

Installing MySQL securely on Ubuntu following the CIS benchmarks involves several steps:

### 1. Update and Upgrade:

- Begin by ensuring your system is up-to-date with the latest security patches.expand\_more  
Use the following commands:

```
sudo apt update  
sudo apt upgrade
```

### 2. Install MySQL Server:

- Use the APT package manager to install the MySQL server package:

```
sudo apt install mysql-server
```

### 3. Initial Security Script:

- After installation, run the included security script to perform basic configuration:

```
sudo mysql_secure_installation
```

This script will prompt you to set a strong root password, remove anonymous users, disallow remote root login, and reload the privilege tables.

### 4. Secure Configuration:

- Edit the MySQL configuration file (/etc/mysql/my.cnf) using a text editor with root privileges.
- Locate the bind-address option and ensure it's set to listen only on localhost (127.0.0.1) by default. This restricts access from external machines.
- Consider additional security options in the configuration file based on the CIS benchmarks, such as:
  - Disabling test database (test)
  - Enabling the log\_warnings option

### 5. Dedicated User and Privileges:

- Create a dedicated user for your applications to access the database instead of the root user. This minimizes potential damage if the user credentials are compromised.

- Grant the user only the necessary privileges for their specific tasks within the database.

#### **6. Secure Connections (Optional):**

- For enhanced security, consider using encrypted connections with tools like `mysql_ssl`.
- This involves configuring the server and client for SSL/TLS connections.[expand\\_more](#)

#### **7. Keep Updated:**

- Regularly update MySQL packages to address vulnerabilities.[expand\\_more](#)

#### **Additional Resources:**

- CIS MySQL Benchmark for Ubuntu: While not directly available online, you can find references and explanations in security guides that reference the CIS benchmarks. Search for "CIS MySQL Security Benchmarks Ubuntu" for relevant resources.
- MySQL Documentation: <https://dev.mysql.com/doc/>

Remember, this is a general guideline. Consult the official CIS MySQL benchmarks for Ubuntu for the most up-to-date and detailed security recommendations.