# A STUDY ON PHPMYADMIN

# ABHISHEK KAUSHAL

# CSE421 (15001401)

## 8<sup>TH</sup> SEM

# AP GOYAL SHIMLA UNIVERSITY

## H.P. (INDIA)

# **INTRODUCTION:**

PhpMyAdmin is one of the most popular applications for MySQL database management. It is a free tool written in PHP. Through this software you can create, alter, drop, delete, import and export MySQL database tables. You can run MySQL queries, optimize, repair and check tables, change collation and execute other database management commands. All the Site Ground clients can manage their MySQL databases through the pre-installed phpMyAdmin software which is integrated in cPanel.

## **Supported features**

Currently phpMyAdmin can:

- create, browse, edit, and drop databases, tables, views, columns, and indexes
- display multiple results sets through stored procedures or queries
- create, copy, drop, rename and alter databases, tables, columns and indexes
- maintenance server, databases and tables, with proposals on server configuration
- execute, edit and bookmark any SQL-statement, even batch-queries
- load text files into tables
- create [1] and read dumps of tables
- export [1] data to various formats: CSV, XML, PDF, ISO/IEC 26300 OpenDocument Text and Spreadsheet, Microsoft Word 2000, and LATEX formats
- import data and MySQL structures from OpenDocument spreadsheets, as well as XML, CSV, and SQL files
- administer multiple servers
- add, edit, and remove MySQL user accounts and privileges
- check referential integrity in MyISAM tables
- using Query-by-example (QBE), create complex queries automatically connecting required tables
- create PDF graphics of your database layout
- search globally in a database or a subset of it
- transform stored data into any format using a set of predefined functions, like displaying BLOB-data as image or download-link
- Track changes on databases, tables and views
- Support InnoDB tables and foreign keys
- Support mysqli, the improved MySQL extension see 1.17 Which Database versions does phpMyAdmin support?
- Create, edit, call, export and drop stored procedures and functions
- Create, edit, export and drop events and triggers
- Communicate in 80 different languages

#### Shortcut keys

Currently phpMyAdmin supports following shortcuts:

- k Toggle console
- h Go to home page
- s Open settings
- d + s Go to database structure (Provided you are in database related page)
- d + f Search database (Provided you are in database related page)
- t + s Go to table structure (Provided you are in table related page)
- t + f Search table (Provided you are in table related page)
- Backspace Takes you to older page.

#### **Topic:**

PhpMyAdmin

#### **Rationale:**

PhpMyAdmin is ia popular and free open source tool used for administering MySQL with a web browser.

Typical operations such as the management of databases, tables, indexes, permissions, and so on are executed with the user interface

. Administrators can also use phpMyAdmin to directly execute any SQL statement.

It has a full range of features for administering MySQL databases, including creating or defining tables, as well as inserting, updating, and deleting data.

It also helps you analyze and optimize performance.

#### **STATEMENT OF PURPOSE:**

In this following topics are included:

#### phpMyAdmin Features

#### **PhpMyAdmin Installation**

#### **PhpMyAdmin Database Management**

**PhpMyAdmin Create a Table** 

#### **PhpMyAdmin Features:**

The main phpMyAdmin features are:

- Intuitive web interface
- Support for most MySQL features:
- browse and drop databases, tables, views, fields and indexes
- create, copy, drop, rename and alter databases, tables, fields and indexes
- maintenance server, databases and tables, with proposals on server configuration
- execute, edit and bookmark any SQL-statement, even batch-queries
- manage stored procedures and triggers
- Import data from CSV and SQL
- Export data to various formats: CSV, SQL, XML, PDF, ISO/IEC 26300 Open Document Text and Spreadsheet, Word, L<sup>A</sup>T<sub>E</sub>X and others
- Creating complex queries using Query-by-example (QBE)
- Searching globally in a database or a subset of it.

## phpMyAdmin Installation •

All hosting accounts on the Site Ground servers come with pre-installed phpMyAdmin software. The application can be opened from cPanel -> phpMyAdmin tool.



However, you may need to install phpMyAdmin manually. The easiest way is to install the application from the Softaculous tool in cPanel.

Alternatively, you can perform the installation manually.

## Manual PhpMyAdmin Installation

To install phpMyAdmin manually, you must first download the latest version of the software from the official project download page. Then, upload the downloaded archive on your account via FTP in the *public\_html* folder.

Once the package is uploaded on your account, you must extract it, which will result in a new folder named **phpMyAdmin-X.X.X** where **X.X.X** is the version of the software you downloaded. If you want, you can rename that folder to **PhpMyAdmin**, so that you can access the application later with *http://yourdomainname.com/phpmyadmin*.

Next step is to access the folder which you created with your browser. If you have renamed the folder to phpmyadmin, then the URL should be *http://yourdomainname.com/phpmyadmin*. This will open the phpMyAdmin login page.



# Welcome to phpMyAdmin

Language		
English	 •	
Log in 🛞		
Username:		
Tussiloru.		
		Go

To use the software you should input a valid MySQL username and password and click the **Go** button. You can also use your cPanel username and password, which will allow you to manage all of the databases on your hosting account.

#### phpMyAdmin Database Management

This tutorial covers the following topics:

- Browse
- Structure
- Search
- Insert
- Empty
- Drop

The main purpose of the phpMyAdmin tool is to manage your databases. This tutorial explains how to use the different functionalities phpMyAdmin provides to do that.

When you open the phpMyAdmin home page, click the **Databases** tab and then select a database to manage by clicking its name.

ohoMuAdmin	Server: knc	alhost:3306			
Career Envirites	Databases	SQL	Status	Export	
ecent Pavonies	Datapase	es			
New	Database 🔺	Collation	Action	1	
wp_commentmeta	information_scher	na utf8_gene	eral_ci 🗾 Ch	eck privileges	
+_w wp_comments	sgtutori_db1	utf8_gene	eral_ci 📑 Ch	eck privileges	
⊕_ wp_links	Total: 2	utf8_gene	eral_ci		
wp_options					
+_wp_postmeta	🔥 Note: Enabli	ng the databa	ase statistics he	re might cause	hear
wp_posts					
🖶 📝 wp_termmeta	Enable stat	tistics			

In the page that opens you will see a list with the database tables, the allowed actions with them, the number of the records, the storage engine, the collation, the tables' sizes and the overhead.

+	Server: localhost:3306	- 0	Database: s	gluk	ori_db1																		
34	Structure 🛛 SQL	4	Search	9	Query	-	Export	1	lm	port	P	Operatio	ons	â	Routine	6	9 E	vents	26	Trigg	ers	d <sup>a</sup>	Designer
	Table -	Act	lion										Rows	9	Туре	Colla	tion			Siz	0	Overt	head
0	wp_commentmeta	$\dot{\pi}$	Browse	M	Structure	ił,	Search	}ê îns	ert	👾 Emp	pty	😂 Drop			InnoDB	utf8m	b4_u	nicode,	520_c	i 48	\$18		10
	wp_comments	龠	Browse	H	Structure	-8	Search	}i Ins	ert	👷 Emp	oty	Orop		1	InnoDB	utf8m	b4_u	nicode.	_520_0	1 96	818		*
0	wp_links	$\dot{\pi}$	Browse	N.	Structure	18	Search	ins ins	ert	👮 Emç	oty	Drop		.0	InnoDB	utf8mi	b4_u	nicode.	_520_c	į 32	RiB		-
	wp_options	ŵ	Browse		Structure	.4	Search	ji ins	ert 1	Emp	nty	Drop		134	InnoDB	utf8mi	b4_u	nicode,	520_c	1.1	NIB		-
0	wp_postmeta	$\dot{\pi}$	Browse	N	Structure		Search	insi	ert	👷 Emg	oty	Orop		ĩ	InnoDB	utf8m	64_u	nicode.	_520_c	6 68	KLB		
0	wp_posts	ŵ	Browse	1	Structure	-2	Search	ji ins	ert	🗑 Emp	oty	Drop		3	InnoDB	utf8m	b4_u	nicode,	.520_c	i 80	RIB		-
D	wp_termmeta	ŵ	Browse	И	Structure	18	Search	}-ins	ert	👷 Emp	oty	Drop		9	InnoDB	utf8m	b4_u	nicode,	520_c	i . 48	XLB		
0	wp_terms	ŵ	Browse	94	Structure	4	Search	Hi Insi	ert I	👷 Emç	oty	Drop		1	InnoDB	utf8mi	b4_u	nicode,	_520_c	i 48	RIB		-
Ö	wp_term_relationships	×	Browse	R	Structure		Search	}ins	ert	👷 Emç	oty	😄 Drop		1	InnoDB	ut/8m	b4_u	nicode_	_520_c	; 32	RiB		÷
0	wp_term_taxonomy	索	Browse	K	Structure	-1	Search	ji ins	ert	📻 Emp	oty	Drop		3	InnoDB	ut/Bm	64_U	nicode_	_520_c	i 40	RiB		-
0	wp_usermeta	$\hat{\mathbf{x}}$	Browse	и	Structure		Search	3jé Ins	ort	👷 Emp	oty	😄 Drop		16	InnoDB	utf8mi	b4_u	nicode,	520_c	j (8	K18		-
0	wp_users	索	Browse	. In	Structure	-8	Search	ins ins	ert	Emp	pty	😄 Drop		1	InnoDB	utf8m	64_u	nicode_	_520_c	i =4	\$1B		
	12 tables	Sur	m											159	InnoDB	utf8_	gene	ral_ci		2.1	NiB		0 8
_																							

The possible actions which you can perform to a chosen table are:

#### Browse

Only the tables with existing records can be browsed. Once you click on the **Browse** button a new page with a list of the records inside the table will be opened.

ESorer located	#3306 - 👩 D	olabasii liyt	- 100, IND -	an Inter wi	CONTRACTS.										0 =
E Drowes 1/2 S	ilructure	SQL	Search	ji m	rt 🔜 Exp	ort 🔚 b	npart	P Operation	ne 31 Trippere						
Showing rows 0 -	0 (1 total, Qu	ery took 0.00	42 seconds	a.											
SELECT + From 'WE_PO	penetta"														
												Profiling   List Inline	East ( Explain SQL )	Create PHP code )	(Patrath)
Show all 1 Ma	untage of rows	28 -	184	over Service	ch pris table										
+ Options +-T-+	<b>*</b> 4	omment_ID	comme	nt. poset. (D	comment_a	uttor co	a freeze	uthor_email	comment_suffer_url	comment author IP	comment_date	comment date gmt	comment_content	comment_karma	comm
C de la Copy	October 20			1	A WordPress Commonter	1 43	our@wor	dpress.axampl	ie https:/wortpress.org/		2017-06-21 06:20:57	2017-08-21 06:20:57	Hi, this is a comment. To get started with moderal	0	1
t_ 🗆 Oteck all	WEY sink	dat 🦯i	n Hos	DV ODV	es 🗸 Des	ŧ									
Stow at 1 M	unbur of rows	26 -	File	ove Ser	H this lable										
Query results op	erations														
Dane \$4 Copy	to clipbowrit .	j Export 🧃	Display ch	ert 👝 Crea	le: viene										

By clicking on the **Edit** button you can edit the chosen record.

You will see the record structure and you can alter the values of the records. Once you are done with the changes, you can submit them bu clicking the **Go** button at the bottom of the page.

Column	Type	Function		Null Value
comment ID	hight(20) unsigned	Function		Null Value
			•	1
comment_post_ID	bigint(20) unsigned		<u>.</u>	1
comment_author	tinytext		·	A WordPress Commenter
omment_author_emai	l varchar(100)		<u>.</u>	wapuu@wordpress.example
comment_author_url	varchar(200)		·	https://wordpress.org/
comment_author_IP	varchar(100)		·	
comment_date	datetime		<u>.</u>	2017-09-21 06:20:57
comment_date_gmt	datetime		-	2017-09-21 06:20:57
comment_content	text		·	Hi, this is a comment. To get started with moderating, editing, and deleting comments, please visit the Comments screen in the dashboard. Commenter avatars come from <a href="https://gravatar.com"&gt;Gravatar.</a 

#### Structure

By clicking the **Structure** button a new page will open that shows the database table's structure.

8	owse 🧏 Stru	cture 🔲 S	SQL 🔍 Search 👫	Insert =	) Ex	port §	🗄 Import	P Operations	Triggers							
И	Table structure	Relatio	an view													
	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra	Action							
1	meta_id 🔑	bigint(20)		UNEXEMPTION	No	None		AUTO_INCREMENT	J Change	😄 Drop	Primary	u Unique	E Index E	Spatial	T Fultest	Distinct valu
2	comment_id 🔎	bigint(20)		CARDERO	No	0			2 Change	Crop	Primary	ų Unique	E Index T	Spatial	T Fullest	Obstinct visio
3	meta_key 🏓	varchar(255)	utf8mb4_unicode_520_ci		Yes	NULL			J Change	😄 Drop	Primary	<b>U</b> Unique	E Index 5	Spatial	T Fultest	Distinct valu
4	meta_value	longtext	utf8mb4_unicode_520_ci		Yes	NULL			2 Change	😄 Drop	Primary	Unique	E Index 3	Spatial	T Fulter	Distinct valu
6	Check al	With selected:	III Browse / Change	CO Drep		Primary	Unique	at index								

You will see the fields' names, their types, collations, attributes, additional extra information, the default values and whether the fields' values can be **NULL**. You can browse for distinct values by clicking on the corresponding action icon. Also, you can edit a field's structure or delete a field. You can define different indexes: **Primary**, **Unique**, **Index** and **Fulltext**. More about the indexes can be found in the MySQL Indexes documentation.

#### Search

With the **Search** button you can generate a search query for the chosen table.

Table search	Real Soom	search 🧏 Find an	d replace			
Do a "quer	y by example"	(wildcard: "%")				
Column	Туре	Collation	Operator		Value	
meta_id	bigint(20)		=	•		
comment_ic	bigint(20)			·		
meta_key	varchar(255)	utf8mb4_unicode_520_ci	LIKE	•		
meta_value	longtext	utf8mb4_unicode_520_cl	LIKE	·		

You can use the **Query by example** functionality to perform a search. Just use to different fields to structure your search query and click the **Go** button to execute it.

For example, if you want to visualize all the records with a field value that starts with "a" you should first select the fields which you want to show. Pick the **LIKE** operator from the drop-down menu and enter in the corresponding field value "a%" (% stands for a wildcard string). Click on the **Go** button to see the result.

#### Insert

Using the Insert button you can insert records in your database table.

Browse	Structure	SQL	Search	3-i Int	sert	Export	import	J Opera	tions 36	Triggers	
Column	Type	Function			Null	Value					
meta_id	bigint(20) unsigned			•				]			
omment_id	bigint(20) unsigned	1		<u>.</u>		0					
meta_key	varchar(255)			•	۵						
meta_value	longtext			-	Ø						
						-					

Once you fill in the corresponding values click on the Go button and the new record will be inserted.

#### Empty

The Empty button allows you to empty a database table, removing the data and keeping the empty table.

ure	Search	E Insert	Err	npty C Drop 1 InnoDB utf8mb4_unice	ode_520_ci	48 KiB	
ure	💦 Search	<b>≩é</b> Insert	👷 Ei	Confirm	∋_520_ci	32 KiB	
are	Rearch	E Insert	E E	You are about to TRUNCATE a complete	9_520_ci	48 KiB	
ure	👒 Search	∃å Insert	👷 Ei	"TRUNCATE wp_commentmeta"?	ə_520_ci	48 KiB	
Jre	Rearch	E Insert	E E	Enable foreign key checks	ə_520_ci	64 KiB	
				OK Cancel		2.1 MiB	0
•							

#### Drop

With the Drop button you can delete the whole table and all the records stored in it.

	Court Titles OF		- coo -:	33 min	
e	Search 3 Insert m El	Confirm ×	9_520_ci	32 KID	
e	🤹 Search 🔮 Insert 🗮 Ei	You are about to DESTROY a complete	∋_520_ci	48 KiB	
е	👒 Search 👫 Insert 🚍 Ei	"DROP TABLE wp_commentmeta"?	9_520_ci	48 KiB	
е	🤹 Search 🔮 İnsert 🚍 Er	Enable foreign key checks	e_520_ci	64 KiB	
	-			2.1 MiB	0
î.		OK Cancel			

#### phpMyAdmin Create And Populate Tables

Learn how to create new tables and add data inside them with phpMyAdmin

This tutorial covers the following topics:

- How to create new tables
- How to Add Content in a Database Table

This tutorial explains how to create additional tables inside a database and add data inside the table.

#### How to create new tables

To create new tables inside a database, first open the phpMyAdmin tool, click on the **Databases** tab and click on the name of the desired database.

Server: localhost:3306 phpMuAdmin Settings **Databases** SQL Status Export Import A Varial <u>↑</u> 0 0 0 0 0 0 Recent Favorites 8 Databases Find information\_schema sgtutori\_db1 New Database Collation Action wp\_commentmeta ma utf8\_general\_ci al Check privileges wp comments sgtutori\_db1 utf8\_general\_ci a Check privileges wp\_links utf8\_general\_ci = Check privileges sgtutori\_newdb + wp\_options utf8\_general\_ci Total: 3 wp\_postmeta Wp posts Livoue: Enabling the database statistics here might cause heavy traffic between the web server and the wp\_termmeta Enable statistics + wp\_terms Wp\_term\_relationships wp\_term\_taxonomy wp\_usermeta wo users

On the new page that opens you will see a list of all the current tables inside the database and a section named **Create table**. In that section, in the **Name** field you should input the desired new name of the table and then select the number of columns that the table should have via the **Number of columns** drop-down. When ready, click the **Go** button to create the table.

Create table		
Narra: Lumra	Number of columns: 3 3	
		60

On the next page you can configure the structure of the columns in the new table. The different fields there are:

- **Name** The name of the column;
- **Type** The type of the data, which will be stored in the corresponding column. More details about the possible choices can be found in the official MySQL Data Types documentation;
- Length/Values The length of the field;
- **Default** With this option you can specify if the fields in the column would have a default value. This is useful for example if you want to have timestamps for the entries in each row;
- **Collation** The data collation for each of the fields;
- Attributes assign any special attributes to the fields;
- Null Define whether the field value can be NULL. More about the NULL value can be found in the MySQL documentation;
- Index Set the Index of the row. More information about the MySQL column indexes can be found in the MySQL documentation;
- A\_I Short for Auto Increment. If this option is enabled then the values in the fields of the column will be auto incremented;
- Comments Here you can add comments, which will be included in the database SQL code.

After you configured the different columns, you should specify the **Collation** and **Engine** of the new table via their respective dropdowns.

When you are ready, click the **Save** button to create the new table.

Collation	Attribut	es l	Null	Index		AI	Comments	
	•	-	0	***	-	0		
	·	<u>.</u>	0	***	·	0		
	•	•	0		·	0		
Storage E	ingine: 😡							
InnoDB	-							
								1
								Preview SQ
								rienen es

## How to Add Content in a Database Table

To add records inside a database table, open the table with phpMyAdmin and click the **Insert** tab.

		in the second second	area T- ma	Serr	and managers 1 in	nubour	operation	18 24	inggers	
olumn	Туре	Function		Null	Value					
meta_id	bigint(20) unsigned	ť	•		(		]			
mment_id	bigint(20) unsigned		·		0					
eta_key	varchar(255)		-	8						
sta_value	longtext		·	0						

Enter the desired data in the corresponding fields and click on the **Go** button to store it. You can see the newly inserted record by clicking on the **Browse** tab.

#### **REQUIREMENTS:**

- You need PHP 7.1.0 or newer, with session support, the Standard PHP Library (SPL) extension, hash, ctype, and JSON support.
- The mbstring extension (see mbstring) is strongly recommended for performance reasons.
- To support uploading of ZIP files, you need the PHP zip extension.
- You need GD2 support in PHP to display inline thumbnails of JPEGs ("image/jpeg: inline") with their original aspect ratio.
- When using the cookie authentication (the default), the <u>openssl</u> extension is strongly suggested.
- To support upload progress bars, see 2.9 Seeing an upload progress bar.
- To support XML and Open Document Spreadsheet importing, you need the <u>libxml</u> extension.
- To support reCAPTCHA on the login page, you need the <u>openssl</u> extension.
- To support displaying phpMyAdmin's latest version, you need to enable allow\_url\_open in your php.ini or to have the curl extension.

#### **DISCUSSION:**

phpMyAdmin is a free and open source administration tool for MySQL and MariaDB

. As a portable <u>web application</u> written primarily in <u>PHP</u>, it has become one of the most popular MySQL administration tools, especially for <u>web hosting services</u>.<sup>13</sup>

PHPMyAdmin is the web-based front end for managing MySQL databases.

It makes MySQL more user-friendly. It has a GUI screen for the most common functions. And it was first released in September 1998 and it has also been the de facto standard in MySQL database administration for years.

One of the best part of using PHPMyAdmin is that it gives you a full-featured and also easy to use web interface where it also has the cross-platform which is also an open source and make its design more attractive option for most of the server administrators.

And today you will also find that phpMyAdmin is loaded into most of the cPanel installations

. <u>Using phpMyAdmin server for your business</u> will helps you to perform various tasks such as creating, modifying or deleting databases, tables, fields or rows; executing SQL statements; or managing users and permissions.

#### **PROS:**

- 1. Multi Server administration
- 2.Export data in formats like CSV, SQL, or PDF
- 3. It is one of the most commonly installed on managed hosting environments
- 4. Global database searching
- 5. Solid performance with Simplicity
- 6. Not very resource intensive

### CONS:

- 1. While phpMyAdmin has the simplest interface but still it can be a little complex for beginner users.
- 2. In phpMyAdmin, it has no schema visualization

#### **CONCLUSION:**

This paper highlights on the study about PhpMyAdmin and its unique features.

This paper tells how to use MySQL. MySQL is open-source relational database management system. It uses Structured Query Language. SQL is the most popular language for adding, accessing and managing content in a database.

It provides a secure and reliable database management system used in popular web applications like Word Press, Drupal, Joomla, Facebook and Twitter.

#### **REFERENCES:**

https://www.quora.com

https://en.wikipedia.org/wiki/PhpMyAdmin

https://www.siteground.com/tutorials/phpmyadmin/