CEFNS MySQL – a Guide for CS212

INTRODUCTION:

In *CEFNS Web Hosting* – a *Guide for CS212*, we covered how to set up XAMPP so that you could host your own content locally for development and testing before uploading to the CEFNS server. We set up the MySQL server but didn't go any further for setting up your database. This document will take that job on.

Before you can begin, you must have an email from me giving you your CEFNS database id (the same as your CAS id) and a password. You will also be given another id, without a password. Keep this second id handy (you can give it a password if you wish).

You won't need to download any additional tools, assuming that you already downloaded XAMPP. If you haven't, then you should first go to the *CEFNS Web Hosting* document and follow those directions.

CEFNS MySQL:

The first thing to do is log into the CEFNS server and change your password from that difficult one you were given to something more reasonable. It does not have to match what you use for XAMPP. You can also log in with the second id and give it a password – remember, you have to log into the id that you want to change. To get to the login screen, go to <u>https://www.cefns.nau.edu/IT/mysql/</u> - it is behind CAS, so you may be prompted for your login if you haven't already logged in. It also requires you to be on the NAU network, either wired, wireless (on NAU, not NAU GUEST), or VPN. If you are working from home and don't have the VPN set up, go to <u>http://nau.edu/its/services/vpn/</u> for instructions and help. Once you have gotten to the first link successfully, you should see something like the screen below.

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1 – CEFNS phpMyAdmin Login

Put in the userid and password and in the pulldown for server choice, select 'tund'. Again, if you aren't already logged into CAS you may be presented with a CAS login screen before you can continue. You should, once successfully logged in, see a screen like the one in the next image.

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		Version information: 3.4.9 Documentation Wiki Official Homepage Contribute Get support ✓			

2 – phpMyAdmin home screen

Notice that the information bar on the left shows you the databases you have access to (you only need the one with the same name as your CAS id). The MySQL block has which id you are currently logged in with and the General Settings block has a link that allows you to change your password. I suggest you do this right away so you don't have to keep using that difficult one that was emailed to you.

Ok, I will assume that you have logged into both your ids and set your password(s) as you wish. That's all you need to do on CEFNS right now, so you can log out (there's an icon like an open door with a green arrow under the phpMyAdmin logo; if you hover the mouse over it you get a tooltip that reads 'Log out'.). Next we are going to set up your local MySQL that you installed with XAMPP.

LOCAL MySQL:

To start up the phpMyAdmin for your local server, enter localhost/xampp in the browser. You will be prompted for your XAMPP credentials (you didn't lose them, I hope) and you will get the XAMPP home screen once you've successfully logged in. Looking down the menu on the left, you will find phpMyAdmin under Tools. Clicking on that, you will get the familiar phpMyAdmin login screen but here the username will be 'root' and the password will be the one you set up for MySQL when you installed XAMPP.

Now you will see a home screen similar to the one from the CEFNS server, but probably with more databases listed. There should be one with the same name as your CAS id, but don't panic if it is not there. We can fix that (if you already have the database, skip to the next paragraph). Simply click on the Databases tab at the top of the window. You'll get a screen like the one following this paragraph. Enter the database name you want in the Create database field (I've entered 'pek7') and click the Create button. That's all there is to it.



3 - Creating a database

Now that you have a database, click the Users tab and find Add user (near the bottom of the user list) and click that. You'll get a window that's rather long so it took two images to show it all on the next page. The top part lets you enter the name and password; you should match the CAS id but the password can be different. You should also use the dropdown next to Host: to select 'local'. Leave Database for user selected at None (or select it if one of the other choices is selected), then scroll down to Global privileges and click on Check All. Finally, scroll down to the bottom and click on the Add user button. You have now created a user equivalent to root that has full permissions on your server for all the databases, including the one we just created for you to do development with. From now on, this will be the one you most often log into phpMyAdmin with.

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4 - Add User

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5 - Add user permissions

Repeat these steps with the other id you were given with the following exceptions. First, make sure it's password matches the one you set up on CEFNS (if you didn't give it a password, use the dropdown to select 'No password'). Second, at Global Permssions, click on Uncheck All. We are going to go back and specify exactly what it can do later. Now click the Add user button.

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6 - User list

You should end up with a list like the one above. I've created a user 'pek7' to match my database, but with all global permissions (I can do anything with this login). I've also created a second user, 'pek7test', with no permissions at all (this would be the second id that you were given). Next we want to give the second id some limited privileges, so click Edit Privileges right next to it and then scroll down to Database-specific privileges to get a screen like the one below.

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7 - Adding database privileges

Notice I've entered my database in the text field. You should enter your database and then click the Go button below and to the right.



You should get a screen like the one above. Notice that at the top it says which user and which database – be sure it is your second user id and the right database. You will have to manually check all the boxes under data and then click the Go button (not to worry, we can always change permissions later if we need to). You should get a message that the permissions have been granted.

That's it. The basic setup is done and you can log off or return to the home screen. We'll learn in class how to create and modify the structure of your database and copy that structure to the CEFNS version. We'll also learn how to store and use data and how to use the second id to enable your web pages to access your database.

As before, I welcome suggestions for improvements to this document. Let me know about any cool tools you've found or any techniques that help. Especially let me know if something doesn't work; things change and I don't always know if something has been affected.