

CSCI 332 Database Concepts

Fall 2020

G. Pothering

Laboratory 3 Database Backup and Restoration in MySQL using MySQL Workbench

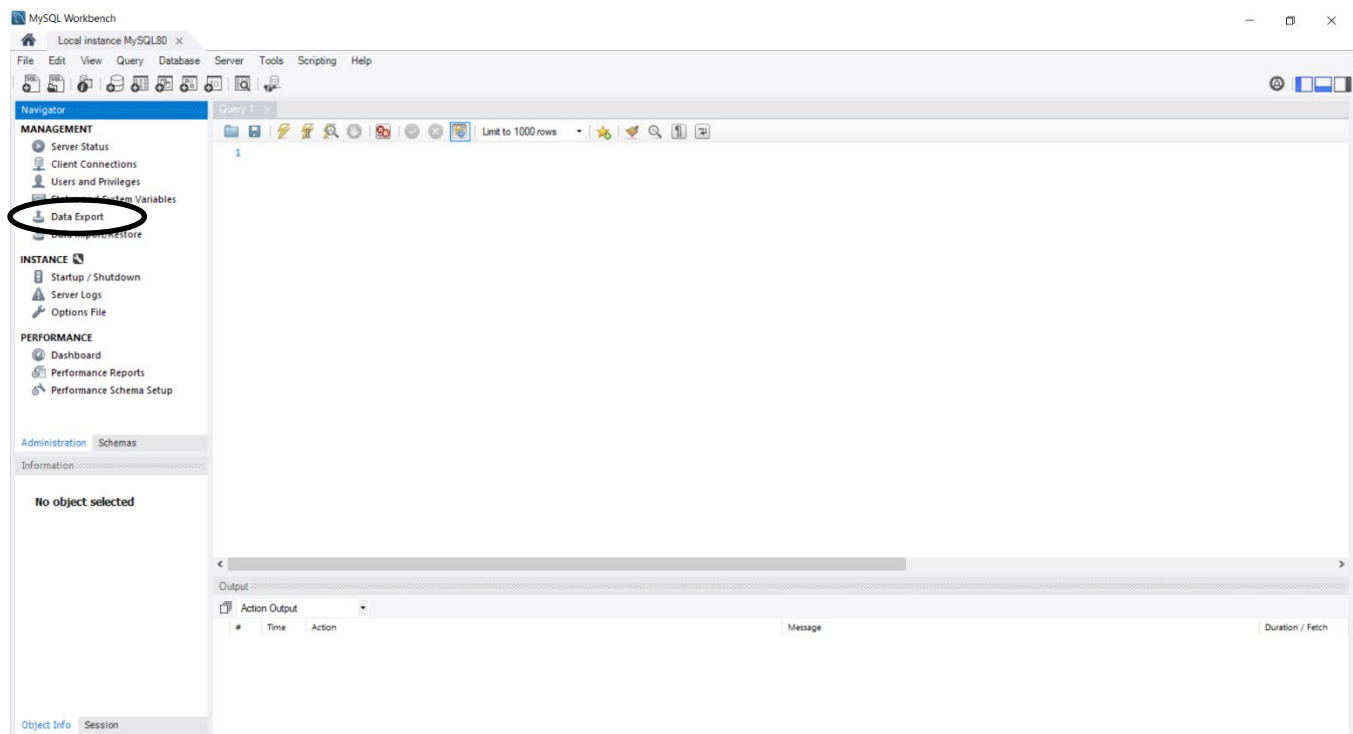
In this lab we discuss how to backup and restore databases in MySQL using MySQL Workbench. This will also be our principal means for moving a database from one system to another.

Database Backup and Restoration is generally not a task performed by a general user of a database intended for use by multiple users concurrently, but rather is an administrative task carried out by a database administrator.

Database Backup

Here we will work with the **university***YourInitials* database you created in Laboratory 2.

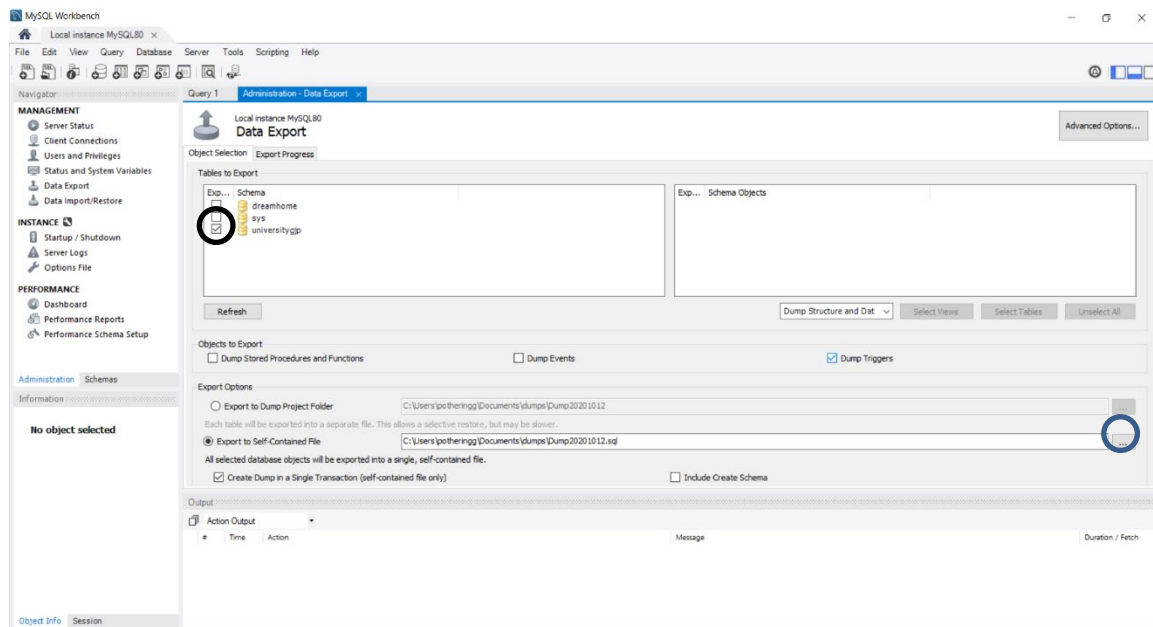
1. Start MySQL Workbench and then activate a connection to local instance of MySQL. Once the connection panel is open, check to be sure that MySQL is running, and if not start it. By clicking the Administration tab in the left-hand panel, if necessary, you should be able to produce a window similar to the following:



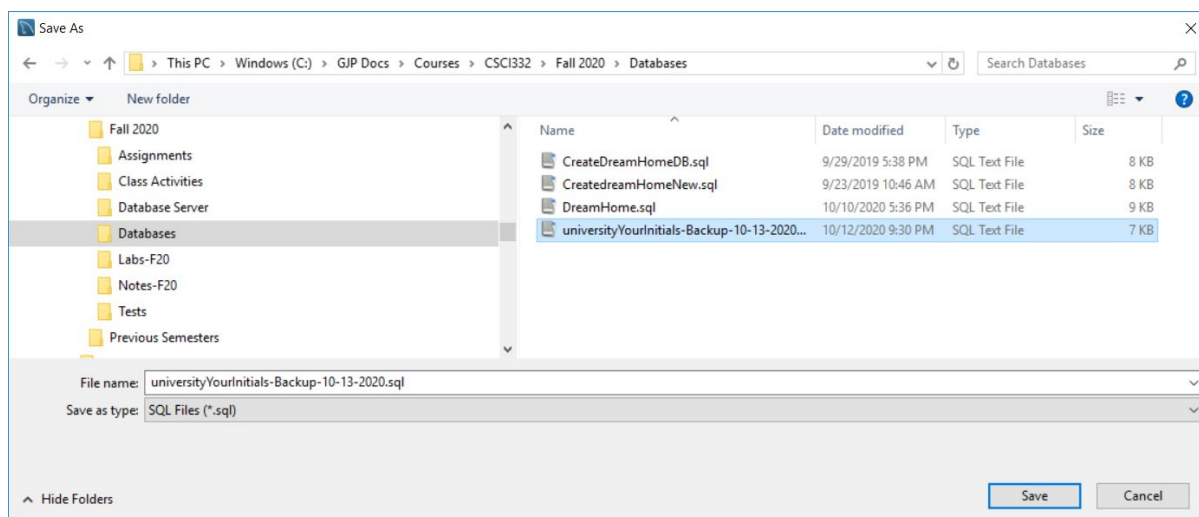
2. Next, click on the Data Export entry, circled above.

This will start up an Administration - Data Export tab as shown below

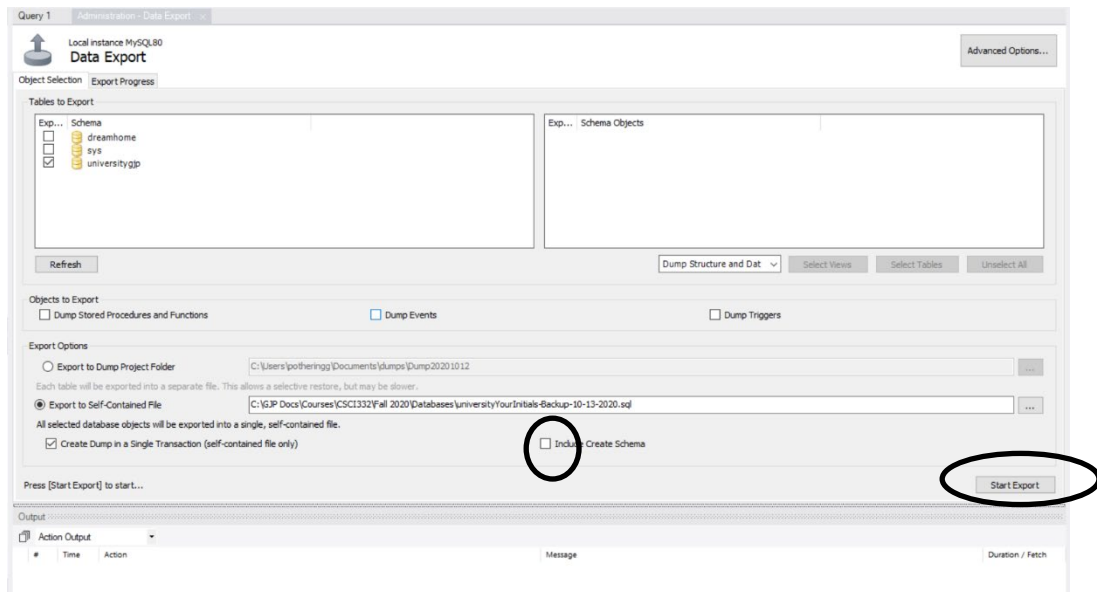
- Click in the checkbox next to the the **universityYourInitials** entry and then in the window that opens up next, click in the part of the window where it says **Export to Self-Contained File**. Then click in the three-dot entry at the right-hand side of this line (all circled below).



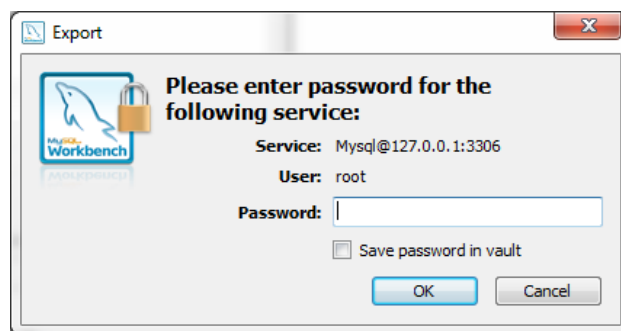
- In the resulting **Save As** window navigate to a folder where you want to store your backup. Once there, give your backup the name **universityYourInitials-Backup-10-13-2020.sql** (it's a good idea to date/timestamp your backups).



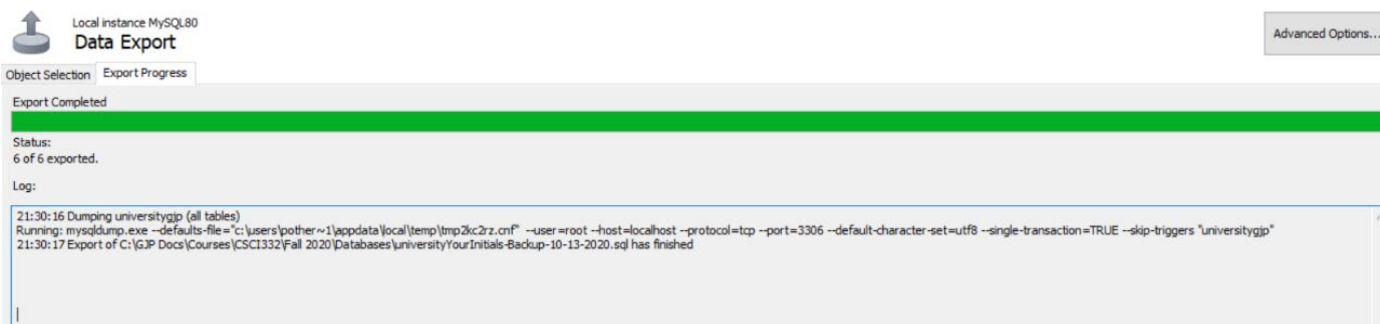
- Click **Save** in the **Save As** window. You will be returned to the **Data Export** panel in MySQL Workbench.
- Once there, place a checkmark in the **Include Create Schema** box (circled below) and then click on the **Start Export** button (also circled below). If you do not see it, you may have to push down the output panel to reveal it.



Some of you see a window where you are asked to provide a password for user root (the default name for the administrator)



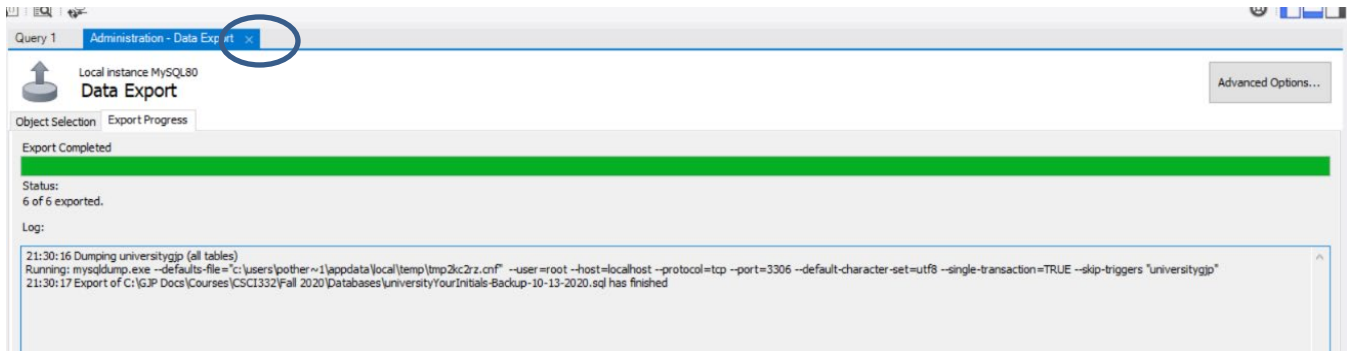
You should then see a progress window such as the following, with a green progress marker moving across the top component.



The important things you want to see are "Export Completed" and also nothing in the Log window that indicates an error has arisen. You may get some warnings, or other types of notifications, but as long as the export concludes successfully, you can ignore these.

If there are any problems, the Log panel may help you determine just what caused it.

You are done! If you wish you can close the Admin panel in which you have been working by clicking on the X in the right-hand side of the tab (shown below), or by right-clicking on the tab and selecting **Close**.



Restoring a New Database from a Backup

The steps used to restore a database from a backup are identical to those in Lab 1, where we created the **dreamhome** schema from a backup. Consequently we shall not repeat these steps here.

Submission: When you have completed this lab upload the file **universityYourInitials-Backup-10-13-2020.sql** to the Lab 3 dropbox on OAKS.