Active Reading Assistant

Server Installation Setup Guide

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This document provides a comprehensive guide for setting up a MySQL server on a Linux-enabled machine via the Linux terminal. The objectives of this guide are to:

- Install a MySQL server on a Linux enabled machine such as ix-dev
- Create an account that allows remote access the database.

STEP 1: Log on to the Linux-enabled server

To begin, log on to a Linux-enabled machine, such as the University of Oregon Computer Science department machine ix, using the following terminal command:

```
ssh username@ix.cs.uoregon.edu
```

Replace “username” with your login name if you are using the ix-dev server.

STEP 2: Install MySQL

Navigate to your home directory and run the following command to install MySQL:

```
mysqlctl install
```

During installation, you'll be prompted to enter a password of your choice. Remember this password for future MySQL commands.

STEP 3: Start the MySQL Server

Initiate the MySQL server by running:

```
mysqlctl start
```

This command not only starts the server but also creates a .my.cnf file and generates a port.

STEP 4: Verify server status

Check the status of the MySQL server by running:

```
mysqlctl status
```

Make note of the port number displayed in the output. It will be used to connect to the server remotely.

An example output is*: mysqld (pid 898545) listening on ix-dev:3932* where the port is 3932.

Alternatively, if you have administrative account privileges on your Linux machine, use the command:

```
mysqladmin -p version
```

And note the TCP port number.

STEP 5: Access the MySQL terminal
Enter the MySQL query terminal by running:

```
mysql -p
```

You'll see mysql> on the left side, indicating that you can now enter queries.

STEP 6: Create a database
Create the Active Reading Assistant database by typing:

```
CREATE DATABASE sq3r_db;
```

STEP 7: Create a user and grant privileges
Create a user with the following query:

```
CREATE USER 'username'@'%' IDENTIFIED BY 'password';
```

Replace "username" and "password" with your desired credentials.

Grant privileges to the database with the following query:

```
GRANT ALL PRIVILEGES ON sq3r_db.* TO 'username'@'%' WITH GRANT OPTION;
```

Replace "username" with the username identified when creating a user.

STEP 8: Create database tables
Run the following queries to create necessary tables:

```
CREATE TABLE `sq3r_db`.`user` (user_id INT AUTO_INCREMENT PRIMARY KEY,
username VARCHAR(255) NOT NULL);
```

```
CREATE TABLE `sq3r_db`.`files` (`id` INT AUTO_INCREMENT PRIMARY KEY,
`file_id` INT,`file_name` VARCHAR(255) NOT NULL);
```

```
CREATE TABLE `sq3r_db`.`notes` (`note_id` INT AUTO_INCREMENT PRIMARY
KEY, `user_id` INT, `file_id` INT, `note` LONGTEXT, FOREIGN KEY
(user_id) REFERENCES `user`(user_id), FOREIGN KEY (file_id) REFERENCES
`files`(id));
```

STEP 9: Finalize setup

Exit the MySQl query terminal by typing:

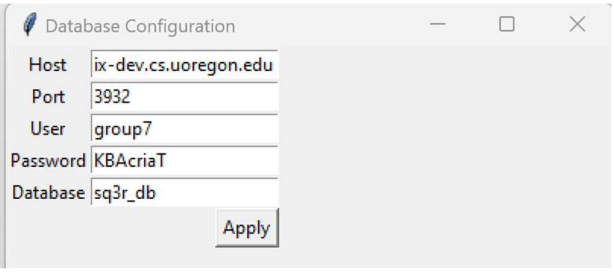
```
exit
```

Your server is now set up and the user can exit the terminal accessing the Linux server.

STEP 10: Configure Active Reading Assistant
Launch the Active Reading Assistant application and enter the following server information:

- Host: Enter the server domain name (example: ix-dev.cs.uoregon.edu)
- Port: Enter the port number captured in step 4
- Username: Enter the username created in step 7
- Password: Enter the password created in step 7
- Database: Enter sq3r_db

You should have a similar configuration to the one below:



If there are no errors after applying the server settings, the MySQL server setup is now complete and ready for use with the Active Reading Assistant application.