

phpMyEdit

**instant MySQL table editor and code
generator**

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phpMyEdit: instant MySQL table editor and code generator
by Ondrej Jombik and Doug Hockinson

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Chapter 1. Introduction

1.1. Overview

How many times have you hand coded a MySQL table editor in PHP? phpMyEdit application provides an instant table editor.

phpMyEdit generates PHP code for displaying/editing MySQL tables in HTML. All you need to do is to write a simple calling program (a utility to do this is included). It includes a huge set of table manipulation functions (record addition, change, view, copy, and removal), table sorting, filtering, table lookups, and more.

1.2. Features

The most important features offered by phpMyEdit are:

- table manipulation code generation
- record addition, change, view, copy and removal
- table paging, sorting and filtering
- lookups into other tables (1:M bindings)
- permission configuration
- multiple navigation style possibilities
- output design control using CSS
- logging user actions
- multilanguage support
- ability to extend base class

and many others.

1.3. Requirements

phpMyEdit requires web server (we recommend Apache), PHP interpreter without any special modules and MySQL relational database management system.

Chapter 1. Introduction

Product is developed and tested using Apache 1.3.23, PHP 4.1.2 and MySQL 3.23.47 under Linux Mandrake 8.2. It should work well on the same or similar, but also some different configurations. Please notify phpMyEdit developers in the event you encounter problems with program's compatibilities or capabilities.

Chapter 2. Installation

In this chapter are detailed installation notes written.

2.1. Getting started

phpMyEdit enables PHP scripters to quickly create forms used to interact with data stored in a MySQL database table. The procedure described below will enable you to generate the *calling script* containing the database logon and a variety of options. An included file `phpMyEdit.class.php` will later manipulate MySQL records based on user options which are configurable in the calling script. The calling script essentially generates one form which facilitates actions that include add record, change record, copy record, view record, delete record, etc.

phpMyEdit is available for download from Platon.SK (<http://www.platon.sk/projects/phpMyEdit/>). Extract, or unzip, the program files to your computer's hard disk. The download file includes icons and various language files which should be extracted into sub-folders below the file named `phpMyEdit.class.php`.

Important: Before uploading the program files to your server, make certain that your FTP client is not configured to force filenames to lower case letters.

With the program files uploaded to your server, point your web browser to the file named `phpMyEditSetup.php`. You will be prompted to enter your MySQL database logon (hostname, username, and password) and click the **Submit** button. The logon screen should resemble the picture below.

Please log in to your MySQL database

Hostname:	<input type="text"/>
Username:	<input type="text"/>
Password:	<input type="text"/>

2.2. Table selection

After successfully logging on to a MySQL database, a list of MySQL tables will be displayed. Select a table and click the Submit button.

Please choose a table from database: book_sc

<input checked="" type="radio"/>	admin
<input type="radio"/>	books
<input type="radio"/>	categories
<input type="radio"/>	customers
<input type="radio"/>	order_items
<input type="radio"/>	orders

2.3. ID selection

After selecting a table, a list of its MySQL columns will be displayed. Select a column that is a unique numeric identifier. The unique numeric identifier is typically that column which is the unique auto-incremented record ID. Although non-numeric unique identifiers are also supported, we recommend you to use numeric one.

Below the list of column names you will find two input boxes containing a suggested Page Title and suggested Base Filename. Either accept or change the content of the input boxes. An attempt will be made to generate a script, write the script to the base filename, and then display the script in the web browser.

Please choose an identifier from table: admin

This field will be used in Changes or Deletes.

It must be numeric and must uniquely identify a record.
If you haven't got a suitable field select *None*.

describe admin

<input type="radio"/>	<i>None</i>	<i>No id field required</i>
<input checked="" type="radio"/>	username	not_null primary_key
<input type="radio"/>	password	not_null

Page Title:

Base Filename:

2.4. Result script

After clicking the Submit button, the script should appear in your web browser along with a message indicating whether or not the attempted disk write was successful.

Depending on your system configuration, the script may or may not have been written to the directory from which `phpMyEditSetup.php` was run. You will need to either open the file that was written to disk or else highlight and copy the script from the web browser and paste it into a blank document in your text editor.

Here is your phpMyEdit calling program

You may now copy and paste it into your PHP editor

```
Trying to write content file to: ./admin.php  
phpMyEdit content file written successfully
```

phpMyEdit content file follows

```
<div class="main">  
  <h3>admin</h3>  
<?php  
// MySQL host name, user name, password, database,  
$opts["hn"] = "localhost";  
$opts["un"] = "me";  
$opts["pw"] = "";  
$opts["db"] = "book_sc";  
$opts["tb"] = "admin";
```

If the proposed Base Filename was "employees" and the disk write was successful, a file named `employees.php` would exist in the directory from which `phpMyEditSetup.php` was run.

If the disk write was NOT successful and you've pasted the script into your text editor, save the file in the same directory which contains the phpMyEdit program files. Save the file with the `.php` extension.

Because HTML header and footer requirements vary between users, no header or footer is generated. Add or include appropriate HTML markup as necessary (e.g. `<HTML><HEAD> [headers] </HEAD><BODY> [script] </BODY></HTML>`). By default the table will be enclosed by `<div class="main"> ... </div>` which offers a

degree of formatting in terms of using CSS (cascading style sheets).

Once the header and footer are in place, there are script configuration options that you should review and possibly change.

Chapter 3. General options

Open the script in your text editor. No HTML header or footer is created, thus you may want to include a header at the top of the script, and include a footer at the end of the script.

3.1. Database connection

Various options are configured near the top of the script, most notably the database logon. For security reasons, you may want to copy/paste the logon options to a separate, included file.

MySQL logon options host name, user name, password, database, and table appear in the following format.

Example 3-1. Database connection options

```
$opts['hn'] = 'localhost';  
$opts['un'] = 'username';  
$opts['pw'] = 'password';  
$opts['db'] = 'database';  
$opts['tb'] = 'table';
```

It is recommended that the first four options shown above be moved to a separate, included file.

3.2. Unique key

Assuming that 'id' is the name of the MySQL column selected as the unique identifier when `phpMyEditSetup.php` script was run, the key will appear in the script as:

Example 3-2. Unique key definition

```
// Name of field which is the unique key  
$opts['key'] = 'id';
```

Important: There were problems reported by phpMyEdit users regarding to usage of MySQL reserved word as an unique key name (the example for this is "key" name). Thus we recommend you to use another name of unique key. Usage of "id" or "ID" names should be safe and good idea.

The column type for the unique numeric identifier should appear as:

Example 3-3. Unique key type definition

```
// Type of key field (int, real, string, date, etc.)
$opts['key_type'] = 'int';
```

The argument 'int' shown above indicates the column type is an integer. If the column type was a date then 'date' would appear above instead of 'int'. Other possible unique key types are 'real' or 'string'.

Important: If you are using 'real' key type and some problems with record manipulaton have ocurred, it is probably because your MySQL key datatype is 'float'. Comparsons with this datatype is a common problem in most computer languages (SQL including), because floating-point values are not exact values. In most cases, changing MySQL datatype from 'float' to 'double' and preserving 'real' as phpMyEdit key type should solve this problem.

For more information about this issue, read Solving Problems with No Matching Rows (http://www.mysql.com/doc/en/No_matching_rows.html) chapter in the MySQL manual (in version 3.23.47 it was A.5.6).

3.3. Common options

Displayed records

Option controls the number of records displayed on the screen. Change the argument

for `$opts['inc']` in order to specify the maximum number of rows to display at one time. The default is 15 rows. To display all found records, specify a value of -1 (negative 1).

Example 3-4. Displayed records

```
$opts['inc'] = 20; // list 20 records per page

$opts['inc'] = -1; // list all found records
```

Multiple selections

This option affects the display of <SELECT MULTIPLE> boxes. If the MySQL column type is "set", the number of lines displayed on multiple selection filters is specified as:

Example 3-5. Multiple selections option

```
$opts['multiple'] = '4'; // default is 4
```

Setting `$opts['multiple']` to a large number may adversely affect the appearance of your form. Four (4) is the default.

Special page elements

There are some special page elements, that may be turned on or off by changing `$opts['display']` array.

Setting the `query` or `sort` values to `true` will display the current query or sort order near the top of the table. To display the execution time of the query below the table, change the `time` value from `false` to `true`. Setting `sort` to `true` is very helpful in understanding how cumulative sorting takes place.

To display all these page elements use:

Example 3-6. Special page elements

```
$opts['display'] = array(
```

```
'query' => true,  
'sort'  => true,  
'time'  => true  
);
```

Images URL

If graphic links are selected with navigation (for example by setting `$opts['navigation']` to 'GD') then `$opts['url']` can be used to specify the folder containing images. The default image location is normally one folder (or directory level) below the location of the `phpMyEdit.class.php` file.

Example 3-7. Images URL

```
$opts['url'] = array('images' => 'images/');
```

Other URLs for another elements may be added into this array in future.

Code execution

Since version 4.0, phpMyEdit automatically starts its execution. You can turn this feature off by setting:

Example 3-8. Turning off default execution

```
$opts['execute'] = 0;
```

If variable `$opts['execute']` is not defined, its value is considered as 1.

3.4. Permission options

Commonly used options include:

```

A -- add
C -- change
P -- copy
V -- view
D -- delete
F -- filter (search)
I -- initial sort suppressed

```

Table listing is always enabled, since all actions are executed from this screen. But it is possible to get specific behaviours without table listing using appropriate phpMyEdit extension. See *Extensions* chapter for more information.

Full privileges to manipulate records are configured as:

Example 3-9. Full permissions

```
$opts['options'] = 'ACPVDF';
```

To deny the user the ability to delete records use:

Example 3-10. Full permissions without delete

```
$opts['options'] = 'ACPVF';
```

To limit the user to view, sort, list, or filter records use this:

Example 3-11. Read only permissions

```
$opts['options'] = 'VFL';
```

In a multi-user environment, it would be wise to only provide the system administrator with the ability to delete records.

3.5. Sorting

phpMyEdit offers powerful default and/or additional sorting capabilities via `$opts['sort_field']` option. You can define column name or column field number you'd prefer to sort on when the script is first loaded. To get descending sort order,

prefix the column name or field number with dash (-) sign. Look at the following examples:

Example 3-12. Sort field option

```
$opts['sort_field'] = 'company'; // sorting according company field
$opts['sort_field'] = 3;         // sorting according 4th field
$opts['sort_field'] = '-id';    // descending sorting according id field
```

Now, let's assume you want to sort your table according to 'company' column, but in addition also according to 'department' column. So the default sort order should be by company first, then department. For this purpose, you can set array with column names and/or field numbers to `$opts['sort_field']` variable.

Example 3-13. Multiple sort fields

```
$opts['sort_field'] = array('company', 'department');
```

Also note that phpMyEdit's sorting feature is cumulative. This means, that if default sort fields are specified and the user selects (clicks) to sort by another column in table listing screen, the resulting screen will be sorted by user selected column first and then by specified default sort fields. Next click on another sort column will again force to sort table by selected column first. Previously selected fields or default ones will follow up in sorting sequence.

This feature enables selecting more than one sort field on the fly. To clear sort fields sequence and to initialize default one, click on **Clear** link in left upper corner. This link could be enabled by setting `$opts['display']['sort']` to true. See *Special page elements* subsection for more information. We also recommend you to enable this option to see how this described sorting feature works.

3.6. Navigation

The style and location of navigational links is a combined setting. The generated form will have various buttons, such as **Next**, **Prev**, **Save**, **Cancel**, etc. Their location

relative to the table can be changed. Button positions are:

- U -- up / above table
- D -- down / below table (default)

Button positions should be combined with navigation styles. The style of navigational links may be text, buttons, or graphic images (icons):

- B -- buttons (default)
- T -- text links
- G -- graphic links

Possible combinations include:

Example 3-14. Navigation possibilities

```
$opts['navigation'] = 'DB'; // buttons below table
$opts['navigation'] = 'DT'; // text links below table
$opts['navigation'] = 'DG'; // graphics below table
$opts['navigation'] = 'UB'; // buttons above table
$opts['navigation'] = 'UT'; // text links above table
$opts['navigation'] = 'UG'; // graphics above table

$opts['navigation'] = 'UDBTG' // all navigations styles
```

As you can see from the last example in box above, all navigation styles can be mixed up together to fit your needs. There is no functionality difference between navigation with graphic/text links and navigation using radio buttons selection.

3.7. Filters

Table-level filter capability (if set) is included in the WHERE clause of any generated SELECT statement. This gives you ability to work with a subset of data from table.

Example 3-15. Filter examples

```
$opts['filters'] = 'column1 like "%11%" AND column2 < 17';

$opts['filters'] = 'section_id = 9';
```

```
$opts['filters'] = 'Table0.sessions_count > 200';
```

For future is planned initialization like the following one.

```
$opts['filters'] = array(  
    'col_name_1' => 'value_1',  
    'col_name_2' => 'value_2'  
);
```

The main advantage of this approach will be that `col_name_1` and `col_name_2` fields are automatically considered as read-only on display record pages with pre-set `value_1`, `value_2` and without need to enter them manually.

3.8. Triggers

Triggers are files that are included via `include()` statement that perform actions before or after insert, update, or delete of record.

- 'before' triggers are usually used to verify conditions prior to executing the main operation.
- 'after' triggers are usually used to perform follow-on operations after the main operation. For example, to update secondary tables to enforce referential integrity or to update aggregate tables.

The operation sequence is this: before, main, after. If any operation fails, not only should the next operation(s) not be executed, but the previous ones are 'rolled back' as if they never happened. If a database is not able to do this, it is not 'transaction-safe'.

Triggers are risky in basic MySQL as there is no native transaction support. It is not transaction-safe by default. There are transaction-safe table types in MySQL that can be conditionally built (see MySQL-Max), but phpMyEdit is currently not set up to support real transactions. What that means is that if an operation fails, the database may be left in an intermediate and invalid state.

The programmer must understand and accept these risks prior to using the phpMyEdit triggers mechanism. If the triggers are used, they execute within the namespace or scope of the phpMyEdit class.

Triggers must return true or false to indicate success or failure.

Example 3-16. Triggers usage

```
$opts['triggers']['insert']['before'] = 'categories.TIB.inc';
$opts['triggers']['insert']['after']  = 'categories.TIA.inc';
$opts['triggers']['update']['before'] = 'categories.TUB.inc';
$opts['triggers']['update']['after']  = 'categories.TUA.inc';
$opts['triggers']['delete']['before'] = 'categories.TDB.inc';
$opts['triggers']['delete']['after']  = 'categories.TDA.inc';
```

In every trigger file you have available following usable variables. Some from them are regarding only to particular performed action.

<code>\$this</code>	object reference
<code>\$this->dbh</code>	initialized MySQL database handle
<code>\$this->key</code>	primary key name
<code>\$this->key_type</code>	primary key type
<code>\$this->key_delim</code>	primary key delimitator
<code>\$this->rec</code>	primary key value (update and delete only)
<code>\$newvals</code>	associative array of new values (update and insert only)
<code>\$oldvals</code>	associative array of old values (update and delete only)
<code>\$changed</code>	array of keys with changed values

There are also other variables available. For example every class property can be accessed using `$this` object reference. All variables occurs in 'before' triggers as well as in 'after' triggers.

It is recommended to use `$this->myQuery()` method in order to perform database queries for fetching additional data or doing inserts or updates to other database tables.

3.9. Logging user actions

You can log performed user actions into special "changelog" table. You must have table created and specified for phpMyEdit using the `$opts['logtable']` option.

Example 3-17. Logging

```
$opts['logtable'] = 'changelog';
```

Example 3-18. Log table schema

```
CREATE TABLE changelog (
  updated    timestamp(14)  default NULL,
  user       varchar(50)    default NULL,
  host       varchar(255)   default NULL,
  operation  varchar(50)    default NULL,
  tab        varchar(50)    default NULL,
  rowkey     varchar(255)   default NULL,
  col        varchar(255)   default NULL,
  oldval     blob           default NULL,
  newval     blob           default NULL
);
```

phpMyEdit provides also possibility of notifying about performed user actions by sending informational e-mail. This feature configuration is done via `$opts['notify']` array with following variables notation. Note that on every place where one e-mail address should be written, it is possible to have array of multiple e-mail addresses there. This feature is provided for informing more than one user about particular performed action.

<code>\$opts['notify']['from']</code>	sender envelope e-mail address (webmaster@SERVER_NAME)
<code>\$opts['notify']['prefix']</code>	prefix of e-mail messages subject (no prefix by default)
<code>\$opts['notify']['wrap']</code>	maximum width of e-mail message body (by default 72 will be used)
<code>\$opts['notify']['insert']</code>	e-mail address for insert action notification
<code>\$opts['notify']['update']</code>	e-mail address for update action notification
<code>\$opts['notify']['delete']</code>	e-mail address for delete action notification
<code>\$opts['notify']['all']</code>	e-mail address for all actions notification

In both cases, changelog table and e-mail notifying are values of "user" extracted from the variables in following order: `$_SERVER['REMOTE_USER']`, `$HTTP_SERVER_VARS['REMOTE_USER']` and global variable `$REMOTE_USER`. Similary "host" variable is checked in `$_SERVER['REMOTE_ADDR']`, than in `$HTTP_SERVER_VARS['REMOTE_ADDR']` and at the end in global variable `$REMOTE_ADDR`.

3.10. Languages

The default language setting is the user's web browser language setting and use it if possible. The following example forces the English language version, and the last

forces the Slovak language version.

Example 3-19. Languages selection

```
// client language (default)
$opts['language'] = $HTTP_SERVER_VARS['HTTP_ACCEPT_LANGUAGE'];

$opts['language'] = 'EN'; // forces english language
$opts['language'] = 'SK'; // forces slovak language
```

Available languages are:

DE	german (standard)
DK	danish
EN-US	english (United States)
EN	english
ES	spanish
ES-AR	spanish (argentinian)
FR	french (standard)
IT	italian (standard)
NL	dutch (standard)
PL	polish
PT	portuguese (standard)
PT-BR	portuguese (brazilian)
RU	russian
SK	slovak

Language codes are based on ISO-3166 standard, which is available on many places, in example here (<http://www.sampade.org/d/iso3166.html>).

3.11. CGI variables

You can optionally append or overwrite individual variables returned from the CGI environment (GET/POST HTTP protocol data). Use these two arrays for this purpose, where array key means CGI variable name, and array value means CGI variable value.

This will turn on search filter on script initialization. However, it is still possible to turn it off by explicit click on **Hide** or **Clear** button.

Example 3-20. CGI variables appending

```
$opts['cgi']['append']['fl'] = 1
```

Next example shows how to cause descending sorting according first field in all cases. Because ['overwrite'] is used, sorting column cannot be altered by user by clicking on column heading.

Example 3-21. CGI variables overwriting

```
$opts['cgi']['overwrite']['sfn'] = '-0';
```

Using \$opts['cgi']['persist'] option you can tell phpMyEdit names and values of CGI variables which should be persistent during various pages reloading and serving. They will be included into all links and also into all forms as appropriate hidden inputs. This feature is provided especially for advanced and experienced users using phpMyEdit in their medium-size and large-size projects. If you do not understand what does this thing do, feel free to skip it. You will surely do not need it.

Example 3-22. Persistent CGI variables

```
$opts['cgi']['persist'] = array(
    'article_id' => $article_id,
    'session_id' => $SESSION_ID
);
```

3.12. CSS classes policy

CSS classes policy in phpMyEdit is one from the most complicated and complex features. The goal is to reach almost any possible classification of HTML elements with the possibility to simplify classification to lower number of classes.

The phpMyEdit CSS class schema is displayed here:

Example 3-23. CSS class name schema

```
<prefix>-<element>-<page_type>-<position>-<divider>-<postfix>
```

Particular parts are described here:

- The `prefix` part is straightforward. Every phpMyEdit CSS class has a user configurable prefix. It can be empty.
- The `element` represents the name or type of element. The examples are `form`, `row`, `value`, `input` and others.
- In order to distinguish between different types of pages there is a `page_type`. The possible values for this part are `add`, `view`, `change`, `copy`, `delete`. This part is empty for table listing and table filtering pages.
- There are also some elements, which occur on the top and on the bottom of page as well. For this matter there is `position` part present with possible values `up` and `down`.
- The `divider` aim is to provide difference between even and odd table listing rows. This part, if present, is always numeric with values starting from 0.
- At the end of CSS class name is `postfix`. This part is related to a particular field. Every field can have its own postfix. See field's *CSS customization* for more information.
- The default separator between parts is dash (-) and can be changed if desired.

CSS class names configuration is handled via `$opts['css']` associative array. Here are possible configuration options related to this issue.

<code>\$opts['css']['prefix']</code>	prefix of every phpMyEdit CSS class (pme by default)
<code>\$opts['css']['page_type']</code>	if page type should occur in class name (disabled by default)
<code>\$opts['css']['position']</code>	if position on the page should occur in class name (disabled by default)
<code>\$opts['css']['divider']</code>	how many list table rows should have their own number before separator
<code>\$opts['css']['separator']</code>	separator between CSS class name parts (dash - by default)

For concrete names of CSS classes look into HTML source code of your generated page. In the following box are examples of how CSS class names may appear. However your CSS class names can differ according to your fields and configuration respectively.

Example 3-24. CSS class name examples

```
pme-navigation-up
```

Chapter 3. General options

pme-row-0
pme-cell-DateTime
pme-cancel-view
pme-input-change
pme-key-ArticleID

Chapter 4. Fields options

This chapter deal with options related to particular database columns. Later there will be often used term *field*, what means exactly the same thing as *column*.

4.1. Definition overview

Fields will be displayed in table columns left to right on the screen in the order in which they appear in the script. Re-arrange the order of the arrays in order to alter the order in which columns are displayed.

Display of a particular column can also be suppressed. Below is an example of the array for a column named 'topic':

Example 4-1. Basic field definition

```
$opts['fdd']['topic'] = array(
    'name'      => 'Topic',
    'select'    => 'T',
    'maxlen'    => 100,
    'nowrap'    => false,
    'required'  => true,
    'sort'      => true
);
```

Because so many questions related to PHP programming language semantics and basis are often asked, please point on the following explanation of "two" ways of possible field options initialization. If you are enough experienced and familiar with PHP, feel free to skip to the next section.

As it was mentioned, there are two ways how to initialize array in PHP.

1. Direct one using

`$opts['fdd']['col_name'] = array('option' => 'value')` which is showed above.

2. Postinitialization one using

`$opts['fdd']['col_name']['option'] = 'value'` which is used in many examples in this documentation.

You may realize, that it is the same if you will change or add option into basic field definition (see example `array()` and notes in first point above) or you will add separated option initialization after this field definition as it is described in second case.

4.2. Basic options

Field name

When the MySQL column name is not appropriate for display as the title of the column in the displayed table, alternate text can be specified. To display the word "Subject" instead of the name "Topic" for the example column from previous chapter, add the following option to the script:

Example 4-2. Field name examples

```
$opts['fdd']['topic']['name'] = 'Subject';
```

When creating MySQL tables for use with phpMyEdit, consider using the underscore character in certain field names. For example, a MySQL column named "last_name" will be displayed as "Last name" in tables created using phpMyEdit (underscore characters are replaced with a space).

Guidance / Help

Sometimes a short title can't be explicit enough, so it is necessary to provide the user a large description on a given field when he is manipulating with field data. For this purpose was `$opts['fdd']['col_name']['help']` option created. Content of this option will appear in the third column of record display pages.

This option is optional. If there is no `['help']` option for all columns, the third "help" column will be omitted.

Example 4-3. Field guidance

```
$opts['fdd']['topic']['help'] = 'Enter topic of article here.';
```

CSS customization

Per field, you can define field CSS class names postfix. This is especially useful in order to highlight one column in a table.

Example 4-4. Field CSS customization

```
$opts['fdd']['col_name']['css'] = array(
    'postfix' => 'ColName'
);
```

More information about CSS handling can be found in the *CSS classes policy* section.

Selection boxes

Specify field input type as text box, numeric comparison text box, drop-down selection, or multiple selection. The same input type will be used also for table filtering.

Example 4-5. Filter selections

```
$opts['fdd']['col_name']['select'] = 'T'; // text box
$opts['fdd']['col_name']['select'] = 'N'; // numeric
$opts['fdd']['col_name']['select'] = 'D'; // drop down
$opts['fdd']['col_name']['select'] = 'M'; // multiple selection
```

Display options

An optional parameter to control whether a field is displayed in the add, change, copy, delete, view, list, or filter views.

```
A -- add
C -- change
P -- copy
V -- view
D -- delete
```

Chapter 4. Fields options

L -- table list
F -- table filter

Additional column-specific options that apply to certain views or modes (add, change, delete, list) are:

R -- indicates a field is read only
W -- indicates a field is a password field
H -- indicates a field is to be hidden and marked as hidden

Example 4-6. Other display options

```
$opts['fdd']['col_name']['options'] = 'H'; // hidden field  
$opts['fdd']['col_name']['options'] = 'P'; // password field  
$opts['fdd']['col_name']['options'] = 'R'; // read-only field
```

4.3. Booleans

All variables in following section should have only `true` or `false` value.

Required fields

By default, JavaScript will be generated to prevent null entries by the user. If an entry is not required for a particular field, change the setting to `false`.

Example 4-7. Required fields

```
$opts['fdd']['col_name']['required'] = true;  
$opts['fdd']['col_name']['required'] = false;
```

Sorting

Allow users to sort the display on this column. Use `"true"` for enable, `"false"` for

disable.

Example 4-8. Field sorting

```
$opts['fdd']['col_name']['sort'] = true;
$opts['fdd']['col_name']['sort'] = false;
```

Striping tags

If you are storing HTML and/or PHP content in you database columns, you may want to have `$opts['fdd']['col_name']['strip_tags']` variable turned on for particular fields. It will strip HTML and PHP tags from field content, when displaying column in table listing.

Example 4-9. Striping tags

```
$opts['fdd']['col_name']['strip_tags'] = true;
$opts['fdd']['col_name']['strip_tags'] = false;
```

4.4. Input restrictions

You can restrict user input for selected fields to selected values. There are several ways to do this. A variety of methods and examples appear below.

Simple restriction

Simple restriction means to restrict user input to the specified constants. Examples appear below.

Example 4-10. Simple input restriction

```
$opts['fdd']['col_name']['values'] = array("','No','Yes'); // default is " (n
$opts['fdd']['col_name']['values'] = array("','Yes','No'); // default is " (n
$opts['fdd']['col_name']['values'] = array('0','1'); // default is 0
```

```
$opts['fdd']['col_name']['values'] = array('A','B','C'); // default is A
$opts['fdd']['col_name']['values'] = array('No','Yes'); // default is No
$opts['fdd']['col_name']['values'] = array('Yes','No'); // default is Yes
$opts['fdd']['col_name']['values'] = range(1,99);
```

Table lookup

Variables `$opts['fdd']['col_name']['values']['table']` and `$opts['fdd']['col_name']['values']['column']` restricts user input to the values found in the specified column of another table. The optional `['values']['description']` field allows the values displayed to the user to be different from those in the `['values']['column']` field. This is useful for giving more meaning to column values.

Example 4-11. Table lookup restriction

```
$opts['fdd']['col_name']['values']['table'] = 'extractTable';
$opts['fdd']['col_name']['values']['column'] = 'extractColumn';
$opts['fdd']['col_name']['values']['description'] = 'extractDescription'; //
```

Column joining

It is also possible to have multiple fields in your description. For example, to concatenate two description labels found in a different table:

Example 4-12. Advanced table lookup

```
$opts['fdd']['col_name']['values']['description']['columns'][0] = 'desc_colu
$opts['fdd']['col_name']['values']['description']['columns'][1] = 'desc_colu
$opts['fdd']['col_name']['values']['description']['divs'][0] = ' ';
```

The 'div' component is what will be used as a divider between the columns in the display. You don't need to define the last 'div' field if it isn't required. So, for example if you have a series of people in a table, with a separate column for id, first name, and last name, you could use:

Example 4-13. Complex table lookup example

```

$opts['fdd']['col_name']['values']['db']      = 'mydb'; // optional
$opts['fdd']['col_name']['values']['table']   = 'mytable';
$opts['fdd']['col_name']['values']['column']  = 'id';
$opts['fdd']['col_name']['values']['description']['columns'][0] = 'name_last';
$opts['fdd']['col_name']['values']['description']['divs'][0]    = ', ';
$opts['fdd']['col_name']['values']['description']['columns'][1] = 'name_first';
$opts['fdd']['col_name']['values']['filters']  = 'id IN (1,2,3)'; // optional
$opts['fdd']['col_name']['values']['orderby'] = 'last_name'; // optional ORD

```

If prefixation with some string in column description is desired, the

`$opts['fdd']['col_name']['values']['description']['divs'][-1]` can be used. It will precede

`$opts['fdd']['col_name']['values']['description']['columns'][0]` column.

Note that the above example contains additional features, such as filtering values using `['filters']`, and ordering values using `['orderby']`.

Additional values

Additional values to table lookup could be stored in `['values2']` array. The main difference between simple `['values']` usage is, that array keys will be stored into database and array values will be printed out in input section boxes. This is especially useful for MySQL enumerations when you do not want to print out enumeration keys, but rather some more user-friendly texts. See example:

Example 4-14. Input restriction using additional values

```

$opts['fdd']['col_name']['values2'] = array(
    'displayed' => 'Displayed Article',
    'hidden'    => 'Hidden Article',
    'disabled'  => 'Disabled Article',
    'deleted'   => 'Deleted Article'
);

```

In the example above, keywords 'displayed', 'hidden', 'disabled' and 'deleted' will be stored in database, but user-friendly expressions will appear in select box for user. Usage of ['values2'] can be combined with ['values'] usage.

4.5. Output control

Field width

An optional display width specification for a column.

Example 4-15. Input field widths

```
$opts[ 'fdd' ][ 'col_name' ][ 'width' ] = '100px' ;  
$opts[ 'fdd' ][ 'col_name' ][ 'width' ] = ( $opts[ 'fdd' ][ 'col_name' ][ 'trimlen' ] * 8
```

Maximum field length

Maximum length of input boxes displayed for Add / Change record mode may be set as pixels (px).

Example 4-16. Field sizes

```
$opts[ 'fdd' ][ 'col_name' ][ 'maxlen' ] = '100px' ;  
$opts[ 'fdd' ][ 'col_name' ][ 'maxlen' ] = '150px' ;
```

Textarea sizes

If the above setting does not work for you, you are probably attempting to change textarea size. It is also possible to specify the size of a textarea used to give multi-line input. Try something like:

Example 4-17. Textarea field height & width

```
$opts['fdd']['col_name']['textarea']['rows'] = 1;
$opts['fdd']['col_name']['textarea']['cols'] = 40;
```

Character length limit

If a table contains a number of text columns which each contain quite a bit of text, the table will likely scroll off the screen. This can be prevented by displaying only a portion of the content from a particular column.

For example, to display only the first 30 characters from a column named 'explanation', add the following:

Example 4-18. Character length limit

```
$opts['fdd']['explanation']['trimlen'] = 30;
```

You may find it useful to limit the number of characters displayed for one or more columns. This option is approximately equivalent to the following PHP statement:

```
if (strlen($value) > $trimlen) {
    echo substr($value, 0, $trimlen - 3) . '...';
}
```

Wrapping

The 'nowrap' option is essentially equivalent to the HTML markup <td nowrap>.

Example 4-19. Wrapping

```
$opts['fdd']['col_name']['nowrap'] = true;
$opts['fdd']['col_name']['nowrap'] = false;
```

Print mask

A string that is used by `sprintf()` to format field output. For more information about this function usage, please refer to its manual page (<http://www.php.net/manual/en/function.sprintf.php>) in PHP documentation.

Example 4-20. Print mask field definition

```
$opts['fdd']['col_name']['mask'] = '%%'; // a literal percent character
$opts['fdd']['col_name']['mask'] = '%01.2f'; // currency or floating-point n
$opts['fdd']['col_name']['mask'] = '%.10s'; // trim string to 10 characters
```

Date masks

Date mask is string that is used to format date and/or time fields using PHP's function call. You can use `['datemask']` option to format date and time using `date()` (<http://www.php.net/manual/en/function.date.php>) function or you can use `['strftimemask']` option to format date and time using `strftime()` (<http://www.php.net/manual/en/function.strftime.php>) function. See function's manual pages for valid formatting characters.

Example 4-21. Date mask field definitions

```
$opts['fdd']['col_name']['datemask'] = 'r';
```

Note that currently only fields displaying is implemented. Entering date fields concerning to these masks will be implemented in the nearly future.

4.6. URL linking

Fields can be made 'clickable' in the display using `['URL']` variable. Primary examples follows:

Example 4-22. Simple URL examples

```
$opts['fdd']['col_name']['URL'] = 'http://$value';
```

```
$opts['fdd']['col_name']['URL'] = 'mailto:$value';
```

Note that the following are available as variables for usage in ['URL']:

```
$key      -- key field for record
$name     -- name of the field
$value    -- value of the field
$css      -- CSS class name
$page     -- this HTML page
$url      -- CGI variables
```

To open a link in a new web browser window use:

Example 4-23. URL target example

```
$opts['fdd']['col_name']['URLtarget'] = '_blank';
```

To display alternative link text use:

Example 4-24. URL display example

```
$opts['fdd']['col_name']['URLdisp'] = 'Launch Page';
```

Old 3.5 behaviour is also supported via ['URLprefix']. It will prepend string before if it is not already present there. Variable ['URLpostfix'] similarly to ['URLprefix'] will append string after if it is not already present there.

Example 4-25. URL prefix and postfix

```
$opts['fdd']['col_name']['URLprefix'] = 'mailto: ';
$opts['fdd']['col_name']['URLprefix'] = 'http://';
$opts['fdd']['col_name']['URLprefix'] = array('http://', 'ftp://');
```

In the third example you can see that array of prefixes or postfixes are supported. First member of array is added to URL value only if none from the elements was matched. This is especially useful in having intelligent URL links with added ability to enter addresses like "www.platon.sk" without preceding "http://".

Chapter 5. Extensions

There are often situations, when more specific functionality is needed from phpMyEdit. You will surely agree, that it will be really strange to hardcode all these particular requirements into the core phpMyEdit class. For this reason the extension mechanism is provided.

5.1. Overview

Extensions are `phpMyEdit_<something>` classes, where `<something>` is an appropriate extension name. They not only extend base phpMyEdit class, but they also add new functionality. But they may not only add new things. It is possible also to disable such features, simply to get the desirable behaviour.

In addition to common phpMyEdit configuration options, extension configuration is usually provided by `$opts['ext']` associative array. Possible keys are described on particular extension pages in this manual. Please refer to them to get more information.

Extensions are currently not part of phpMyEdit distribution. They are only in CVS repository (<http://www.platon.sk/cvs/cvs.php/phpMyEdit/extensions/>), because they are still under development and they are changing a lot. This manual chapter is provided for letting phpMyEdit users know, that something like this exists. The only way how to get extension files is to fetch them from CVS. All extensions need to be placed under the `extensions/` subdirectory below the phpMyEdit core class location.

Several new extensions are planned to create or handle more or less specific tasks, especially those which are not appropriate for the phpMyEdit core class. You can feel absolutely free to improve existing extensions, suggest new improvements for them, or create new extensions to fit your own needs. We will be happy to add them to repository.

5.2. phpMyEdit-slide

phpMyEdit-slide can create slideshow with ability to view and/or edit records.

Everytime is exactly one record shown. Record can be displayed in view or edit mode.

View mode looks like "view" functionality in normal phpMyEdit, change mode looks like "change" functionality in normal phpMyEdit.

The only difference is that two buttons, **Prev** and **Next**, are displayed in addition to common view/edit buttons to provide ability of going to the next or previous record. This extension purposely disable "add", "copy", "delete", and "table listing" functionalities.

Here are configuration variables related to extension. All of these phpMyEdit-slide options are optional.

```
$opts['ext']['rec']           -- primary key value of record to display initially
$opts['ext']['next_disable']  -- disable Next button
$opts['ext']['prev_disable']  -- disable Prev button
```

Following variables are not options, but they are used internally by extension. They can be used for getting some information for example in triggers.

```
$opts['ext']['next']         -- primary key value of next record
$opts['ext']['prev']         -- primary key value of previous record
```

To use this extension you have to include

`extensions/phpMyEdit-slide.class.php` file instead of common `phpMyEdit` class file.

5.3. phpMyEdit-report

phpMyEdit-report extension is provided for easy table report creation. There is often a need for selecting particular fields from table with applying specific filter options and finally write out chosen subset of data (report) to HTML page.

Navigation is easy to use. Field selection menu would be displayed if `fields_select` parameter is passed by GET or POST HTTP method to PHP script and it has non-empty value. This field selection menu contains list of checkboxes connected with columns, list of filtering input fields and also button for report creation. Every report page has ability to return back into field selection. It is possible to specify amount of records on report page, what is by default set to unlimited.

To use this extension simply include `extensions/phpMyEdit-report.class.php` file instead of common `phpMyEdit` class file. Extension specific configuration parameters currently do not exist, thus all table columns are allowed to be selected in final report. This will surely change in future, because table could have columns that need to be unselectable for final report (such as password column or similar).

Chapter 6. Other information

6.1. Authors and homepage

phpMyEdit had amount of project maintainers.

- John McCreesh <jpmcc@users.sourceforge.net> founded project and developed all versions 0.x, 1.x, 2.x and 3.x.
- Jim Kraai <jkraai@users.sourceforge.net> maintains phpMyEdit versions 4.x.
- Ondrej Jombik <nepto@platon.sk> is current project maintainer. He develops version 5.0 and later.

Many thanks to various project contributors. See `doc/ChangeLog` file for credits. Special thanks belongs to Pau Aliagas <pau@newtral.com> who converted phpMyEdit to PHP class in version 3.0.

Please do not write previous maintainers support questions, suggestions, bug reports or patches. Use Platon.SK bug-tracking system, support forum or phpMyEdit mailinglist for these purposes.

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The official phpMyEdit homepage is: <http://www.platon.sk/projects/phpMyEdit/>

The phpMyEdit project management page is:

http://www.platon.sk/projects/main_page.php?project_id=5

This documentation is related to phpMyEdit version 5.3 which was released in 8th April 2003.

6.2. License

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2, or (at your option) any later version.

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You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 59 Temple Place - Suite 330, Boston, MA 02111-1307, USA.

6.3. Support and feedback

Bug-tracking system

We are happy to accept bug reports, suggestions for improvement, or improved code, preferably via our Platon.SK (<http://www.platon.sk/>) bug-tracking system where everyone can see them. When submitting a new bug report, make sure the same bug is not already submitted. If not, go straight to the new bug submission link and enter exhaustive details by filling out all the required fields.

All bugs listing page:

http://www.platon.sk/projects/view_all_bug_page.php?project_id=5

New bug submission:

http://www.platon.sk/projects/bug_report_advanced_page.php?project_id=5

Support forum

A web based forum has been established to provide support for phpMyEdit. There you can discuss and consult general issues related to this project. Installation, configuration and usage questions can be asked there. The forum is also the right place for brainstorming about new features, since more opinions and points of view can be presented. The whole matter needs to be completely re-thought before it will be submitted into bug-tracking system, marked as a feature request and finally implemented.

<http://www.platon.sk/forum/projects/?c=5>

Feedback

Feel free to correct the text of the documents and messages in this project if you find a mistake or typo.

Usage of mentioned services is preferred, however if you need to contact authors directly, use the following `<platon@pobox.sk (mailto:platon@pobox.sk?subject=phpMyEdit)>` e-mail address and write 'phpMyEdit' keyword in the Subject line.

Translations

If you don't find in `lang/` subdirectory a translation into your language, you can make one. Before spending time creating a translation, check <http://www.platon.sk/cvs/cvs.php/phpMyEdit/lang/> to see if development for that translation has already begun.

6.4. Mailinglist

There is phpMyEdit mailinglist provided on SourceForge.Net (<http://sourceforge.net/>). Subscription is strongly recommended, especially if you want to discuss new features or participate on further ideas and thoughts.

You can join this mailinglist by accessing following link

<http://lists.sourceforge.net/lists/listinfo/phpmyedit-discuss>

Another possibility is by sending e-mail with keyword 'subscribe' in Subject line to following e-mail address

`<phpmyedit-discuss-request@lists.sourceforge.net>`

6.5. CVS access

Whole phpMyEdit project is provided in Platon software development group (<http://www.platon.sk/>) CVS repository. It is possible to review our CVS repository using CVSweb interface (<http://www.platon.sk/cvs/cvs.php/phpMyEdit/>), but it is also possible to checkout files using anonymous access.

Chapter 6. Other information

Particular CVS instructions follows. Platon CVS repository can be checked out through anonymous (pserver) CVS with the following instruction set. When prompted for a password for anonymous, simply press the **Enter** key.

```
export CVSROOT=:pserver:anonymous@kepler.fmph.uniba.sk:/home/cvs
cvs login
cvs checkout phpMyEdit
```

These commands should work with no problems on any UNIX-like system with cvs client installed. For checkouting on MS-Windows platform you can use one from several free available CVS client softwares.