

Part 1: MySQL Backup and Recovery

First is running the CMD as Administrator

```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.26100.3775]
(c) Microsoft Corporation. All rights reserved.

C:\Windows\System32>
```

Then navigate to the path which is “C:\Program Files\MySQL\MySQL Server 9.2\bin”

```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.26100.3775]
(c) Microsoft Corporation. All rights reserved.

C:\Windows\System32>cd C:\Program Files\MySQL\MySQL Server 9.2\bin
C:\Program Files\MySQL\MySQL Server 9.2\bin>
```

`mysqldump -u root -p your_database_name > /path/to/destination/backup.sql`

for example

`mysqldump -u root -p library_ms > "C:\Users\akwean\Downloads\backup.sql"`

```
Microsoft Windows [Version 10.0.26100.3775]
(c) Microsoft Corporation. All rights reserved.

C:\Users\akwean>cd 'C:\Program Files\MySQL\MySQL Server 9.2\bin'
The filename, directory name, or volume label syntax is incorrect.

C:\Users\akwean>cd "C:\Program Files\MySQL\MySQL Server 9.2\bin"

C:\Program Files\MySQL\MySQL Server 9.2\bin>mysqldump -u root -p library_ms > "C:\Users\akwean\Downloads\backup.sql"
Enter password: ****

C:\Program Files\MySQL\MySQL Server 9.2\bin>
```

Simulate dropping database

First is go to the `mysql -u root -p` to open the MySQL Command Line Client

```
C:\Program Files\MySQL\MySQL Server 9.2\bin>mysql -u root -p
Enter password: ****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 51
Server version: 9.2.0 MySQL Community Server - GPL

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql>
```

Then drop the table

```
mysql> drop database library_ms;
Query OK, 10 rows affected (0.17 sec)

mysql>
```

Next is create the database again:

```
mysql> CREATE DATABASE library_ms;
Query OK, 1 row affected (0.01 sec)

mysql> exit
Bye

C:\Program Files\MySQL\MySQL Server 9.2\bin>
```

Then type **Exit** to exit the MySQL Command Line Client

Next is restore it using `mysql -u root -p library_ms < "C:\Users\akwean\Downloads\backup.sql"`

```
C:\Program Files\MySQL\MySQL Server 9.2\bin>mysql -u root -p library_ms < "C:\Users\akwean\Downloads\backup.sql"
Enter password: ****
```

Part 2: Cloud Deployment

I choose to use railway so sign up and created the **MySQL** from the service templates.

Then us the public network to connect

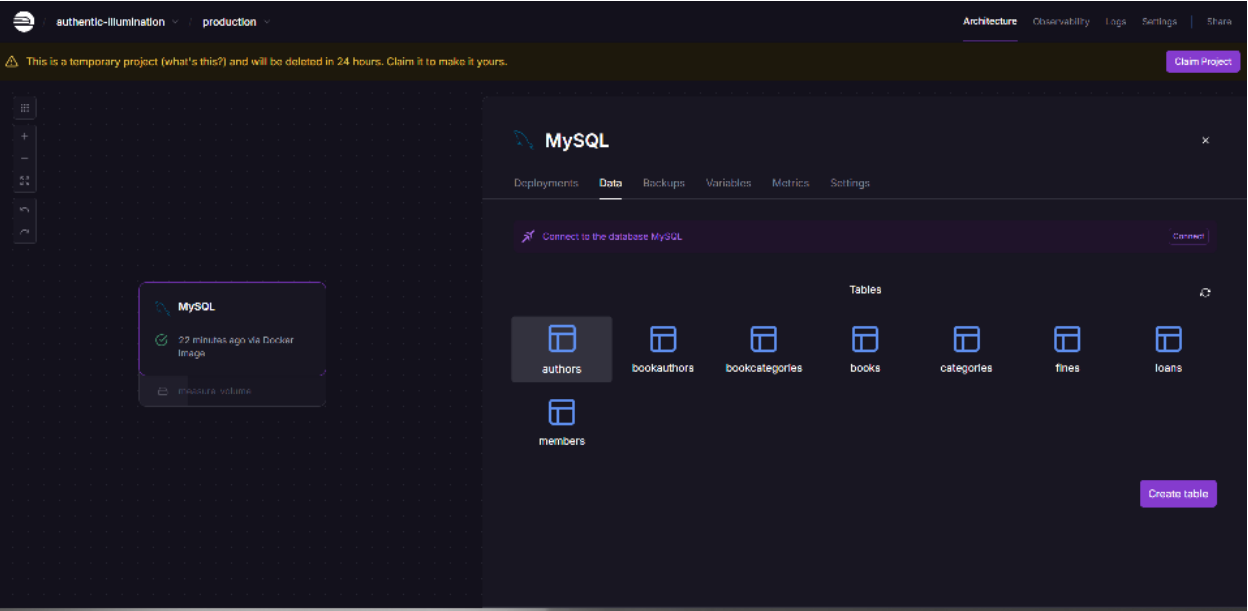


Then I uploaded it using

`mysql -h caboose.proxy.rlwy.net -u root -pqTwPuQDooeAjByuugZhksEHgZWIXRrNA --port 30615 --protocol=TCP railway < "C:\Users\akwean\Downloads\backup.sql"`

```
C:\Program Files\MySQL\MySQL Server 9.2\bin>mysql -h caboose.proxy.rlwy.net -u root -pqTwPuQDooeAjByuugZhksEHgZWIXRrNA --port 30615 --protocol=TCP railway < "C:\Users\akwean\Downloads\backup.sql"
mysql: [Warning] Using a password on the command line interface can be insecure.
ERROR 1114 (HY000) at line 419: The table 'members' is full
```

But it got the message the it said members is full means it has reach the free tier capacity.



So I check the Mysql cli of the Railway

This the results

```
mysql> select count(*) as rowcount from members
-> ;
+-----+
| rowcount |
+-----+
|    90039 |
+-----+
1 row in set (0.26 sec)

mysql> select count(*) as rowcount from bookcategories;
+-----+
| rowcount |
+-----+
|   164719 |
+-----+
1 row in set (0.28 sec)

mysql> select count(*) as rowcount from categories;
+-----+
| rowcount |
+-----+
|   110000 |
+-----+
1 row in set (0.27 sec)
```

```
mysql> select count(*) as rowcount from books;
+-----+
| rowcount |
+-----+
|    110000 |
+-----+
1 row in set (0.27 sec)

mysql> select count(*) as rowcount from authors;
+-----+
| rowcount |
+-----+
|    110000 |
+-----+
1 row in set (0.37 sec)

mysql> select count(*) as rowcount from publishers;
ERROR 1146 (42S02): Table 'railway.publishers' doesn't exist
mysql> select count(*) as rowcount from users;
ERROR 1146 (42S02): Table 'railway.users' doesn't exist
mysql> select count(*) as rowcount from bookauthors;
+-----+
| rowcount |
+-----+
|    219985 |
+-----+
1 row in set (0.35 sec)

mysql> |
```

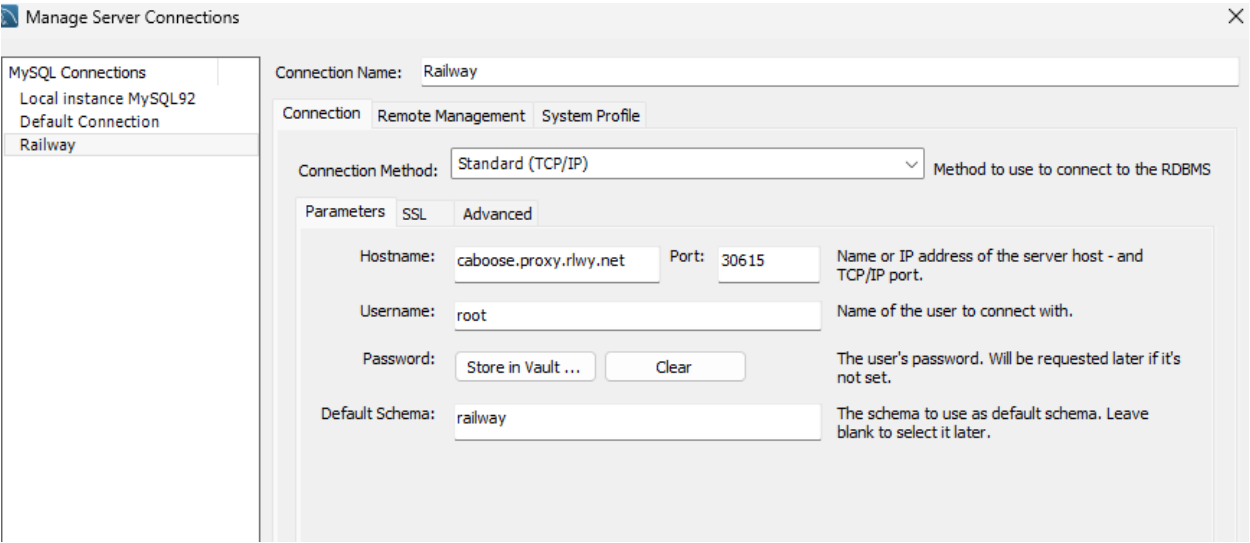
```
mysql> select count(*) as rowcount from loans;
+-----+
| rowcount |
+-----+
|    110002 |
+-----+
1 row in set (0.27 sec)

mysql> select count(*) as rowcount from fines;
+-----+
| rowcount |
+-----+
|    110001 |
+-----+
1 row in set (0.25 sec)

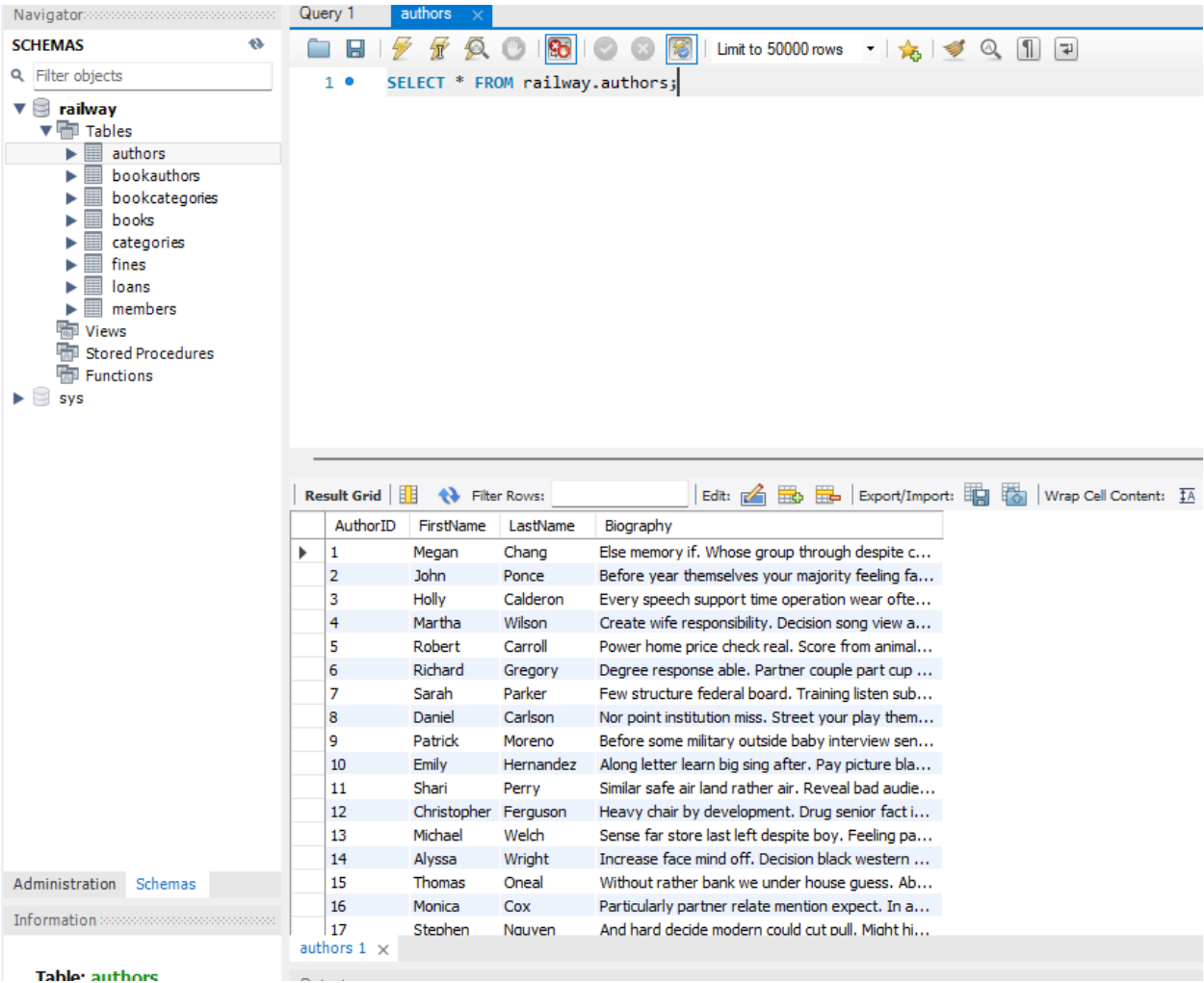
mysql> |
```

So three tables (Publishers, Users, BookAuthors) even the Members table only got 90k of it rows were not uploaded because of the 0.512 gb storage limit of the Railway.

At last I was able to connect it to the work bench



This is the railway connection



There except the problems missing tables because the free tier only has 512mb
it is working fine

This is the in my local sql connection

Navigator

SCHEMAS

Filter objects

library_ms

Tables

Views

Stored Procedures

Functions

sys

library_ms Load_infile authors publishers bookcategories categories boo

Limit to 50000 rows

1 • SELECT * FROM library_ms.authors;

2 • select Count(*) as rowcount

3 from library_ms.authors;

4

5 • DELETE FROM library_ms.authors;

6

7 • ALTER TABLE library_ms.authors AUTO_INCREMENT = 1;

Result Grid Filter Rows: Edit: Export/Import:

	AuthorID	FirstName	LastName	Biography
▶	1	Megan	Chang	Else memory if. Whose group through despite c...
	2	John	Ponce	Before year themselves your majority feeling fa...
	3	Holly	Calderon	Every speech support time operation wear ofte...
	4	Martha	Wilson	Create wife responsibility. Decision song view a...
	5	Robert	Carroll	Power home price check real. Score from animal...
	6	Richard	Gregory	Degree response able. Partner couple part cup ...
	7	Sarah	Parker	Few structure federal board. Training listen sub...
	8	Daniel	Carlson	Nor point institution miss. Street your play them...
	9	Patrick	Moreno	Before some military outside baby interview sen...
	10	Emily	Hernandez	Along letter learn big sing after. Pay picture bla...
	11	Shari	Perry	Similar safe air land rather air. Reveal bad audie...
	12	Christopher	Ferguson	Heavy chair by development. Drug senior fact i...
	13	Michael	Welch	Sense far store last left despite boy. Feeling pa...
	14	Alyssa	Wright	Increase face mind off. Decision black western ...
	15	Thomas	Oneal	Without rather bank we under house guess. Ab...
	16	Monica	Cox	Particularly partner relate mention expect. In a...
	17	Stephen	Nguyen	And hard decide modern could cut pull. Might hi...
	18	Ryan	Hawkins	Must cut father kid painting movie end discussio...

authors 1 x