



THE UNIVERSITY OF
MELBOURNE

Tutorial Week 1

INFO90002





Agenda

- Meet tutor and other students
- Introduction to MySQL Server and MySQL Workbench
- Installation of MySQL Server and MySQL Workbench
- Bonus Activity



Introduction to MySQL

MySQL is a brand, with a range of products

- MySQL Server
- MySQL Workbench
- MySQL Utilities

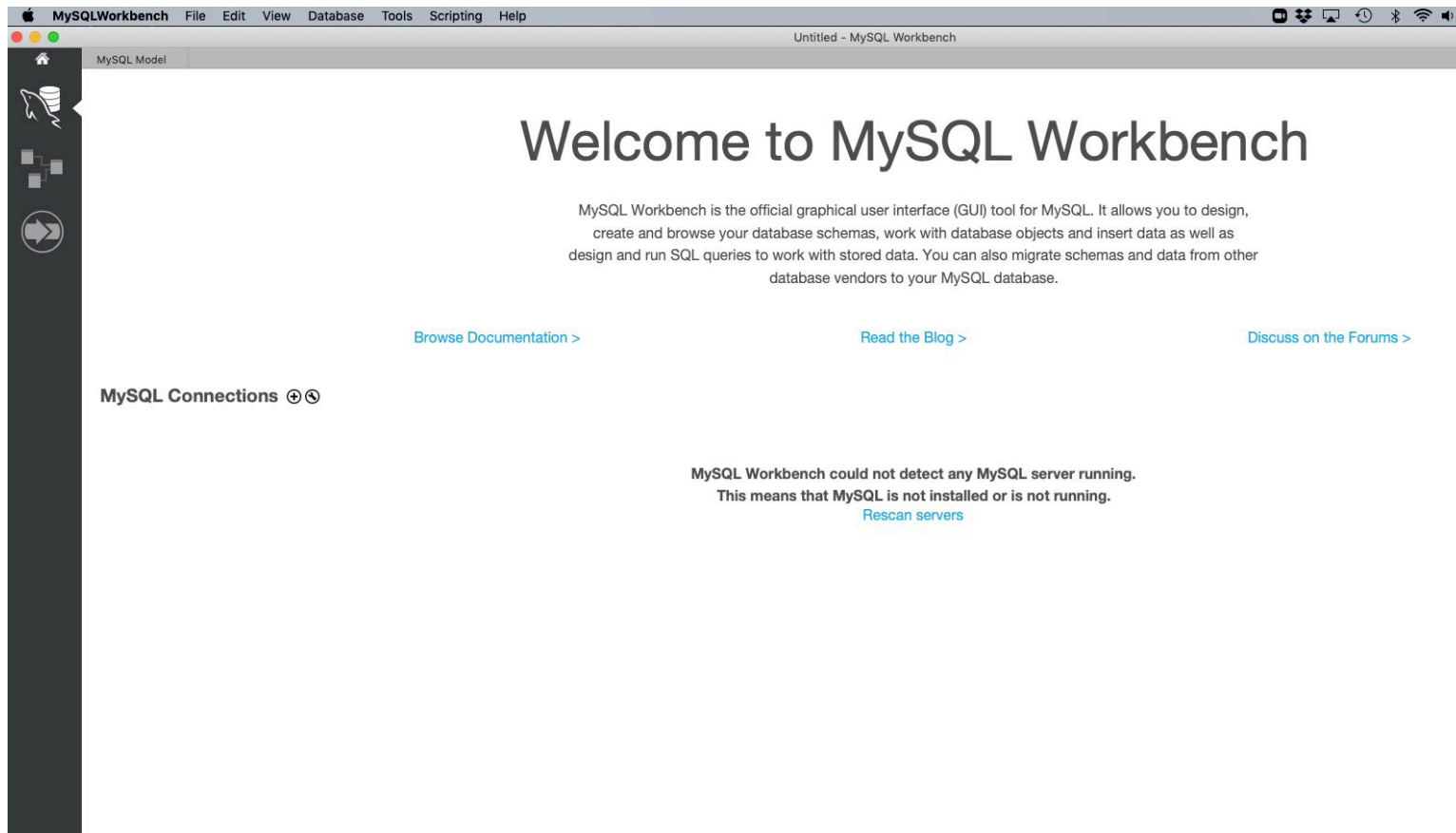
MySQL Server is a relational database management system

MySQL Workbench is a graphic user interface used to connect to and work with MySQL server

MySQL Workbench creates a connection to the database server over a network



Workbench demonstration





Installation

Install MySQL Server and MySQL Workbench

- MySQL Server

Be sure to download the **MySQL Community Server** edition (includes the whole package)

<https://dev.mysql.com/downloads/mysql/>

- MySQL Workbench from this link (only if you already have the server)

<http://dev.mysql.com/downloads/workbench/>

The binaries of these downloads are also in Canvas

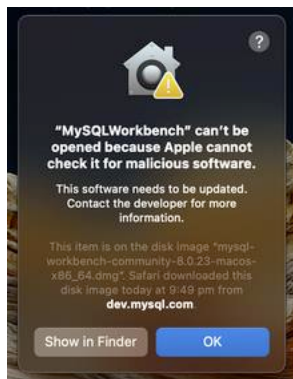
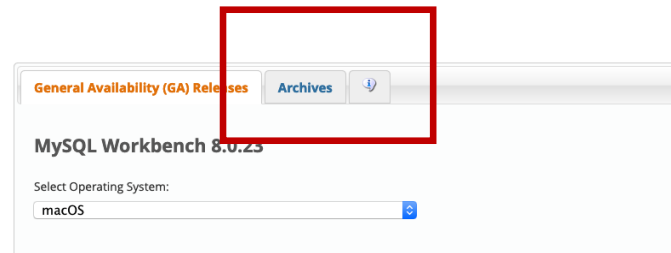
Some notes...

MacOS

If you are using Mac m1 chip, try version 8.0.21 (Find it in the *Archives* tab)

If you get the security message, go to

System Preferences > *Security and Privacy* > approve the app to be downloaded





Some notes...

Windows

- MySQL Installer for Windows

Prerequisites

- You may need to install **Microsoft C++ packages** <https://dev.mysql.com/doc/refman/8.0/en/windows-installation.html>
However, if installing as a developer package (shown on the following slides), Windows will resolve and install missing packages without need for intervention

General Availability (GA) Releases Archives

MySQL Community Server 8.0.28

Select Operating System:
Microsoft Windows

Looking for previous GA versions?

Recommended Download:

MySQL Installer for Windows

All MySQL Products. For All Windows Platforms. In One Package.

Starting with MySQL 5.6 the MySQL Installer package replaces the standalone MSI packages.

Windows (x86, 32 & 64-bit), MySQL Installer MSI

[Go to Download Page >](#)

Other Downloads:

Windows (x86, 64-bit), ZIP Archive (mysql-8.0.28-winx64.zip)	8.0.28	211.7M	Download
Windows (x86, 64-bit), ZIP Archive Debug Binaries & Test Suite (mysql-8.0.28-winx64-debug-test.zip)	8.0.28	506.3M	Download

MD5: f1a0cfb0086256a56c81e1fe75e1338c | [Signature](#)

MD5: b8d45945da1d823bec37e30f6847c54f | [Signature](#)

Mysql-installer-community

MySQL Community Downloads

MySQL Installer

General Availability (GA) Releases Archives ⓘ

MySQL Installer 8.0.28

Select Operating System:
Microsoft Windows ▼

[Looking for previous GA versions?](#)

Windows (x86, 32-bit), MSI Installer (mysql-installer-web-community-8.0.28.0.msi)	8.0.28	2.3M	Download
Windows (x86, 32-bit), MSI Installer (mysql-installer-community-8.0.28.0.msi)	8.0.28	435.7M	Download

MD5: 514567a7503999d271a20b86057f15d0 | [Signature](#)

MD5: ef223cbd7873a057d5aa0abcfa596201 | [Signature](#)

! We suggest that you use the [MD5 checksums](#) and [GnuPG signatures](#) to verify the integrity of the packages you download.

Do NOT sign up, just download

MySQL Community Downloads

Login Now or Sign Up for a free account.

An Oracle Web Account provides you with the following advantages:

- Fast access to MySQL software downloads
- Download technical White Papers and Presentations
- Post messages in the MySQL Discussion Forums
- Report and track bugs in the MySQL bug system

Login »

using my Oracle Web account

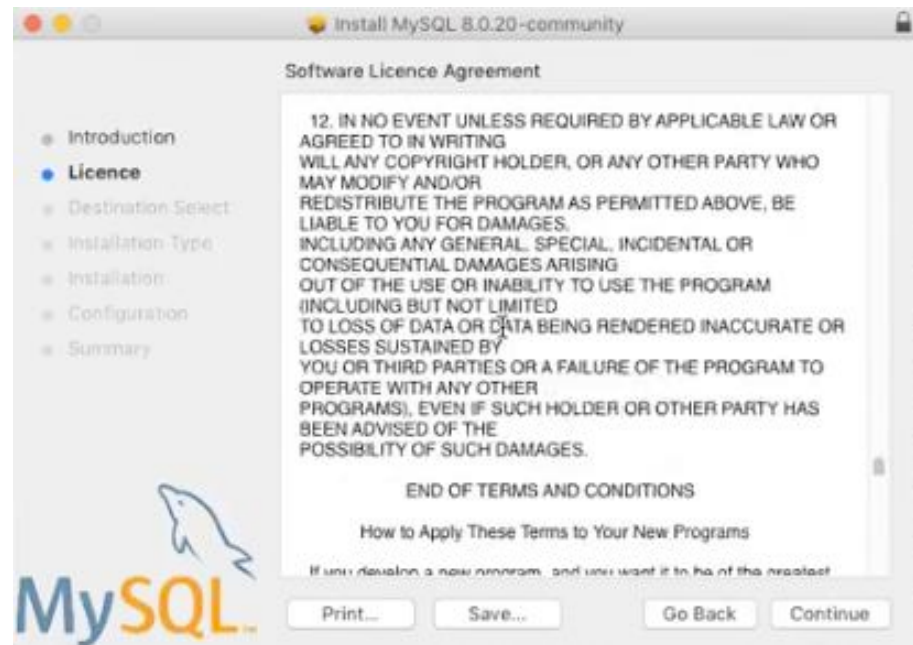
Sign Up »

for an Oracle Web account

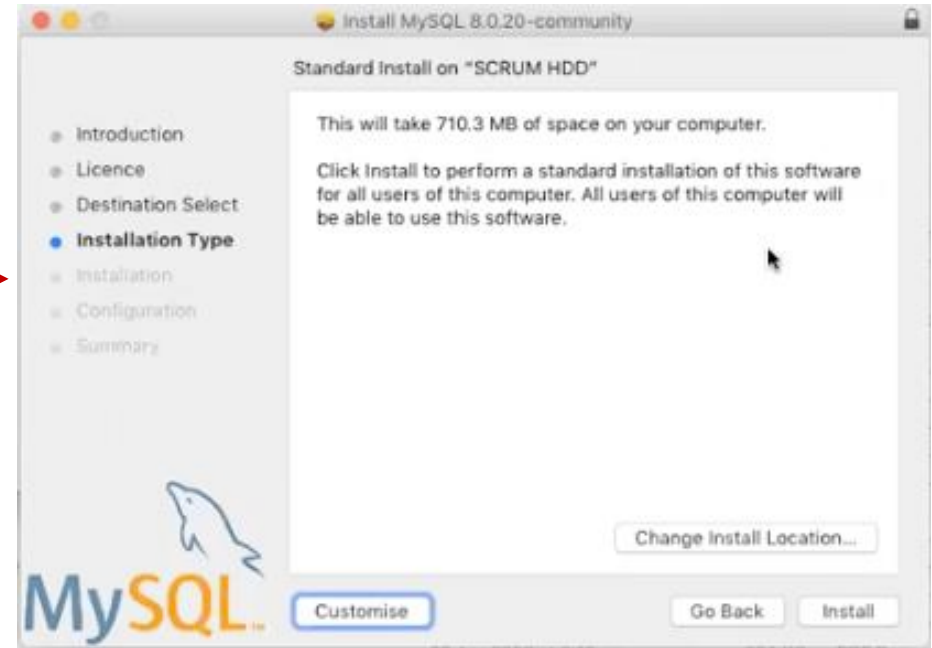
MySQL.com is using Oracle SSO for authentication. If you already have an Oracle Web account, click the Login link. Otherwise, you can signup for a free account by clicking the Sign Up link and following the instructions.

No thanks, just start my download.

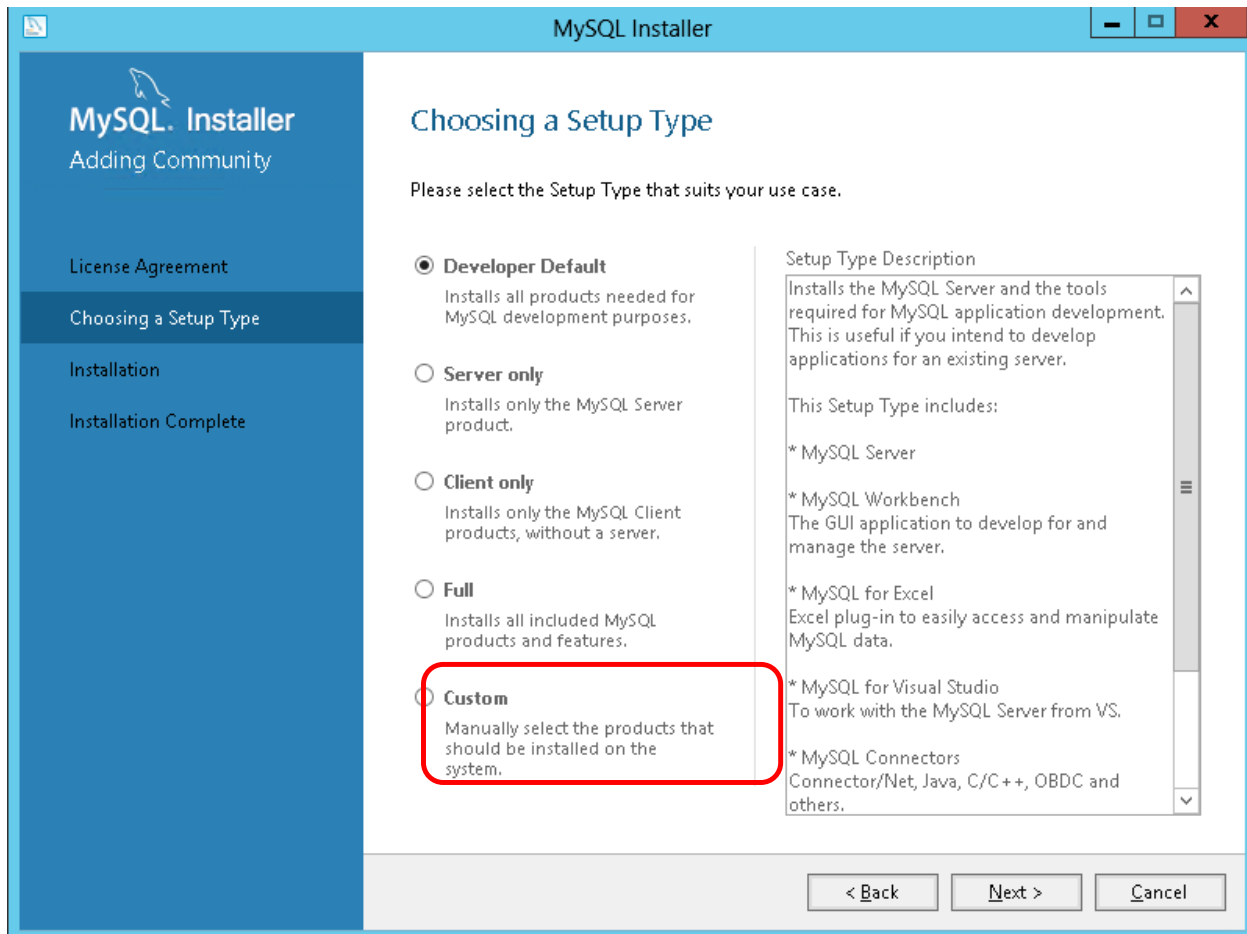
Installing MySQL Server on Mac



Installing MySQL Server on Mac



Installing MySQL Server on Windows



Windows: MySQL Custom Installation

MySQL Installer

MySQL® Installer
Adding Community

Choosing a Setup Type

Select Products

Installation

Product Configuration

Installation Complete

Select Products

Please select the products you would like to install on this computer.

Filter:

Available Products:

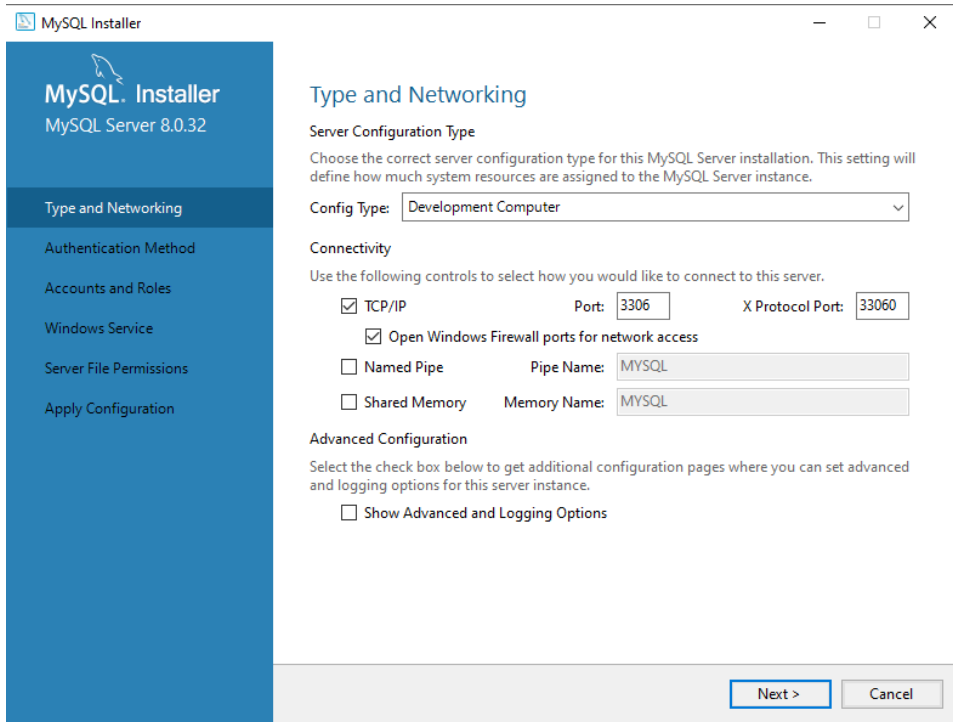
- MySQL Servers
 - MySQL Server
 - MySQL Server 8.0
 - MySQL Server 8.0.28 - X64
- Applications
 - MySQL Workbench
 - MySQL Workbench 8.0
 - MySQL Workbench 8.0.28 - X64
 - MySQL for Visual Studio
 - MySQL Shell
 - MySQL Router
- MySQL Connectors
- Documentation

Products To Be Installed:

- MySQL Server 8.0.28 - X64
- MySQL Workbench 8.0.28 - X64

☐ Enable the Select Features page to customize product features

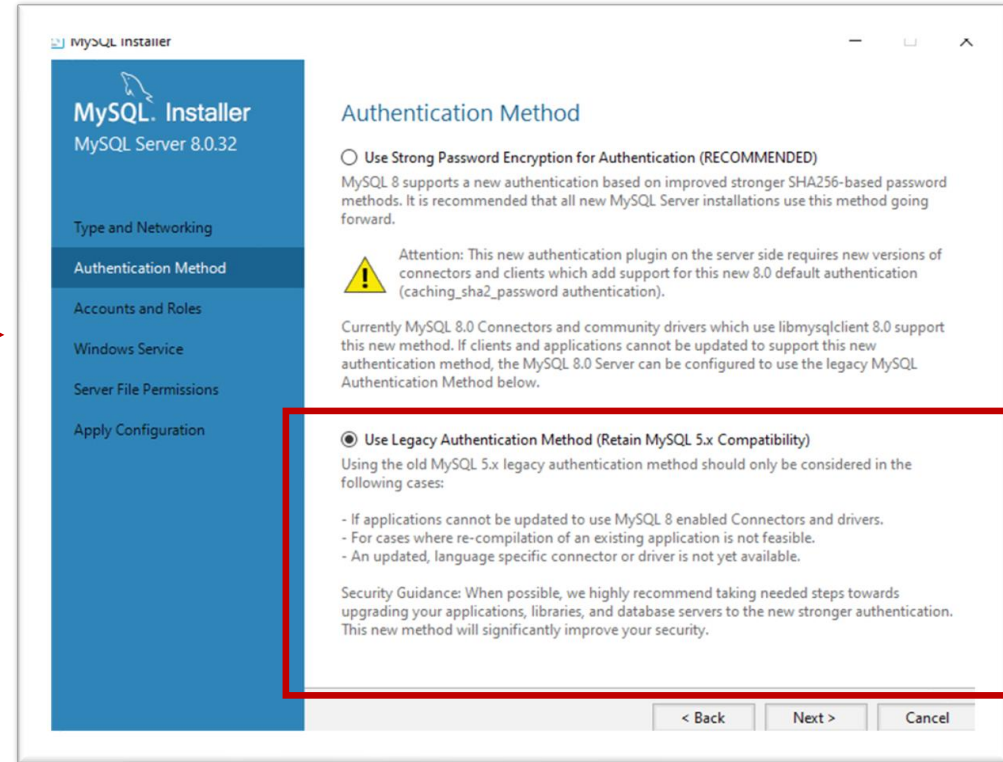
Windows installation and Password Encryption Settings



The screenshot shows the 'Type and Networking' screen of the MySQL Installer for MySQL Server 8.0.32. The left sidebar lists the installation steps: Type and Networking (selected), Authentication Method, Accounts and Roles, Windows Service, Server File Permissions, and Apply Configuration. The main area is titled 'Type and Networking' and contains the following sections:

- Server Configuration Type:** A dropdown menu set to 'Development Computer'. Below it is a description: 'Choose the correct server configuration type for this MySQL Server installation. This setting will define how much system resources are assigned to the MySQL Server instance.'
- Connectivity:** A section with the instruction 'Use the following controls to select how you would like to connect to this server.' It includes:
 - ☒ TCP/IP: Port: 3306, X Protocol Port: 33060
 - ☒ Open Windows Firewall ports for network access
 - ☐ Named Pipe: Pipe Name: MYSQL
 - ☐ Shared Memory: Memory Name: MYSQL
- Advanced Configuration:** A section with the instruction 'Select the check box below to get additional configuration pages where you can set advanced and logging options for this server instance.' It includes:
 - ☐ Show Advanced and Logging Options

At the bottom right are 'Next >' and 'Cancel' buttons.



The screenshot shows the 'Authentication Method' screen of the MySQL Installer for MySQL Server 8.0.32. The left sidebar is the same as the previous screen. The main area is titled 'Authentication Method' and contains the following sections:

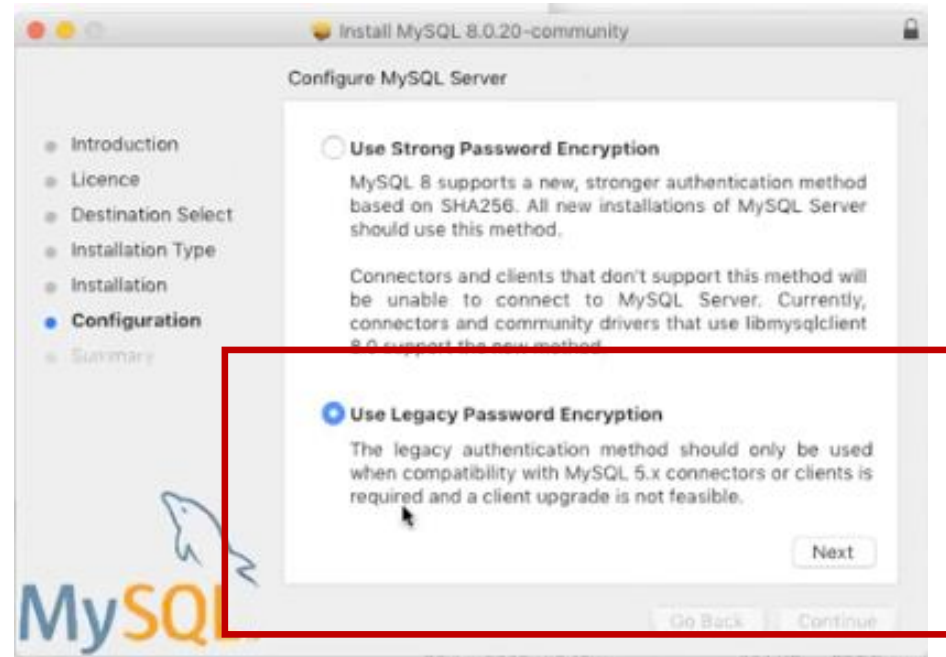
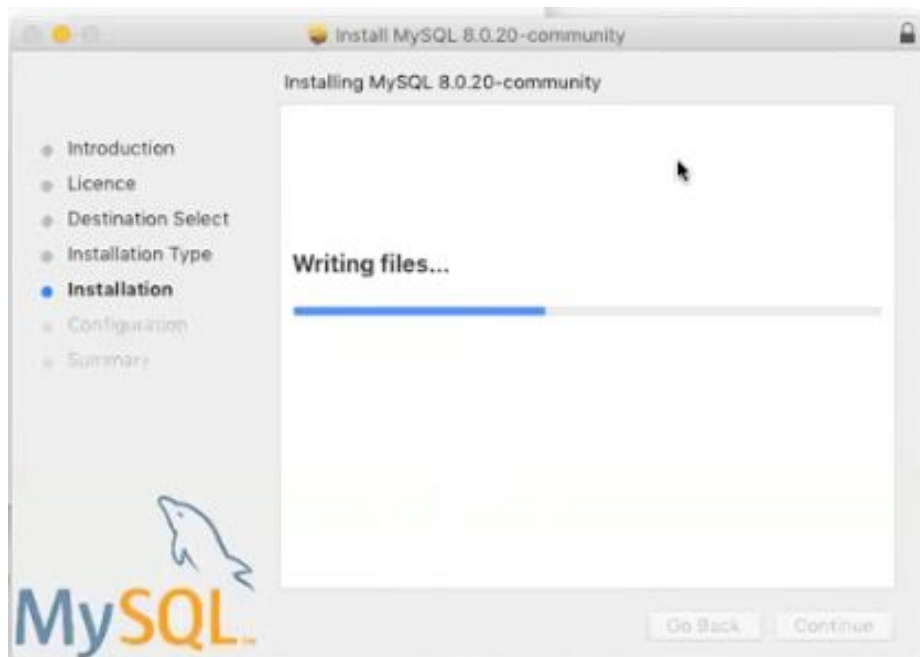
- Use Strong Password Encryption for Authentication (RECOMMENDED):** A radio button option. Below it is a description: 'MySQL 8 supports a new authentication based on improved stronger SHA256-based password methods. It is recommended that all new MySQL Server installations use this method going forward.'
- Attention:** A yellow warning icon followed by the text: 'This new authentication plugin on the server side requires new versions of connectors and clients which add support for this new 8.0 default authentication (caching_sha2_password authentication).'
- Currently MySQL 8.0 Connectors and community drivers which use libmysqlclient 8.0 support this new method. If clients and applications cannot be updated to support this new authentication method, the MySQL 8.0 Server can be configured to use the legacy MySQL Authentication Method below.**
- Use Legacy Authentication Method (Retain MySQL 5.x Compatibility):** A radio button option, which is highlighted with a red rectangle. Below it is a description: 'Using the old MySQL 5.x legacy authentication method should only be considered in the following cases:' followed by a list:
 - If applications cannot be updated to use MySQL 8 enabled Connectors and drivers.
 - For cases where re-compilation of an existing application is not feasible.
 - An updated, language specific connector or driver is not yet available.
- Security Guidance:** A paragraph stating: 'When possible, we highly recommend taking needed steps towards upgrading your applications, libraries, and database servers to the new stronger authentication. This new method will significantly improve your security.'

At the bottom right are '< Back', 'Next >', and 'Cancel' buttons.

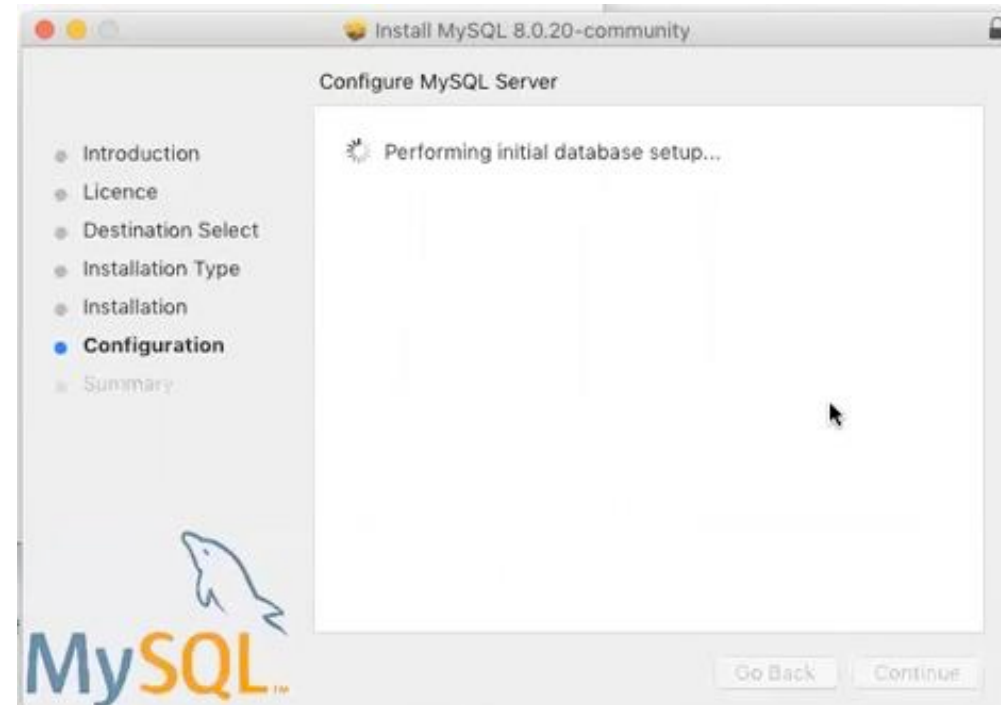
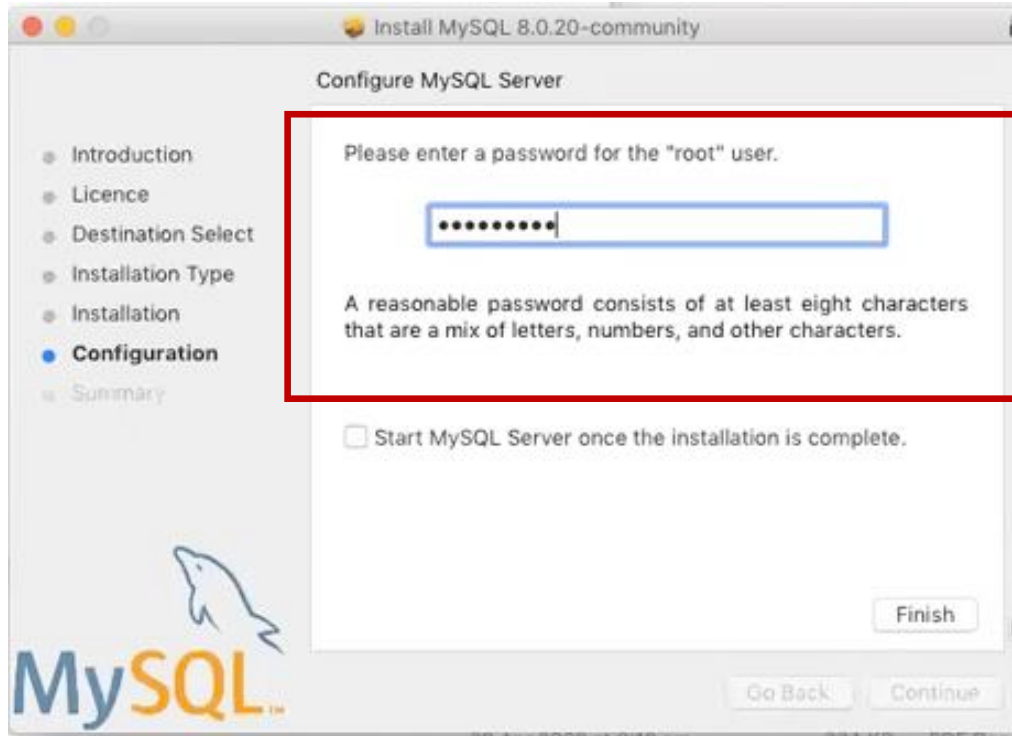
Leave default settings

After you enter password, keep default settings on all following screens

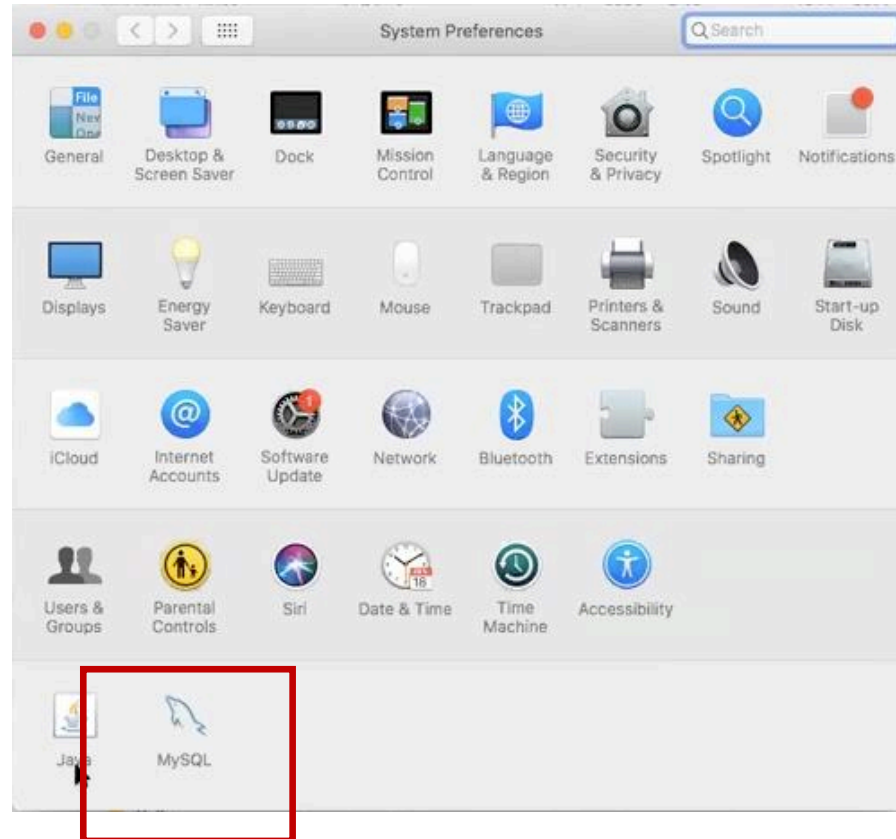
Installing MySQL Server on Mac



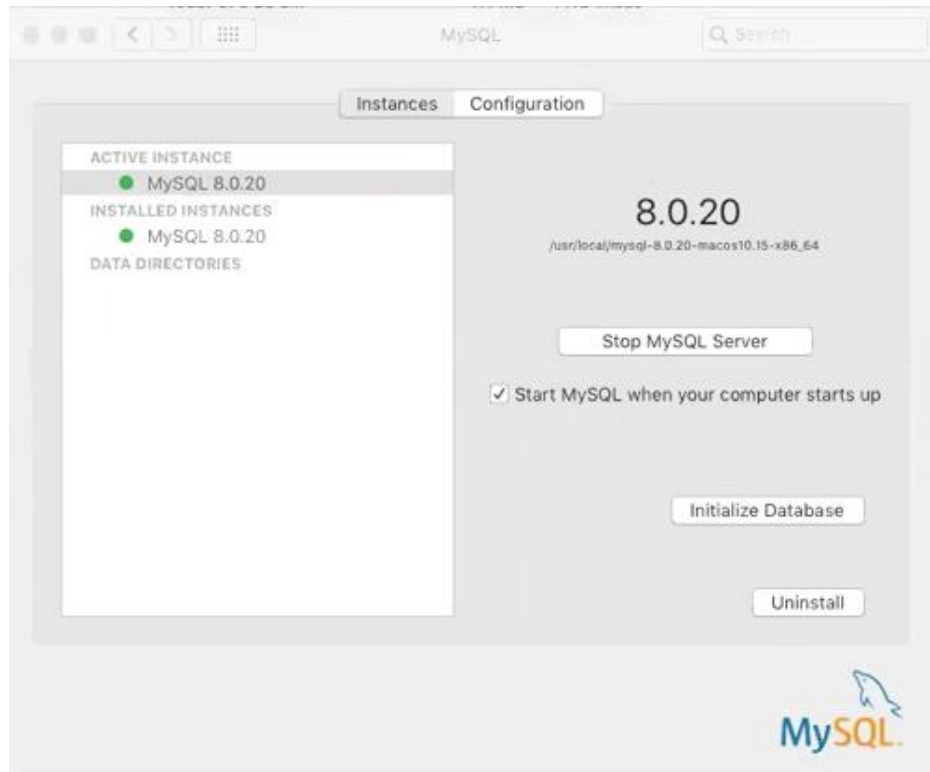
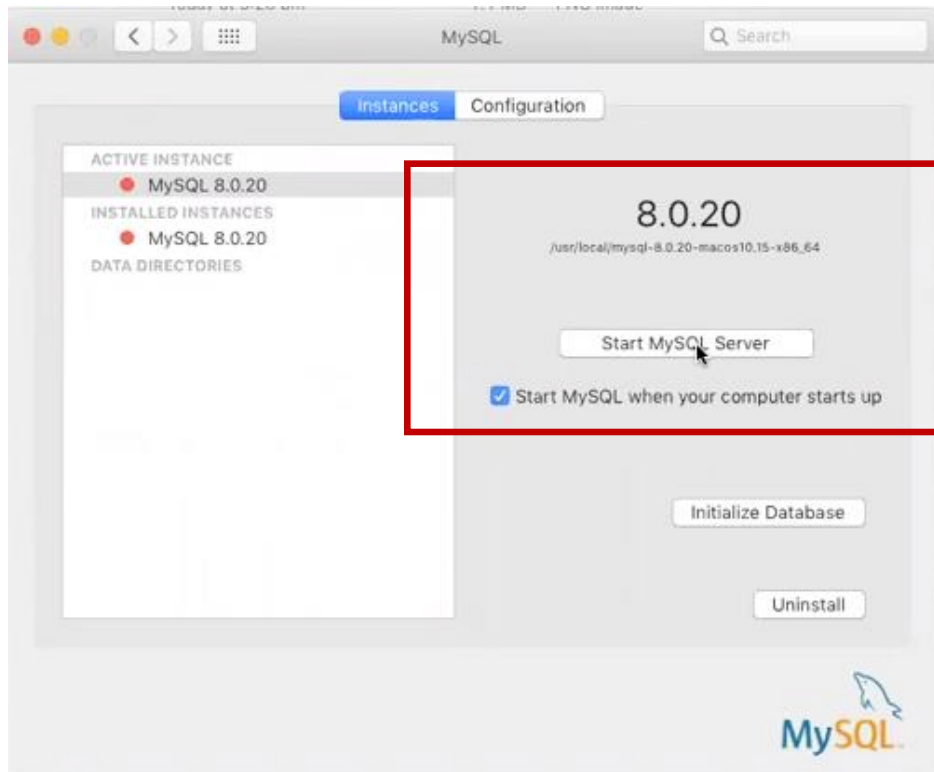
Installing MySQL Server on Mac



Installing MySQL Server on Mac



Installing MySQL Server on Mac

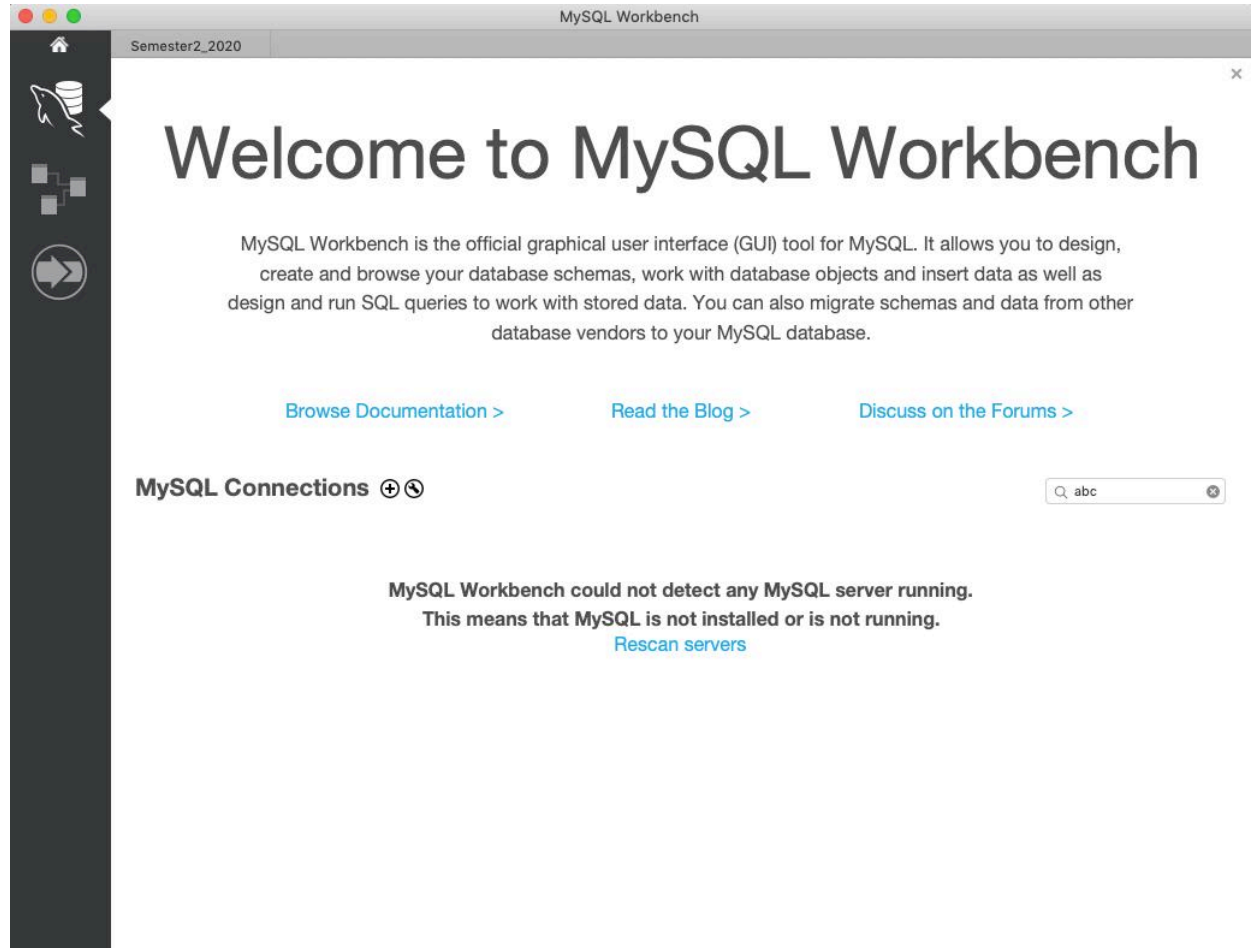


Installing MySQL Workbench on Mac





MySQL Workbench

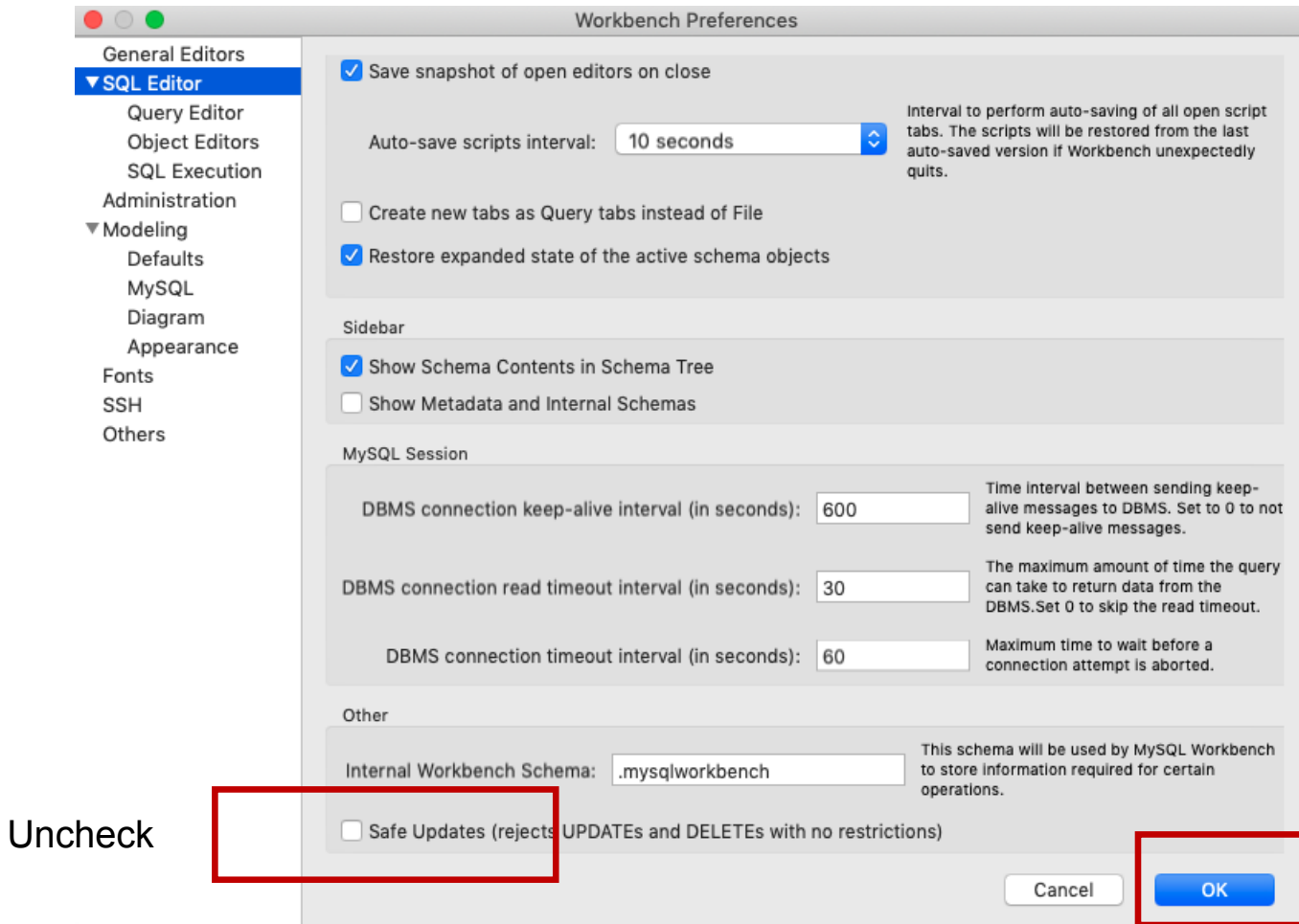




Remove Safe Mode

- In the navigation menu, go to:

MySQLWorkbench >
Preferences >
SQL Editor



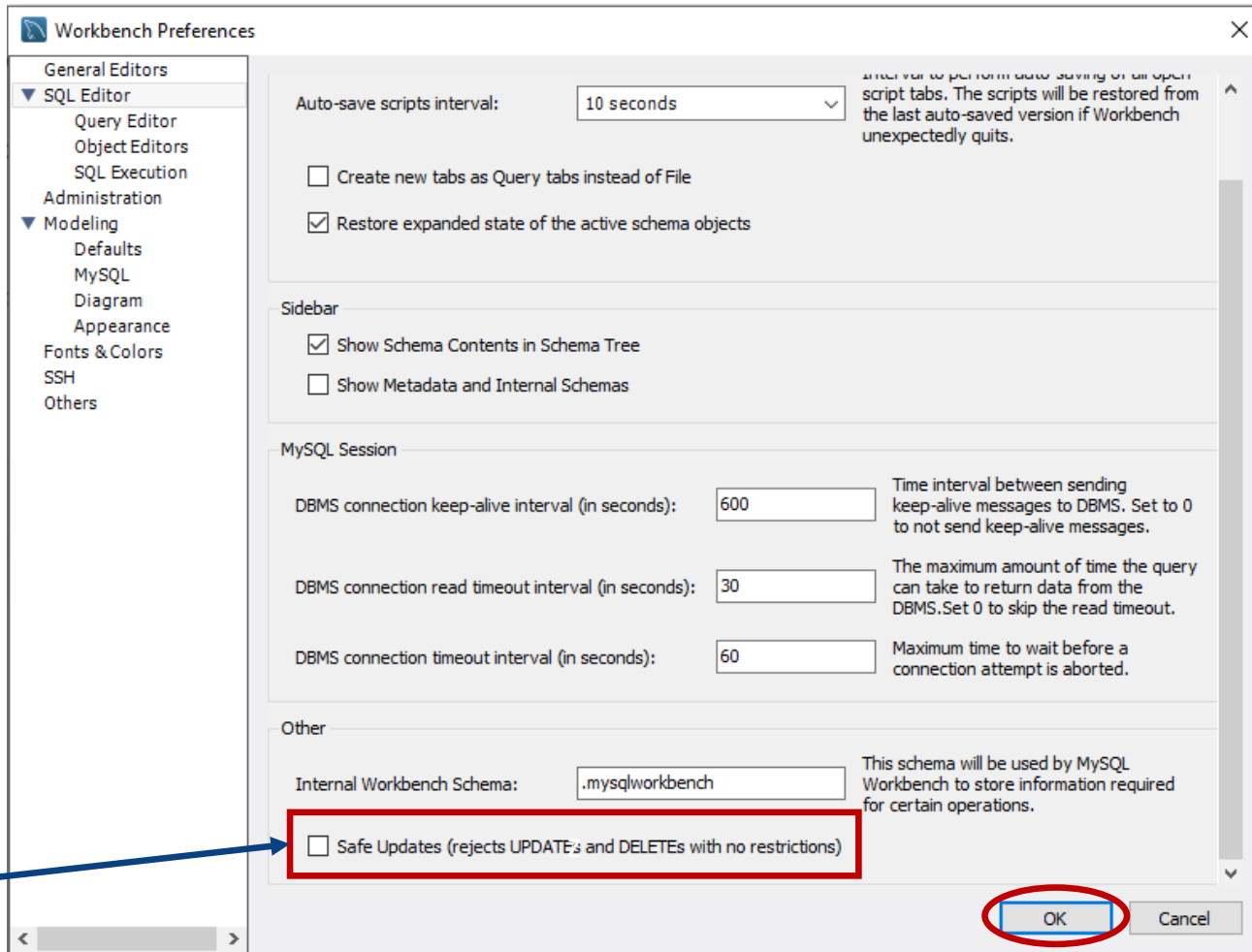
Remove Safe Mode on Windows

- In the navigation menu, go to:

Edit >

Preferences >

SQL Editor



Uncheck,
click OK



If you cannot connect to the server

- Ensure you are using your UNIMELB username
- Ensure that your username is in lowercase
- Ensure you are connected to the unimelb Wi-Fi or the VPN
(If you are on unimelb lab computer, you do not need VPN)
- Try retyping everything – you may have misspelt something



Exercise

Brainstorm:

- What tables could be used to create this order confirmation?
- What columns some of these tables could contain?
- See lecture 1 slides 25-26 for help

TICKETS ORDER

Order Date: 7/02/2022 4:00:10 PM

Order Number: 39727316

Customer Number: 21128361

Order Total: \$346.45

Your Account Information:

Mr John Lin

PO Box 180

PARKVILLE, VIC 3010

Description	Location	Seats	Price	Total
An American in Paris Wed 16 Mar 2022 7:30pm Arts Centre Melbourne, State Theatre	Circle	A 41	\$169.00	\$338.00
	Circle	A 42	\$169.00	
Subtotal:				\$338.00
Fees:				\$8.45
Total:				\$346.45

For full Terms and Conditions, see our policies here: [Terms and Conditions](#)

To understand how we will use the information we have collected from you at time of purchase, please read our [Privacy Policy](#).



Thank you

- Use the discussion board (Ed discussions) in Canvas if you are having issues with the installation of Workbench.
- Please detail your:
 - Operating system
 - Issue
 - Screenshot of issue