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By: Justin Ellingwood   ⊹ Subscribe   ⬆ Share   ☰ Contents ⌄

⬡ How To Install and Secure phpMyAdmin on Ubuntu 14.04   ⌃
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Posted April 23, 2014   👁 933.2k   APACHE   MYSQL   SECURITY   UBUNTU

Introduction

While many users need the functionality of a database management system like MySQL, they may not feel comfortable interacting with the system solely from the MySQL prompt.

phpMyAdmin was created so that users can interact with MySQL through a web interface. In this guide, we'll discuss how to install and secure phpMyAdmin so that you can safely use it to manage your databases on Ubuntu 14.04.

> **Note:** phpMyAdmin can be installed automatically on your Droplet by adding this script to its User Data when launching it. Check out this tutorial to learn more about Droplet User Data.

Prerequisites

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First, we'll assume that you are using a non-root user with sudo privileges, as described in steps 1-4 in the initial server setup of Ubuntu 14.04.

We're also going to assume that you've completed a LAMP (Linux, Apache, MySQL, and PHP) installation on your Ubuntu 14.04 server. If this is not completed yet, you can follow this guide on installing a LAMP stack on Ubuntu 14.04.

Once you are finished with these steps, you're ready to get started with this guide.

Step One — Install phpMyAdmin

To get started, we can simply install phpMyAdmin from the default Ubuntu repositories.

We can do this by updating our local package index and then using the `apt` packaging system to pull down the files and install them on our system:

```
sudo apt-get update
sudo apt-get install phpmyadmin
```

This will ask you a few questions in order to configure your installation correctly.

Warning

When the first prompt appears, apache2 is highlighted, but **not** selected. If you do not hit "SPACE" to select Apache, the installer will *not* move the necessary files during installation. Hit "SPACE", "TAB", and then "ENTER" to select Apache.

- For the server selection, choose **apache2**.

- Select **yes** when asked whether to use `dbconfig-common` to set up the database

- You will be prompted for your database administrator's password

- You will then be asked to choose and confirm a password for the `phpMyAdmin` application itself

The installation process actually adds the phpMyAdmin Apache configuration file into the `/etc/apache2/conf-enabled/` directory, where it is automatically read.

The only thing we need to do is explicitly enable the `php5-mcrypt` extension, which we can do by typing:

```
sudo php5enmod mcrypt
```

Afterwards, you'll need to restart Apache for your changes to be recognized:
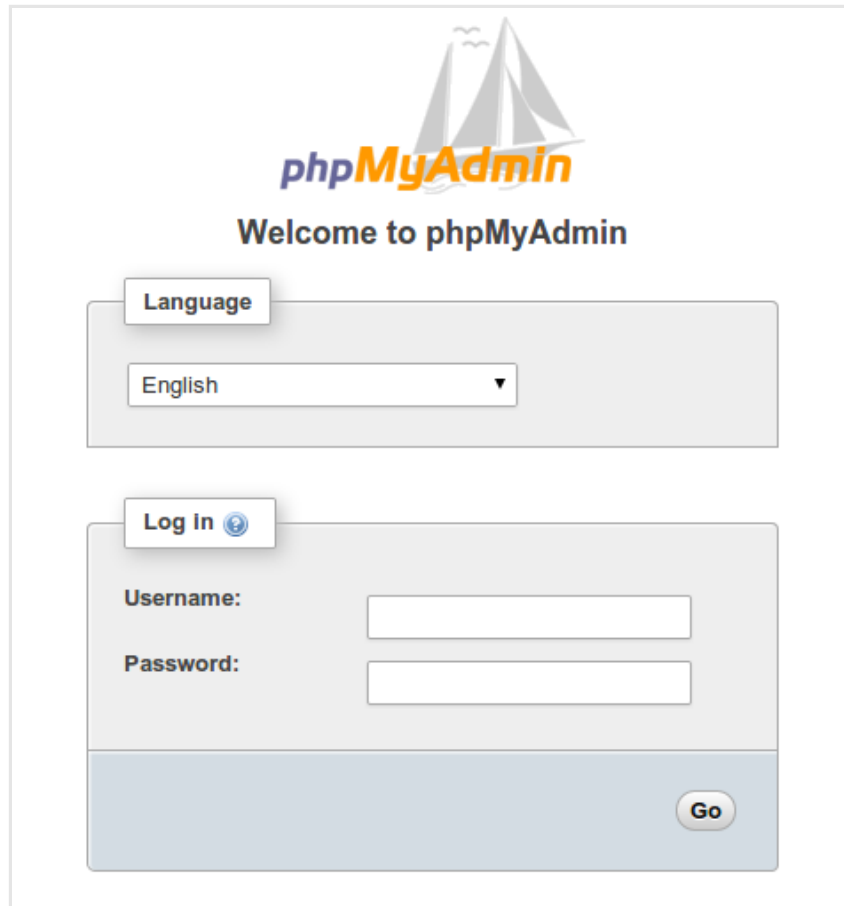
```
sudo service apache2 restart
```

You can now access the web interface by visiting your server's domain name or public IP address followed by `/phpmyadmin`:
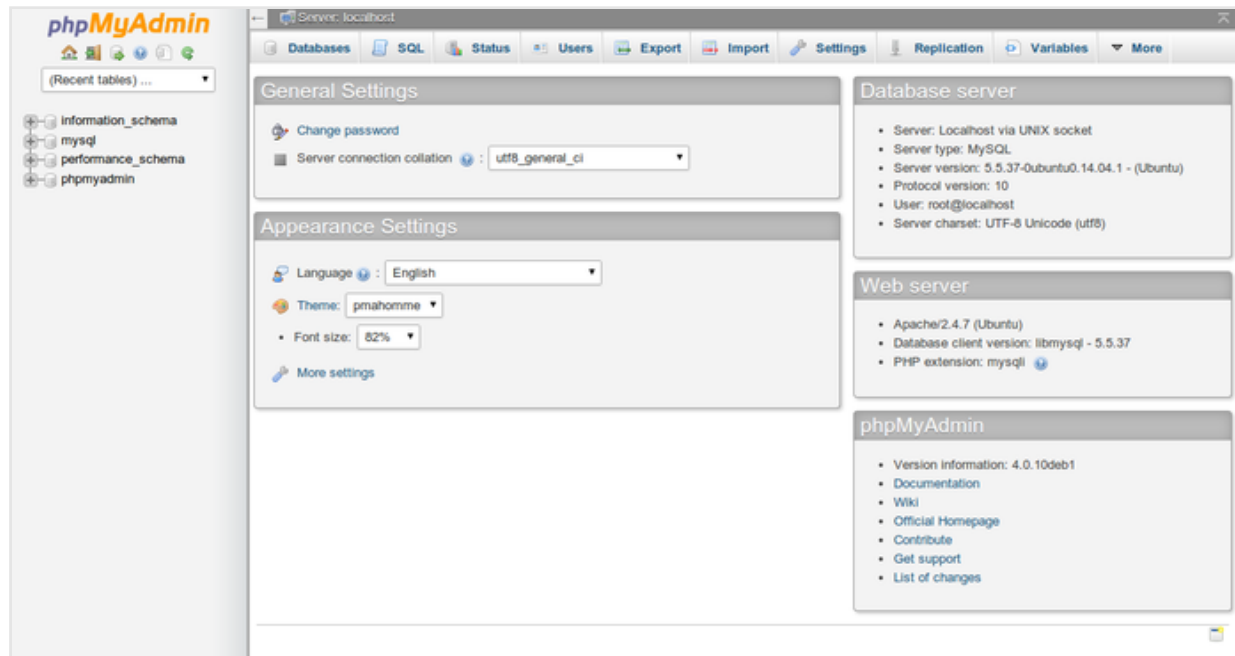
http://domain_name_or_IP/phpmyadmin

You can now log into the interface using the `root` username and the administrative password you set up during the MySQL installation.

When you log in, you'll see the user interface, which will look something like this:

Step Two — Secure your phpMyAdmin Instance

We were able to get our phpMyAdmin interface up and running fairly easily. However, we are not done yet. Because of its ubiquity, phpMyAdmin is a popular target for attackers. We need to secure the application to help prevent unauthorized use.

One of the easiest way of doing this is to place a gateway in front of the entire application. We can do this using Apache's built-in `.htaccess` authentication and authorization functionalities.

Configure Apache to Allow .htaccess Overrides

First, we need to enable the use of `.htaccess` file overrides by editing our Apache configuration file.

We will edit the linked file that has been placed in our Apache configuration directory:

```
sudo nano /etc/apache2/conf-available/phpmyadmin.conf
```

We need to add an `AllowOverride All` directive within the `<Directory /usr/share/phpmyadmin>` section of the configuration file, like this:

```
<Directory /usr/share/phpmyadmin>
    Options FollowSymLinks
    DirectoryIndex index.php
    AllowOverride All
    . . .
```

```
sudo service apache2 restart
```

Create an .htaccess File

Now that we have enabled `.htaccess` use for our application, we need to create one to actually implement some security.

In order for this to be successful, the file must be created within the application directory. We can create the necessary file and open it in our text editor with root privileges by typing:

```
sudo nano /usr/share/phpmyadmin/.htaccess
```

Within this file, we need to enter the following information:

```
AuthType Basic
AuthName "Restricted Files"
AuthUserFile /etc/phpmyadmin/.htpasswd
Require valid-user
```

Let's go over what each of these lines mean:

- **AuthType Basic**: This line specifies the authentication type that we are implementing. This type will implement password authentication using a password file.
- **AuthName**: This sets the message for the authentication dialog box. You should keep this generic so that unauthorized users won't gain any information about what is being protected.
- **AuthUserFile**: This sets the location of the password file that will be used for authentication. This should be outside of the directories that are being served. We will create this file shortly.
- **Require valid-user**: This specifies that only authenticated users should be given access to this resource. This is what actually stops unauthorized users from entering.

When you are finished, save and close the file.

Create the .htpasswd file for Authentication

Now that we have specified a location for our password file through the use of the `AuthUserFile` directive within our `.htaccess` file, we need to create this file.

We actually need an additional package to complete this process. We can install it from our default repositories:

Afterward, we will have the `htpasswd` utility available.

The location that we selected for the password file was "`/etc/phpmyadmin/.htpasswd`". Let's create this file and pass it an initial user by typing:

```
sudo htpasswd -c /etc/phpmyadmin/.htpasswd username
```
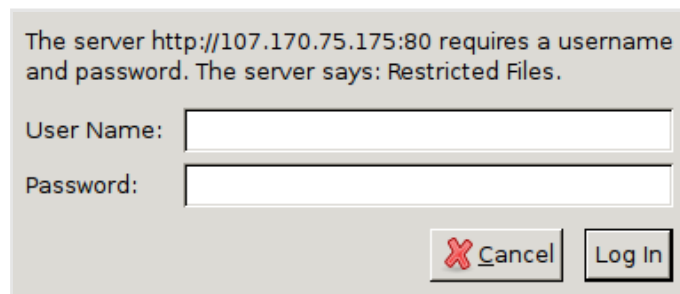
You will be prompted to select and confirm a password for the user you are creating. Afterwards, the file is created with the hashed password that you entered.

If you want to enter an additional user, you need to do so **without** the `-c` flag, like this:

```
sudo htpasswd /etc/phpmyadmin/.htpasswd additionaluser
```

Now, when you access your phpMyAdmin subdirectory, you will be prompted for the additional account name and password that you just configured:

```
http://domain_name_or_IP/phpmyadmin
```

The server http://107.170.75.175:80 requires a username and password. The server says: Restricted Files.

User Name: [   ]
Password: [   ]

                                    ✖ Cancel   Log In

After entering the Apache authentication, you'll be taken to the regular phpMyAdmin authentication page to enter your other credentials. This will add an additional layer of security since phpMyAdmin has suffered from vulnerabilities in the past.

Conclusion

You should now have phpMyAdmin configured and ready to use on your Ubuntu 14.04 server. Using this interface, you can easily create databases, users, tables, etc., and perform the usual operations like deleting and modifying structures and data.

To learn how to further secure your interactions with the server by encrypting your communication with SSL, check out our article on setting up SSL certificates with phpMyAdmin.

By Justin Ellingwood

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⁰ Hey! Thanks for the tutorial. I ran into a problem though, I get a 404 not found error when visiting http://myserver/phpmyadmin/ (where 'myserver' is my ip adress'). The strange thing is that the PMA favicon is showing. When I visit http://myserver/ the apache configuration page shows fine. Any idea why phpmyadmin can't be found?

Thanks!
Nic

mahmutsu *December 31, 2014*

₀ same with me. did you solve that? could you please help me?

mlangell *December 10, 2015*

₁ For the next person who may run into this issue, I needed to purge the install and reinstall remembering to hit space bar & tab when it asks to select apache.

```
sudo apt-get purge phpmyadmin
```

follow uninstall prompts and then reinstall

ariqnaufal *January 11, 2016*

₂ make sure you add this on the following bottom of your apache2.conf (on /etc/apache2/apache2.conf) " Include /etc/phpmyadmin/apache.conf " #withoutquote

And try service apache2 restart :)

gangeshmatta *May 13, 2016*

₀ Works. Thank you.

verdipratama *June 2, 2016*

₀ gan mau nanya, ane bisa buat pass di http://domain_name_or_IP/phpmyadmin, tp kok ane ketik di http://domain_name_or_IP/ kok ask password juga ya? itu knp ya?

asb MOD *April 24, 2014*

₀ Could you post any relevant information from your Apache log?

∧ [nicolaas.wagenaar](#) *April 24, 2014*
♡
0 The log doesn't show any relevant information, only multiple instances of this:

```
[Thu Apr 24 10:55:18.746603 2014] [core:notice] [pid 10813] AH00094: Command line: '/us
[Thu Apr 24 10:59:56.400419 2014] [mpm_prefork:notice] [pid 10813] AH00169: caught SIGT
[Thu Apr 24 10:59:57.489426 2014] [mpm_prefork:notice] [pid 10873] AH00163: Apache/2.4.
```

But I got it to work. Strangely I didn't find any phpmyadmin conf file in `/etc/apache2/conf-enabled/` , so I used the method as described in the Ubuntu 12.04 tutorial and included phpmyadmin's conf file in `/etc/apache2/apache2.conf` . For the .htaccess security procedures I used the conf file in the phpmyadmin directory. Everything now works as it should :)

I think why it didn't work is because the phpmyadmin.conf file was not added to the `/etc/apache2/conf-enabled/` directory. Do you know why this might be the case?

∧ [main.blackpoint](#) *April 24, 2014*
♡
6 The .conf file for me wasn't put in the right place either. You need to manually copy it over like this:

sudo cp /etc/phpmyadmin/apache.conf /etc/apache2/conf-enabled/phpmyadmin.conf

∧ [szeto](#) *April 25, 2014*
♡
7 Got an 404 error when I access http://domain_name_or_IP/phpmyadmin

Solution: manually copy over the the PHPMyAdmin Apache conf file over to the conf-available directory:

sudo cp /etc/phpmyadmin/apache.conf /etc/apache2/conf-available/phpmyadmin.conf

Then enabled the Apache conf file using a2enconf:

sudo a2enconf phpmyadmin

∧ [navneet2014](#) *April 13, 2015*
♡
0 still not working for me.....any suggestions how to do it?

jellingwood MOD *April 25, 2014*

1 Thanks for the heads up everyone.

The problems that you are describing indicate that you never actually selected "Apache" for your web server during the phpMyAdmin installation processes. Although that option is highlighted by the installer, you need to hit "SPACE" to check the box and select that option.

This is the part of the configuration that lets phpMyAdmin know that you wish to move the files into the Apache configuration hierarchy.

I have updated the guide to make this a bit more clear. Please let us know if you have any additional problems.

rcondie66 *April 29, 2014*

0 Hi
This is the best i have seen for some time i spent 2 weeks trying to get server 2008 r2 to do the same thing and it took me about 2 hours to do the full install and configure this.

well done ubuntu you won me over..
Many thanks

Richard C

yalunren *May 31, 2014*

2 Thanks for the tutorial. Very helpful. Just have one question. How to I change the phpmyadmin default http directory? I mean I don't want to use http://ip/phpmyadmin as visiting link because it's too easy to guess.

Thanks!

asb MOD *June 2, 2014*

4 @yalunren: To change the url, edit the phpmyadmin.conf file:

```
sudo nano /etc/apache2/conf-available/phpmyadmin.conf
```

File the "Alias" line and change the first part to the url you want. For instance, change:

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```
Alias /phpmyadmin /usr/share/phpmyadmin
```

to

```
Alias /somethingelse /usr/share/phpmyadmin
```

Then restart Apache:

```
sudo service apache2 restart
```

Now, phpmyadmin is available at http://your.ip.address/somethingelse

---

yalunren   *June 6, 2014*

0 @Andrew SB : Great, thanks!

1on1development   *June 11, 2014*

0 Followed security procedures but not getting the apache login box.. page loads phpmyadmin right away - I did restart Apache

---

1on1development   *June 11, 2014*

0 Actually works now. You need to edit the phpmyadmin.conf in the conf-enabled dir NOT conf-available

---

ubusrv.adm   *July 6, 2014*

0 In the setup for phpmyadmin I'm asked to create a password for accessing it. But when I get to the login screen that password fails, I have to use the MySQL root password, am I missing something or did something wrong during install? (Love the guide BTW, thanks for helping!)

hello i have follow all the steps and everything is fine except the "popup" validation for phpmyadmin, it never loads, can anyone help me please?

︿ **kamaln7** MOD   *July 13, 2014*
♡
1 @luisdiazvenero: Can you pastebin the contents of `/etc/apache2/conf-available/phpmyadmin.conf` ? ⬍

︿ **nubletss** *July 15, 2014*
♡
0 Hi All,

How do i change the password which i have create inside the .htpasswd?
Using this commmand "sudo htpasswd -c /etc/phpmyadmin/.htpasswd username"

Thanks
Simeon

︿ **kamaln7** MOD   *July 15, 2014*
♡
1 @nubletss: Delete the current user:

```
sudo htpasswd -D /etc/phpmyadmin/.htpasswd username
```

and then re-add it with a new password:

```
sudo htpasswd -c /etc/phpmyadmin/.htpasswd username
```

︿ **hello683138** *July 29, 2014*
♡
0 Can't get the apache login before the phpmyadmin login to work, any suggestions.

contents of /etc/apache2/conf-available/phpmyadmin.conf

contents of /usr/share/phpmyadmin/.htaccess

and /etc/phpmyadmin/.htpasswd has a username:pass

have restarted apache

and if I run: "sudo a2enconf phpmyadmin" says its already enabled.

Thanks!

@hello: If you take a closer look at https://kmlnsr.me/Screenshot%20from%202014-07-30%2001%3A07%3A56-ntgtXsp8jg5gPZX81TImrJYg3ARuZijP.png, you'll see that it's applying to rules to `/phpmyadmin/setup/*`. Try replacing `/usr/share/phpmyadmin/setup` with `/usr/share/phpmyadmin`. Also replace `.htpasswd.setup` with `.htpasswd`.

Finally, restart apache:

```
sudo service apache2 restart
```

hello683138 *July 29, 2014*

@Kamal Nasser:

Thanks will try. Still new to apache and well server admin in general. ;)

Should have metioned, I added the AllowOverride All in the top part under the /usr/share/phpmyadmin declarations.

I assume that should tell it to look for rewrite rules in an .htaccess in that directory.

anyway, we'll see what I can do. Thanks!

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