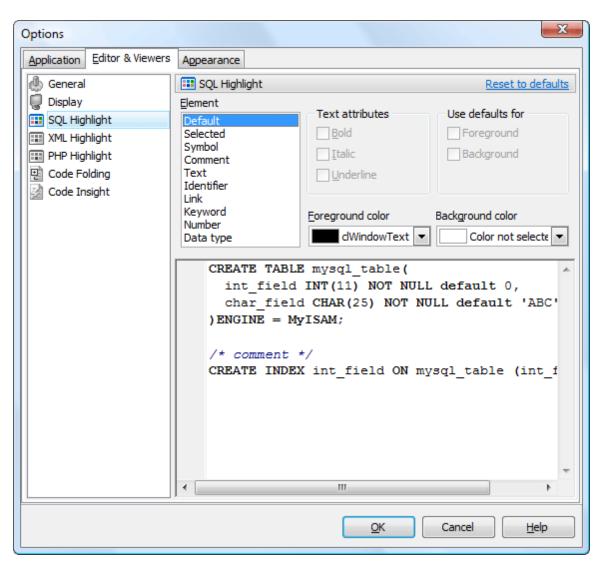
You can disable/enable the right text margin and the gutter of the editor area, set the position of the right text margin as Right margin, and the Gutter width.

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.



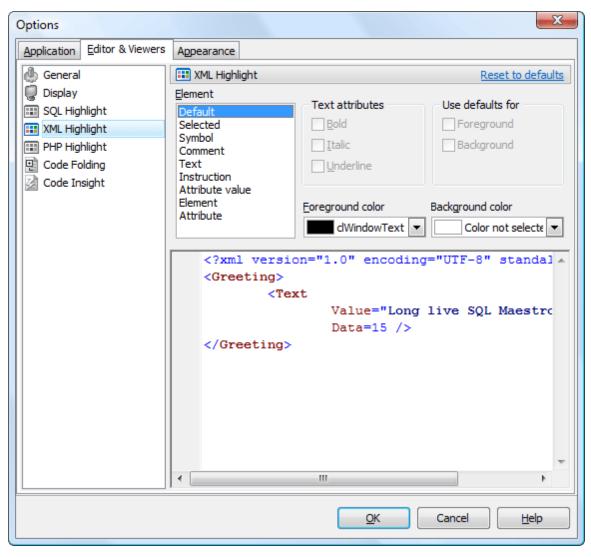
7.2.3 SQL highlight

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.



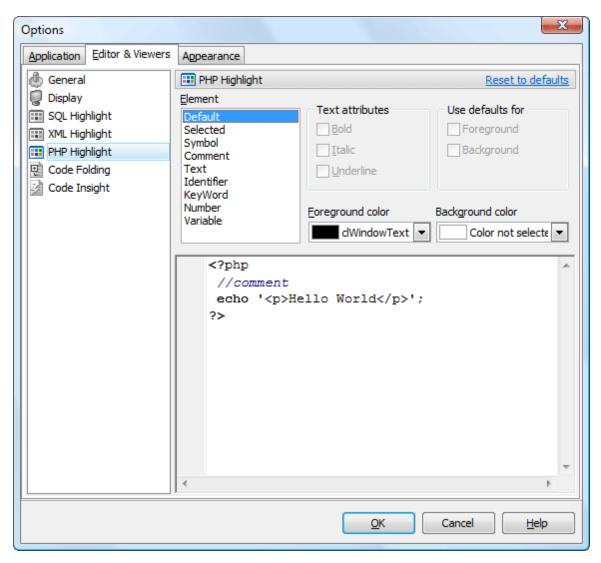
7.2.4 XML highlight

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.



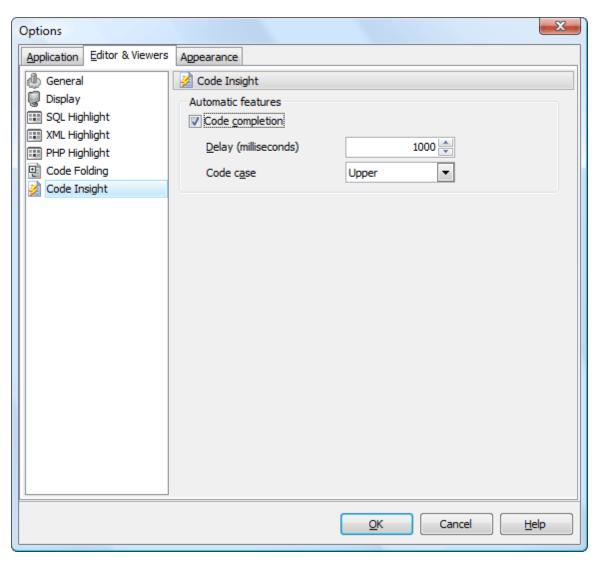
7.2.5 PHP highlight

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.



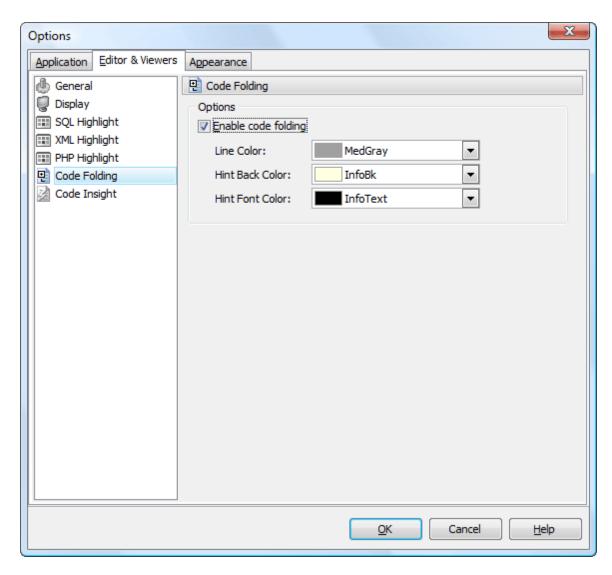
7.2.6 Code Insight

You can disable/enable the code completion with the corresponding option and also set the time is 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.

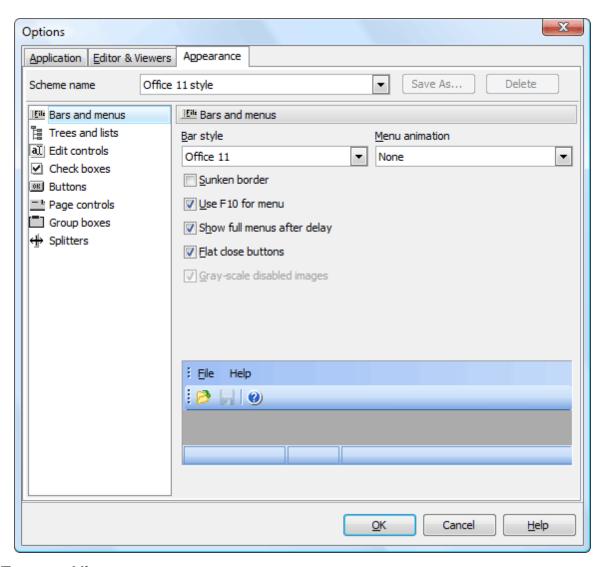
Use the Scheme name box to select the interface scheme you prefer: Office XP style, Windows XP native style, etc. You can create your own interface schemes by customizing any visual options (Bars and menus, Trees and lists, Edit controls, Check boxes, Buttons, etc.) and clicking the Save As button. All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

- Bars and menus 85
- Trees and lists 85
- Edit controls 87
- Check boxes 8
- Buttons 89
- Page controls 90
- Group boxes [91]
- Splitters 92

7.3.1 Bars and menus

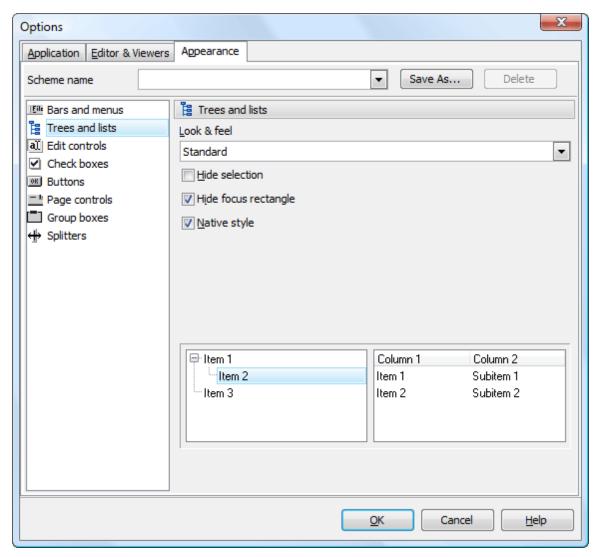
Use the Bars and menus item to customize PHP Generator for MySQL toolbars style and menus animation.

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.



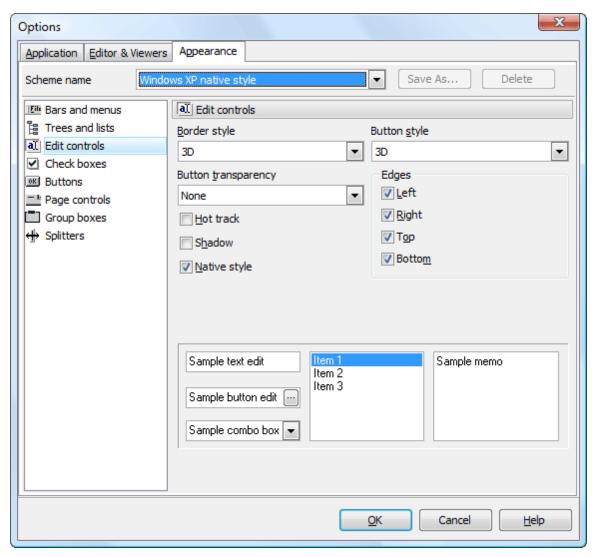
7.3.2 Trees and lists

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.



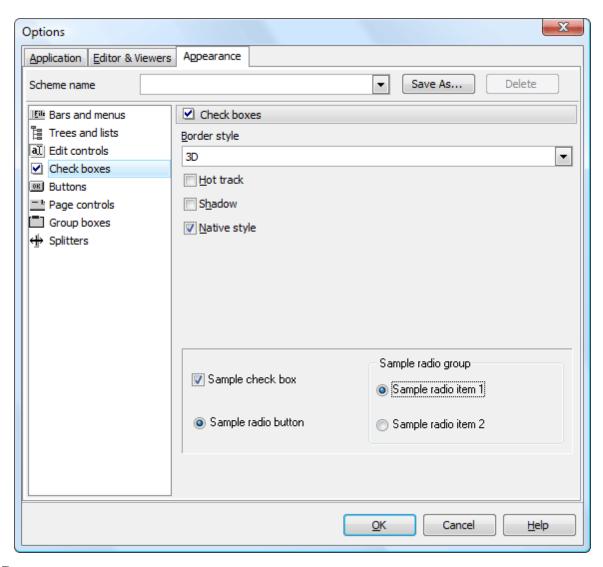
7.3.3 Edit controls

Use the Edit controls item to customize the appearance of different PHP Generator for MySQL 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.



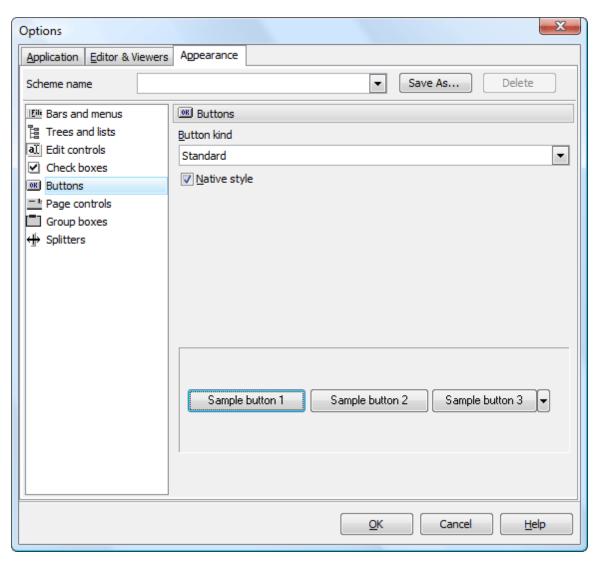
7.3.4 Check boxes

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.



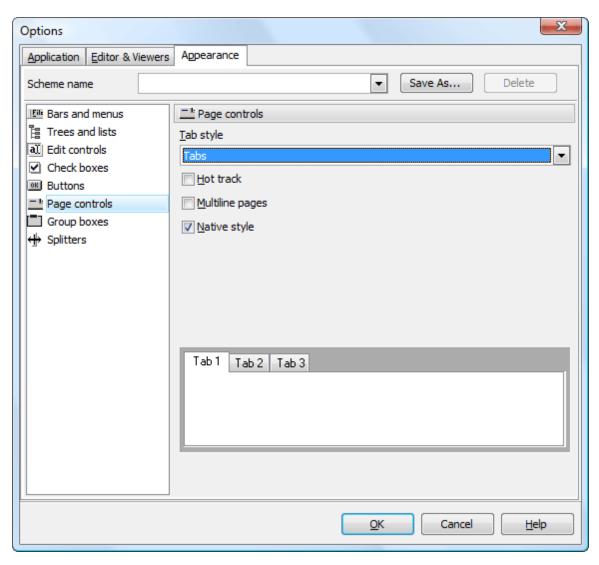
7.3.5 Buttons

Use the Buttons item to customize PHP Generator for MySQL buttons. The tab allows you to adjust the appearance of buttons and define sample buttons as well.



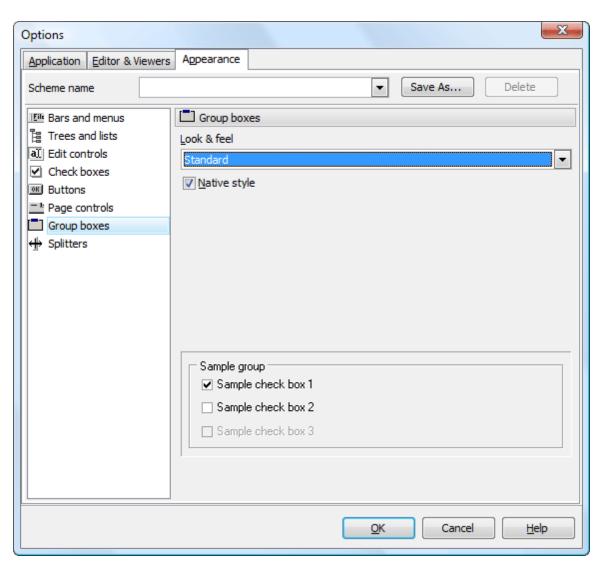
7.3.6 Page controls

The Page controls item allows you to customize the style of all PHP Generator for MySQL page controls. The tab allows you to select tab styles, enable/disable hot track, multiline pages and native style.



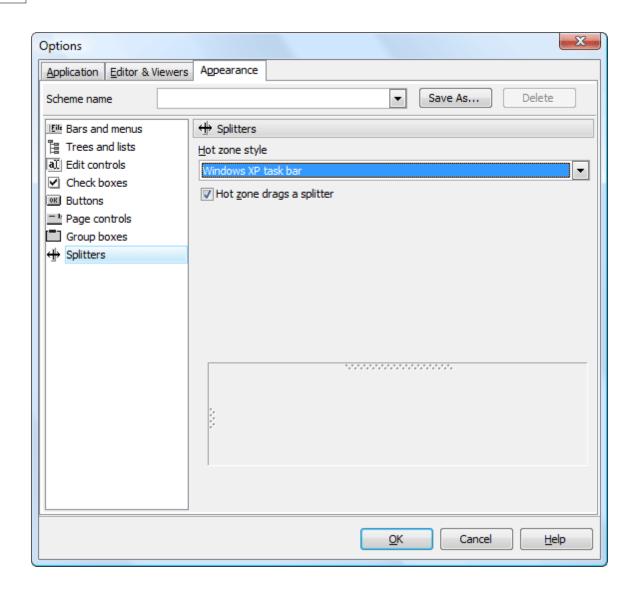
7.3.7 Group boxes

Use the Group boxes item to customize all PHP Generator for MySQL 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 PHP Generator for MySQL 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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