

MySQL Workbench

Big Data Systems

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Important note

- Using MySQL Workbench is NOT needed for HW
- But you can use it instead of using CLI

Installing MySQL Workbench

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

TAU's CS MySQL Server

- <https://www.cs.tau.ac.il/system/MySQL>
- **UPDATE**
 - sakila is on ~~mysqlsrv~~ and mysqlsrv1
 - Your own account (if created) is on mysqlsrv1
not needed for the HW

Sakila

- A sample database/schema
- User: sakila
Password: sakila
Server: mysqlsrv1.cs.tau.ac.il

Reminder - MySQL CLI (from nova):

```
mysql -h mysqlsrv1.cs.tau.ac.il -u sakila -p
```

Using MySQL Workbench from home

- **VPN is NOT enough**
unlike MySQL CLI
- **You need to create a tunnel (via nova).**
- You can choose either option:
 - A. Use the built in MySQL Workbench “TCP over SSH”
 - B. Manually create a tunnel
Local port 3305 to `mysqlsrv1.cs.tau.ac.i:3306`

Option A - Via “Workbench TCP over SSH”

The screenshot shows the 'Manage Server Connections' dialog box in MySQL Workbench. On the left, a list of connections includes 'MySQL Connections', 'TAU-MySQL-Tunnel', and 'TAU-MySQL', with 'TAU-MySQL' selected. The main area is titled 'Connection Name: TAU-MySQL' and has tabs for 'Connection', 'Remote Management', and 'System Profile'. The 'Connection' tab is active, showing 'Connection Method: Standard TCP/IP over SSH'. Below this are sub-tabs for 'Parameters', 'SSL', and 'Advanced', with 'Parameters' selected. The 'Parameters' section contains the following fields:

- SSH Hostname: nova.cs.tau.ac.il
- SSH Username: boim
- SSH Password: (with 'Store in Keychain ...' and 'Clear' buttons)
- SSH Key File: (with a file selection button)
- MySQL Hostname: mysqlsrv1.cs.tau.ac.il
- MySQL Server Port: 3306
- Username: sakila
- Password: (with 'Store in Keychain ...' and 'Clear' buttons)
- Default Schema: (empty)

Each field has a descriptive tooltip on the right. At the bottom of the dialog are buttons for 'New', 'Delete', 'Duplicate', 'Move Up', 'Move Down', 'Test Connection', and 'Close'.

Option B - Tunnel (Mac)

- Connect via VPN
- Then, terminal is all you need:
`ssh -L 3305:mysqlsrv1.cs.tau.ac.il:3306 <user>@nova.cs.tau.ac.il`

Option B - Tunnel (Windows)

- Connect via VPN
- Then, create a tunnel via putty and connect

 PuTTY Configuration ✕

Category:

- Session
 - Logging
- Terminal
 - Keyboard
 - Bell
 - Features
- Window
 - Appearance
 - Behaviour
 - Translation
 - Selection
 - Colours
- Connection
 - Proxy
 - Telnet
 - Rlogin
 - SSH
 - Auth
 - Tunnels
 - Bugs

Basic options for your PuTTY session

Specify your connection by host name or IP address

Host Name (or IP address) Port

nova.cs.tau.ac.il 22

Protocol:

☐ Raw ☐ Telnet ☐ Rlogin ☒ SSH

Load, save or delete a stored session

Saved Sessions

Default Settings

Load

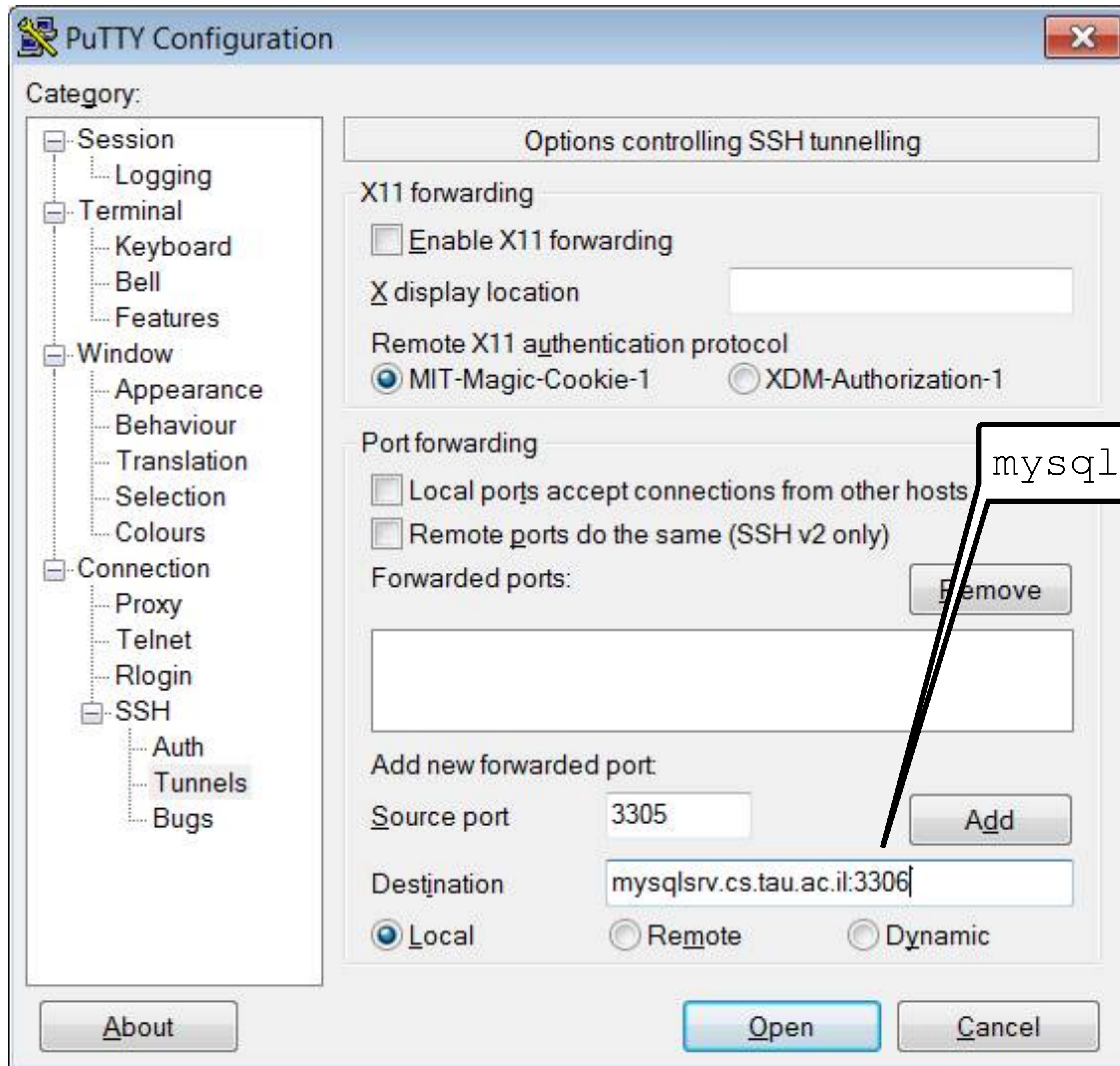
Save

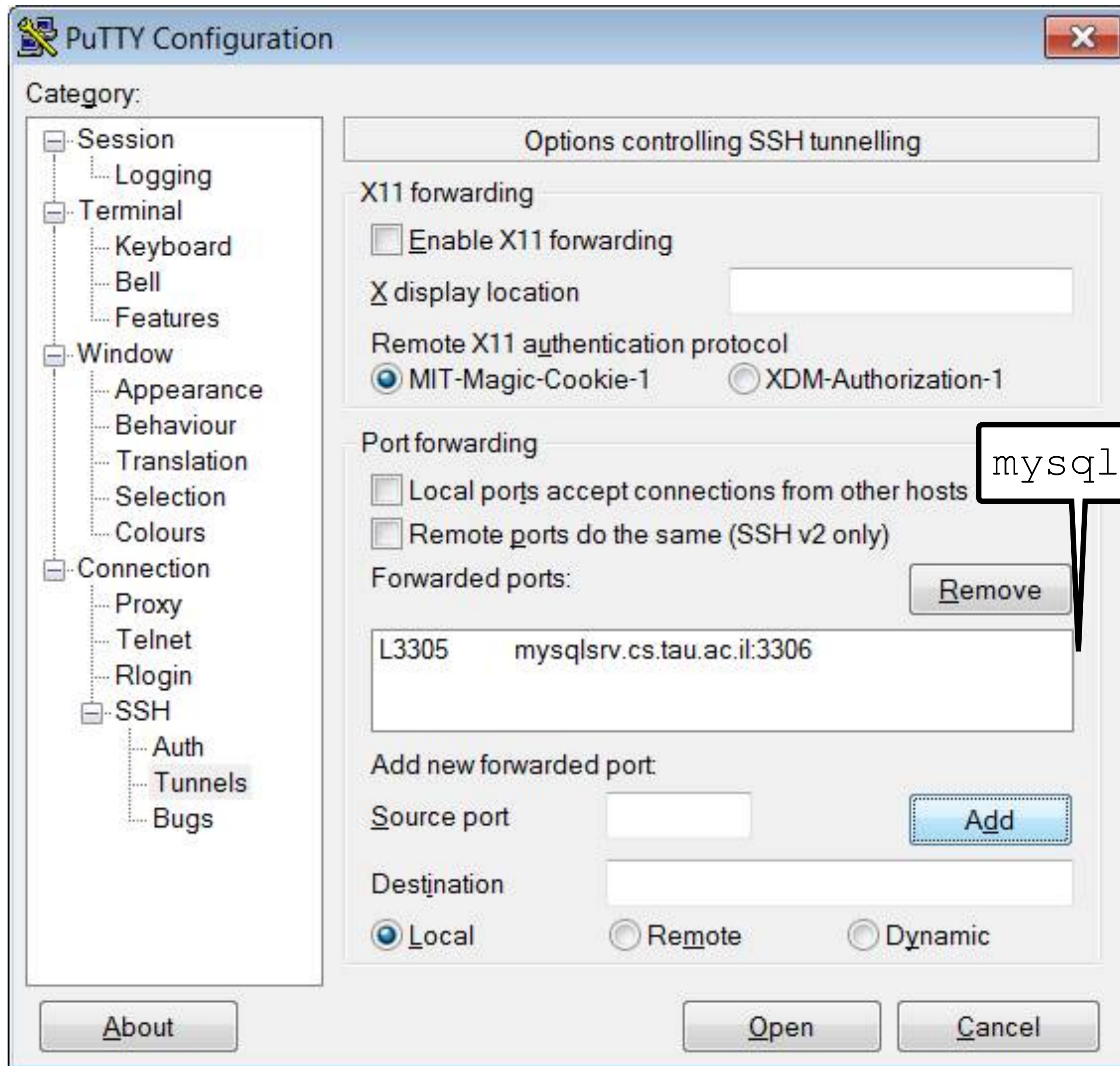
Delete

Close window on exit:

☐ Always ☐ Never ☒ Only on clean exit

About Open Cancel





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Basic options for your PuTTY session

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Host Name (or IP address)	Port
nova.cs.tau.ac.il	22

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☐ Raw ☐ Telnet ☐ Rlogin ☒ SSH

Load, save or delete a stored session

Saved Sessions

TAU - MySQL Tunneling	Load <input checked="" type="button" value="Save"/> Delete
Default Settings TAU - MySQL Tunneling	

Close window on exit:

☐ Always ☐ Never ☒ Only on clean exit

nova.cs.tau.ac.il - PuTTY

login as: boim

Using keyboard-interactive authentication.

Password:

Last login: Sun Mar 6 13:46:16 2011 from lap-milo6.cs.tau.ac.il

nova 1% █

Setup New Connection

Connection Name: Type a name for the connection

Connection Method: Method to use to connect to the RDBMS

Parameters | SSL | Advanced

Hostname: Port: Name or IP address of the server host - and TCP/IP port.

Username: Name of the user to connect with.

Password: Store in Keychain ... Clear The user's password. Will be requested later if it's not set.

Default Schema: The schema to use as default schema. Leave blank to select it later.

Configure Server Management... Test Connection Cancel OK

Local host (3305) —> will use the tunnel

We got it connected, what now?

MySQL Workbench

TAU mysqlserv (via tunnel) - Warning - not supported

Administration

Schemas

actor

SCHEMAS

Filter objects

sakila

Tables

actor

address

category

city

country

customer

film

film_actor

film_category

film_text

inventory

language

payment

rental

staff

store

Views

Stored Procedures

Functions

Limit to 1000 rows

1 • SELECT * FROM sakila.actor;

100%

28:1

Result Grid

Filter Rows:

Search

Edit:

Export/Import:

Result Grid

Form Editor

Field Types

	actor_id	first_name	last_name	last_update
	3	ED	CHASE	2006-02-15 04:34:33
	4	JENNIFER	DAVIS	2006-02-15 04:34:33
	5	JOHNNY	LOLLOBRIGIDA	2006-02-15 04:34:33
	6	BETTE	NICHOLSON	2006-02-15 04:34:33
	7	GRACE	MOSTEL	2006-02-15 04:34:33
	8	MATTHEW	JOHANSSON	2006-02-15 04:34:33
	9	JOE	SWANK	2006-02-15 04:34:33
	10	CHRISTIAN	GABLE	2006-02-15 04:34:33
	11	ZERO	CAGE	2006-02-15 04:34:33
	12	KARL	BERRY	2006-02-15 04:34:33
	13	UMA	WOOD	2006-02-15 04:34:33
	14	VIVIEN	BERGEN	2006-02-15 04:34:33
	15	CUBA	OLIVIER	2006-02-15 04:34:33

actor 1

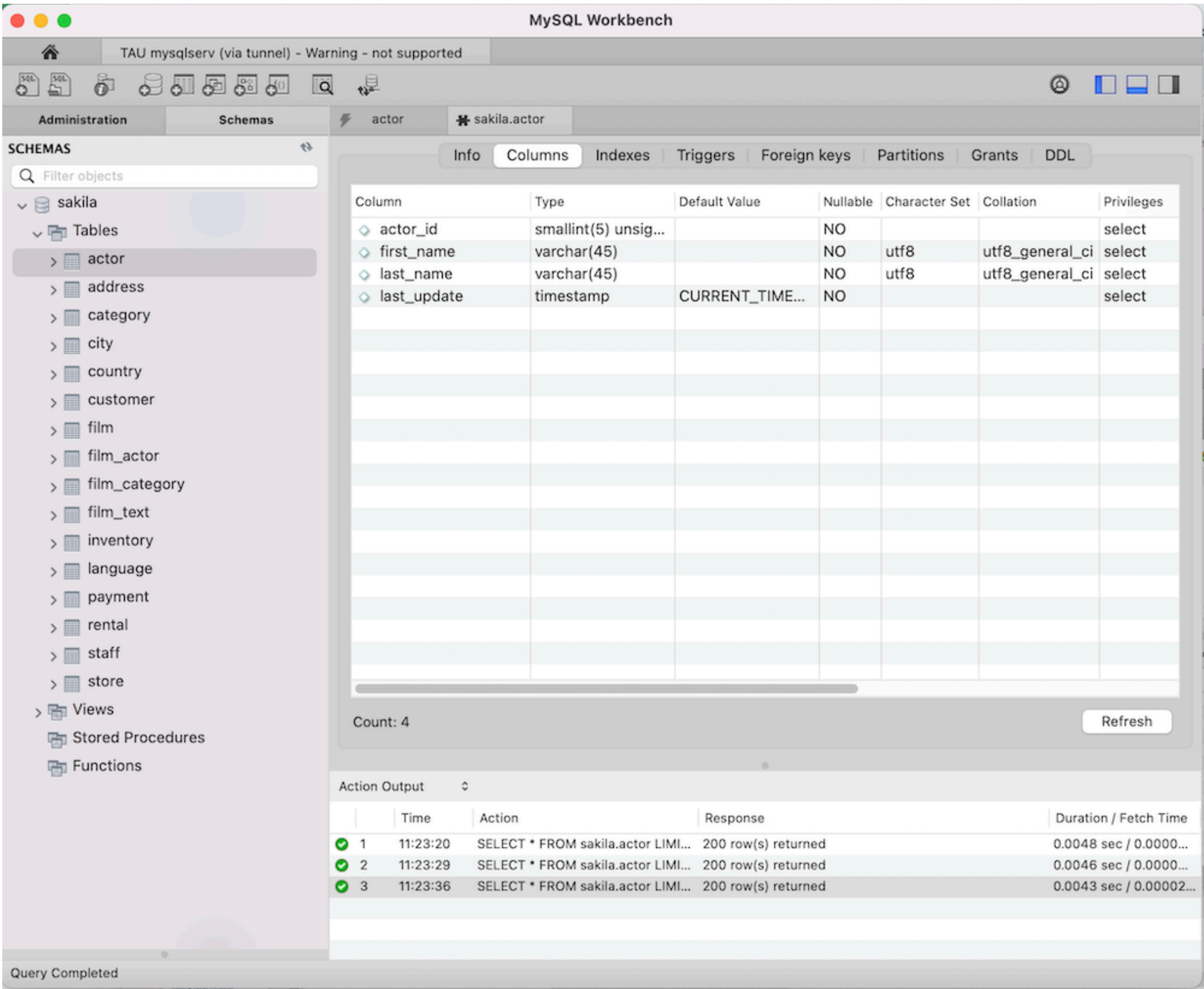
Apply

Revert

Action Output

	Time	Action	Response	Duration / Fetch Time
✓ 1	11:23:20	SELECT * FROM sakila.actor LIM...	200 row(s) returned	0.0048 sec / 0.0000...
✓ 2	11:23:29	SELECT * FROM sakila.actor LIM...	200 row(s) returned	0.0046 sec / 0.0000...
✓ 3	11:23:36	SELECT * FROM sakila.actor LIM...	200 row(s) returned	0.0043 sec / 0.00002...

Query Completed



Using the ER tools

- Option 1: download it

<https://downloads.mysql.com/docs/sakila-db.zip>

Open `sakila.mwb` with MySQL Workbench

- Option 2: reverse engineer `sakila` at TAU

MySQLWorkbench

FileEditViewQueryDatabaseServerToolsScriptingHelp

TAU mysqlserv (via tunnel) - Warning - not supported

Administration

Schemas

Query 4

SCHEMAS

Filter objects

sakila

Tables

actor

address

category

city

country

customer

film

film_actor

film_category

film_text

inventory

language

payment

rental

staff

store

Views

Stored Procedures

Functions

1

100%

1:1

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Added new scratch query editor

Connect to Database... ⌘U

Manage Connections...

Reverse Engineer... ⌘R

Schema Transfer Wizard...

Migration Wizard...

Edit Type Mappings for Generic Migration...

Search Table Data...

