

EECS Tutorial: cslab-db MariaDB/MySQL service

FAQ for accessing the cslab-db MariaDB/MySQL service for CS 665

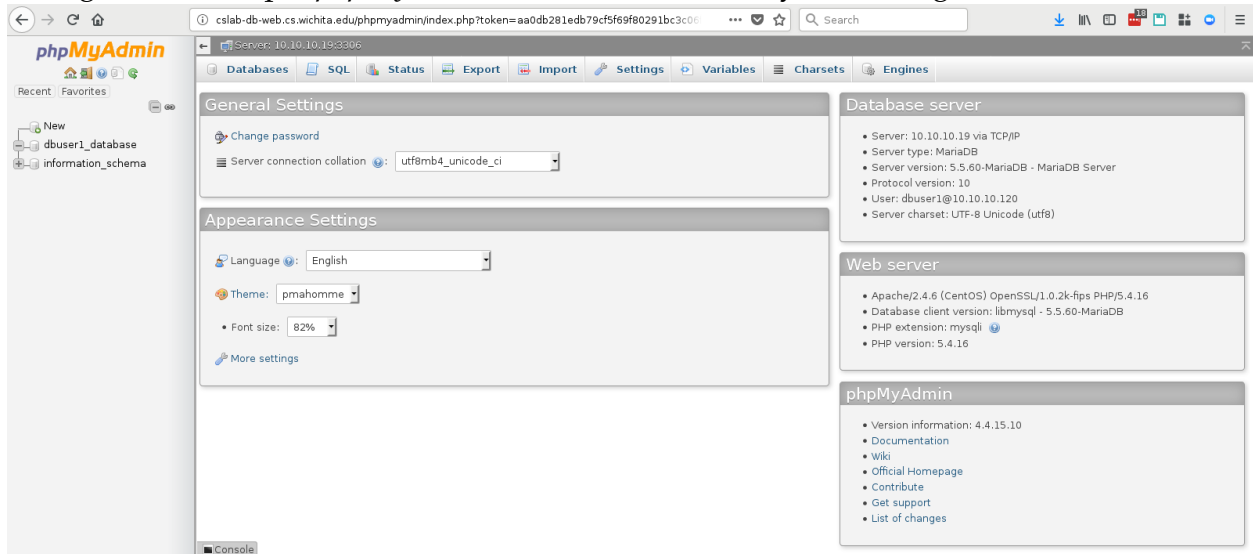
How do I access the <i>phpMyAdmin</i> interface for cslab-db from a web-browser?	2
How do I access cslab-db using MySQL shell from the cslab Linux environment? . .	3
What do I do if I cannot access the cslab Linux environment?	3
How do I embed SQL queries in my code/program for running within the cslab Linux environment?	4

How do I access the *phpMyAdmin* interface for cslab-db from a web-browser?

1. Open your favorite web-browser and go to the cslab-db-web *phpMyAdmin* interface at cslab-db-web.cs.wichita.edu
2. At the login screen enter the dbuser# and password given to you by your course instructor and you will be presented with the *phpMyAdmin* home screen.
3. You will have access to create, modify, insert, and delete tables, fields, and queries within the dbuser#_database assigned to you for your course project.
4. You can also use a MySQL console at the bottom of the *phpMyAdmin* home screen.
5. To log out of the *phpMyAdmin* interface, click on the *log out* icon under the logo on upper left of the window.
6. For further information on how to use *phpMyAdmin*, see [phpMyAdmin tutorials](#).

NOTE: Due to WSU security policies, cslab-db-web can only be remotely accessed from on campus in the labs or after connecting into the university VPN service at vpn.wichita.edu.

Figure 1: Example *phpMyAdmin* home screen when you first log into cslab-db-web



How do I access cslab-db using MySQL shell from the cslab Linux environment?

1. Follow the [eecs_tutorial_cslab_web_access](#) document to log into [cslab-gateway.cs.wichita.edu](#) using a web-browser.
2. Once logged into cslab *guacamole*, open either a **cslab_RDP_GUI_desktop** or **cslab_SSH_CLI_terminal** connection.
3. If you are using a **cslab_RDP_GUI_desktop** connection, then open a terminal emulator window, such as *LXTerminal* or *Terminator*.
4. Alternatively, you can directly SSH into a cslab node if you have previously configured your SSH client. For further information on configuring an SSH client to access cslab, please follow the [eecs_tutorial_cslab_ssh_access](#) document.
5. Connect directly to the cslab-db MariaDB server from the cslab terminal by typing (where # is the dbuser assigned to you by your course instructor)
`mysql -h cslab-db.cs.wichita.edu -D dbuser#_database -u dbuser# -p`
6. Enter the password given to you by your instructor when prompted to do so.
7. Once connected to cslab-db, you can use MariaDB/MySQL shell commands to create, modify, insert, and delete tables, fields, and queries within the `dbuser#_database` assigned to you for your course project.
8. To exit from the mysql shell, type `exit` or press CTRL+D.
9. For further information on how to use MariaDB/MySQL commands, please see the [MariaDB Training & Tutorials knowledge base](#).
10. For further information on the mysql shell command and associated option flags, please see the [official mysql man page](#).

What do I do if I cannot access the cslab Linux environment?

- If you cannot access the cslab environment, ensure you have changed your myWSU password within the last three months and can access the myWSU main website [mywsu.wichita.edu](#). If you cannot access the myWSU website, then you will need to change your password before gaining access into the cslab environment.
- If you can access myWSU but cannot access the cslab environment, please contact the EECS systems administrator, ben.roose@wichita.edu.

How do I embed SQL queries in my code/program for running within the cslab Linux environment?

1. Follow the [eecs_tutorial_cslab_web_access](#) document to log into [cslab-gateway.cs.wichita.edu](#) using a web-browser.
2. Once logged into cslab *guacamole*, open either a **cslab_RDP_GUI_desktop** or **cslab_SSH_CLI_terminal** connection.
3. Alternatively, you can directly SSH into a cslab node if you have previously configured your SSH client. For further information on configuring an SSH client to access cslab, please follow the [eecs_tutorial_cslab_ssh_access](#) document.
4. Code your C, C++, or Java program within cslab using a MariaDB/MySQL API connector.
5. You will need to use the following details in your code to access your MySQL database (where # is the dbuser assigned to you by your course instructor).
 - host: `cslab-db.cs.wichita.edu`
 - port: `3306`
 - database: `dbuser#_database`
 - user: `dbuser#`
 - password: (the password assigned to you by your course instructor)
6. You will find a simple Java example using the MariaDB Connector/J with the standard Java JDBC API in [Ben Roose's GitHub repository here](#).
7. To compile and run Ben's Java example code, you will need to first clone/download his `cslab_db_java_test` repository by typing

```
git clone https://github.com/benroose/cslab_db_java_test.git
```
8. For further instructions on how to compile and run Ben's example code, follow the README.md file included within the newly cloned/downloaded directory.
9. For further information on how to use MariaDB/MySQL API connectors, please see the [MariaDB Application Programming Interfaces documentation](#).
10. For questions on how to implement SQL queries within your code or if you wish to use a MySQL connector not currently installed within cslab, please speak with your course instructor.