## **Backup and Restore MySQL Databases**

XAMPP includes phpMyAdmin, an open-source, browser-based tool for managing MySQL database servers. This guide walks you through the process of backing up and restoring a MySQL database using phpMyAdmin.

This guide assumes that you already have a PHP application that uses a MySQL database deployed on XAMPP. The example application used in this guide is WordPress, although the steps outlined below will work for any application.

**TIP** Remember that you can install WordPress quickly using the Bitnami WordPress module for XAMPP.

To backup a MySQL database using phpMyAdmin, follow these steps:

- 1. Browse to http://localhost/phpMyAdmin or http://127.0.0.1/phpMyAdmin. If required, log in using your database access credentials. On a fresh XAMPP installation without any changes, you can log in as *root* with a blank password.
- 2. Select the database to be backed up from the list in the left navigation pane. In this case, we're backing up the WordPress database, which is named *bitnami\_wordpress*.

phpMuAdmin	👝 🗐 Server: 127.0.0.1 > 🗑 Database: bitnami_wordpress						
<u>≙ 1</u> ≥ 0 © ¢	🖌 Structure 🛛 📋 SQL	🔍 Search 🔋 Query 🖼 Export					
Recent Favorites	Table 🔺	Action					
	wp_commentmeta	🚖 🗐 Browse 📝 Structure 👒 Search 👫					
	wp_comments	🚖 🗐 Browse 🥻 Structure 🤜 Search 👫					
	□ wp_links	🚖 🗐 Browse 🛃 Structure 👒 Search 👫					
	wp_options	🚖 🔟 Browse 🥻 Structure 🤏 Search 📑					
	wp_postmeta	🚖 🗐 Browse 🔐 Structure 👒 Search 👫					
	wp_posts	🚖 🗐 Browse 🥻 Structure 👒 Search 👫					
	wp_terms	🚖 🗐 Browse 📝 Structure 🤹 Search 🐉					
	<pre>wp_term_relationships</pre>	🚖 🗐 Browse 🥻 Structure 🍕 Search 👫					
	wp_term_taxonomy	🚖 🗐 Browse 📝 Structure 🤏 Search 👫					
	🗖 wp_usermeta	🚖 🔲 Browse 🥻 Structure 🍕 Search 👔					
	□ wp_users	🚖 🗐 Browse 📝 Structure 👒 Search 👫					
	11 tables	Sum					

- 3. Select the "Export" command in the top navigation bar.
- 4. On the resulting page, select "Quick" as the export method and "SQL" as the output format. Click "Go" to proceed.



phpMyAdmin will export the database to a text file as a series of SQL statements. Once done, the browser will prompt you to download it to the desktop. This text file is your backup, so store it safely!

Opening bitnami_wordpress.sql	×
You have chosen to open:	
bitnami_wordpress.sql which is: sql File from: http://localhost	
What should Firefox do with this file?	
© Open with Browse	
C Save File	
Do this <u>a</u> utomatically for files like this from now on.	
OK Cancel	

At a later point, you may wish to restore the database. To restore the data to a fresh MySQL database using phpMyAdmin, follow these steps:

- 1. Browse to http://localhost/phpMyAdmin or http://127.0.0.1/phpMyAdmin. If required, log in using your database access credentials.
- 2. Select the "New" command in the left navigation pane.

phpMuAdmin	🗕 🗊 Server 127 U.D.1 💦 🛪						
<u>≙ 41 6 9 0 6</u>	🗊 Databases 📋 SQL 🐁 Status 💌 Users 😹 Export 😹 Import 🤌 Settings 💌 More						
New Information_schema	Databases						
+ performance_schema	🖟 Create database 📦						
+ phpmyadmin	Database name Collation   Create						
🖶 test							
	Note: Enabling the database statistics here might cause heavy traffic between the web server and the MySQL server.						
	Database  Collation						
	information_schema utf8_general_ci III Check Privileges						
	myblog ut18_general_ci a: Check Privileges						
	mysql latin1_swedish_ci a Check Privileges						
	E performance_schema utt8_general_ci a. Check Privileges						
	🗖 phpmyadmin utf8_bin 📧 Check Privileges						
	T test latin1_swedish_ci a. Check Privileges						
	Total: 6 latin1_summatish_ci						
	Check All With selected: 📷 Drop						
	Enable Statistics						

3. On the resulting page, enter a name for the new database (in this case, *myblog*). Select the collation "utf8\_general\_ci". Click "Create" to create the database.

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📄 Databases	📄 SQL	🚯 Status	💻 Users	📕 Export	📑 Import
Database	s				
Create data	abase 😡	utf8_general_	ci	- Cr	eate
📐 Note: Enablir server.	ng the databa	ase statistics h	ere might caus	e heavy traffic	between the web

Once the database has been created, it will appear in the left navigation pane.



- 4. Select the new database from the left navigation pane. In the resulting page, select the "Import" command in the top navigation bar.
- 5. Click the "Browse...\_" button and select the backup file created earlier. Click "Go" to proceed.

🗕 🗐 Server: 127.0.0.1 » 🗑 Database: myblog						
🕅 Structure 🗐 SQL 🔍 Search 🗐 Query 🖾 Export 🚍 Import 💌 More						
Importing into the database "myblog"						
File to Import:						
File may be compressed (gzip, bzip2, zip) or uncompressed. A compressed file's name event exclin <mark>(format].[compression].</mark> Example: . <b>sql.zip</b>						
Browse your computer Browse No file selected. (Max: 2,048KiB)						
Character set of the file:						
Partial Import:						
Allow the interruption of an import in case the script detects it is close to the PHP timeout limit. (This might be a good way to import have files, however it can break transactions.)						
Skip this number of queries (for SQL) or lines (for other formats), starting from the first one:						
Format:						
SOL						
Format-Specific Options:						
SQL compatibility mode: NONE						
Do not use AUTO_INCREMENT for zero values						
Go						

phpMyAdmin will import the data from the backup file. Once complete, you will see a screen indicating the status of the import.



If you browse the contents of the database, you should now see your original data.

← 👘 Server: 127.0.0.1 > 🗑 Database: myblog > 🔚 Table: wp_posts										
Browse	🧭 Str	ucture		SQL 🔍 Se	earch 📑	Insert	🛃 Export	📑 Import	▼ Mo	re
✓ Showing rows D - 2 (3 total, Query took 0.0000 seconds.)										
SELECT * 1	FROM 'wp_	posts'								
				🗆 Profil	ing [ Inline ] [	[Edit][E	xplain SQL ] [	Create PHP C	ode][Re	fresh]
Number of I	rows: 2	5 👤	Fi	lter rows: Sear	ch this table					
Sort by key: 🗅	None			•						
+ Options										
←⊤→		~	ID	post_author	post_date		post_date_gr	nt post_c	content	post_title
🗖 🥜 Edit 📱	🕯 Сору 🧲	Delete	1	1	2014-11-10	10:25:06 2	2014-11-10 10	25:06 Welco WordF This is first po	me to <sup>I</sup> ress. your st. Edi	Hello worldl
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🗖 🥜 Edit 📱	🕯 Сору 🍯	Delete	3	1	2014-11-14	36:33:38 0	0000-00-00 00	:00:00		Auto Draft

You should now update your application's configuration and point it to your newly-created database. For example, with the Bitnami WordPress module, you will need to edit the *wp-config.php* file in the *apps\wordpress\htdocs\* subdirectory of your XAMPP installation directory. Within this file, you will need to update the *DB\_NAME* constant to use the new database name.



NOTE

By default, PHP (and therefore phpMyAdmin) is configured to only accept uploads up to 2 MB in size. If your database is larger than this, you need to modify the PHP configuration file to accept a larger upload size. To do this, edit the *php.ini* file in the *php\* subdirectory of your XAMPP installation directory and increase the values of the *post\_max\_size* and *upload\_max\_filesize* variables. Save your changes and restart Apache for the changes to take effect.