# EECS Tutorial: cslab-db MariaDB/MySQL service

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

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#### 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.

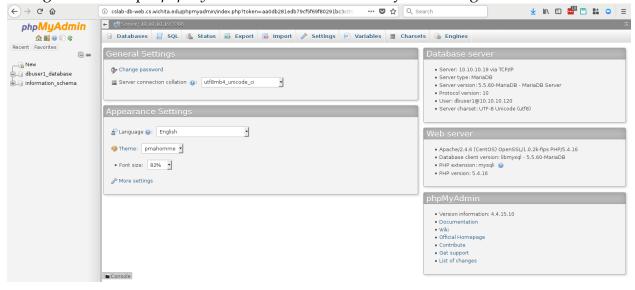


Figure 1: Example phpMyAdmin home screen when you first log into cslab-db-web

#### 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.
- 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 any of the installed MySQL API connectors.
  - Currently installed MySQL API connectors include the MySQL Connector for C/C++ and the Java database (JDBC) driver for MySQL.
- 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

• db: dbuser# database

• user: dbuser#

- passwd: (the password assigned to you by your course instructor)
- 6. For further information on how to use MariaDB/MySQL API connectors, please see the MariaDB Application Programming Interfaces documentation.
- 7. 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.