

CNT 4714: Enterprise Computing Spring 2013

Client User Creation In The MySQL Workbench

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Client User Creation In The MySQL Workbench

- For Project 5 you need to create two new clients for the `project5` database and assign them specific privileges on the database.
- This set of slides steps you through that process using the MySQL Workbench.
- This can also be done via the MySQL command line client, however, it requires issuing specific GRANT commands and while providing finer grained privilege detail, goes a bit beyond what we need for this project.



Workbench Central



Welcome to MySQL Workbench

→ What's New in This Release?

Read about all changes in this MySQL Workbench

Doc
yMySQL Bug
ReporterWorkbench
Blogs

Planet MySQL



Start the Workbench
and select Server
Administration from
the right side of the
window.

Workspace



SQL Development

Connect to existing databases and run SQL Queries, SQL scripts, edit data and manage database objects.



Open Connection to Start Querying

Or click a DB connection to open the SQL Editor.



New Connection

Add a new database connection for querying.



Edit Table Data

Select a connection and schema table to edit.



Edit SQL Script

Open an existing SQL Script file for editing.



Manage Connections

Modify connection settings or add connections.



Data Modeling

Create and manage models, forward & reverse engineer, compare and synchronize schemas, report.



Open Existing EER Model

Or select a model to open or click here to browse.



Create New EER Model

Create a new EER Model from scratch.



Create EER Model From Existing Database

Create by connecting and reverse engineering.



Create EER Model From SQL Script

Import an existing SQL file.



Server Administration

Configure your database server, setup user accounts, browse status variables and server logs.



Server Administration

Or click to manage a database server instance.



New Server Instance

Register a new server instance to manage.



Manage Import / Export

Create a dump file or restore data from a file.



Manage Security

Manage user accounts and assign privileges.



Manage Server Instances

Add, delete and update server instance settings.



Admin (mysqld@127.0.0.1) x

File Edit View Database Plugins Scripting Community Help ORACLE

Task and Object Browser

MANAGEMENT

- Server Status
- Startup / Shutdown
- Status and System Variables
- Server Logs

CONFIGURATION

- Options File

SECURITY


- Users and Privileges

DATA EXPORT / RESTORE

- Data Export
- Data Import/Restore

Server Status

INFO

 Name: **mysqld@127.0.0.1**
Host: **127.0.0.1**
Server: **5.5.20**
Status: **Running**

SYSTEM

CPU: -- Mem: --

SERVER HEALTH

Connection Usage: -- Traffic: -- Query Cache Hitrate: -- Key E

CONNECTIONS

Id	User	Host	DB	Command	Time	State	Info
2	root	localhost:49193		Query		0	SHOW PROCESSLIST
3	root	localhost:49194		Sleep		6	

Kill Query Kill Connection

WB Admin Opened

Server Administration default screen is displaying the server status for the server you are currently connected to.

From this screen, select Users and Privileges.



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Users and Privileges

Server Access Management Schema Privileges

User Accounts

User	From Host
client1	localhost
root	localhost

Select an account to edit or click Add Account to create a new one

Login Administrative Roles Account Limits

Login Name: You may create to connect fromLimit Connectivity to Hosts Matching: % and _ wildPassword: Type a passwordConfirm Password: Enter password

Current user accounts are displayed here. Your screen will probably only have the root user at this point.

Click the Add Account button

Add Account

Remove

Revoke All Privileges

Revert

Apply

Refresh



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Users and Privileges

Server Access Management Schema Privileges

User Accounts

User	From Host
client1	localhost
root	localhost
newuser	%

Details for account newuser@%

Login Administrative Roles Account Limits

Login Name: You may create to connect from

Limit Connectivity to Hosts Matching: % and _ wildcard

Password: Type a password

Confirm Password: Enter password

Enter the information for the new user where the name newuser is currently displayed.



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Users and Privileges

Server Access Management Schema Privileges

User Accounts

User	From Host
client1	localhost
root	localhost
newuser	%

Details for account newuser@%

Login Administrative Roles Account Limits

Login Name: You may create to connect from

Limit Connectivity to Hosts Matching: % and _ wildcar

Password: Type a passwor

Confirm Password: Enter password

After entering the new user's information. Click the Apply button

Account 'client2@localhost' was deleted



Admin (mysql@127.0.0.1) x

File Edit View Database Plugins Scripting Community Help ORACLE

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Users and Privileges

Server Access Management Schema Privileges

User Accounts

User	From Host
client1	localhost
client2	localhost
root	localhost

Details for account client2@localhost

Login Administrative Roles Account Limits

Login Name: You may create to connect from

Limit Connectivity to Hosts Matching: % and _ wildcard

Password: Type a password

Confirm Password: Enter password

Add Account Remove Revoke All Privileges Revert Apply Refresh

After clicking the Apply button the new user is now confirmed.

Created account 'client2@localhost'



Admin (mysqld@127.0.0.1) x

File Edit View Database Plugins Scripting Community Help ORACLE

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User	From Host
client1	localhost
client2	localhost
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Details for account client2@localhost

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Login Name: You may create to connect from

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Password: Type a password

Confirm Password: Enter password

Add Account Remove Revoke All Privileges Revert Apply Refresh

Select the Schema Privileges tab.

Created account 'client2@localhost'

| [] |



Admin (mysql@127.0.0.1) x

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- Data Export
- Data Import/Restore

Users and Privileges

Server Access Management Schema Privileges

Users

- client1
- client2
- root

Select a user and pick the privileges it has for a given Schema and Host combination.

Host	Schema	Privileges
------	--------	------------

Schema and Host fields may use % and _ wildcards.
The server will match specific entries before wildcarded ones.

Delete Entry Add Entry...

Object Rights

- SELECT
- INSERT
- UPDATE

DDL Rights

- CREATE
- ALTER
- REFERENCES
- TRIGGER

Other Rights

- GRANT OPTION
- CREATE TEMPORARY TABLES
- LOCK TABLES

Select "ALL" Unselect All Revert Save Changes

Select the newly created client2

Created account 'client2@localhost'

[]



Task and Object Browser

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Select "ALL" Unselect All Revert Save Changes

With the client2 user selected, the Add entry button will be active, so click it.



Task and Object Browser

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- Server Status
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SECURITY

- Users and Privileges**

DATA EXPORT / RESTORE

- Data Export
- Data Import/Restore

New Schema Privilege Definition

Select the Host and the Schema for which the user 'client2' will have the privileges you want to define.

Host

- Any Host (%)
- Hosts matching pattern or name:
- Selected host: localhost

Schema

- Any Schema (%)
- Schemas matching pattern or name:
- Selected schema:
 - bikedb
 - coloursurvey
 - guestbook
 - information_schema
 - mailinglist
 - mysql
 - performance_schema
 - prog3
 - project2
 - project4
 - test

Privileges

Delete Entry Add Entry...

Other Rights

- GRANT OPTION
- CREATE TEMPORARY TABLES
- LOCK TABLES

Cancel OK

Revert Save Changes

When you click the Add entry button, this dialog box will appear as shown.

Created account 'client2@localhost'

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 - bikedb
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 - guestbook
 - information_schema
 - mailinglist
 - mysql
 - performance_schema
 - prog3
 - project2
 - project4**
 - test

Cancel OK

has for a given Schema and Host combination.

Privileges

nd_wildcards.
before wildcard

Rights

- CREATE
- ALTER
- REFERENCES
- INDEX
- CREATE VIEW
- CREATE ROUTE
- ALTER ROUTINE
- DROP
- TRIGGER

Revert Save Changes

Select the selected host option for localhost in the Host area, then select the Selected Schema in the Schema area. This will highlight the various databases on the server. You'll select the Project5 database (I'm using project4 database here). Then click OK and go to the next page.

Created account 'client2@localhost'

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Users and Privileges

Server Access Management

Schema Privileges

Users

client1
client2
root

Select a user and pick the privileges it has for a given Schema

Host	Schema	Privileges
localhost	project4	SELECT, UPD

Schema and Host fields may use % and _ wildcards.
The server will match specific entries before wildcarded ones.

The user 'client2', when connecting from the host 'localhost', will have the following access rights to the schern

Object Rights

- SELECT
- INSERT
- UPDATE
- DELETE
- EXECUTE
- SHOW VIEW

DDL Rights

- CREATE
- ALTER
- REFERENCES
- INDEX
- CREATE VIEW
- CREATE ROUTINE
- ALTER ROUTINE
- DROP
- TRIGGER

Other Rights

- GRANT OPTION
- CREATE TEMPORARY
- LOCK TABLES

Select "ALL"

Unselect All

Revert

Save

For project 5, the client2 user has only select and update privileges on the project 5 database, so check only those two boxes. Then click Save.



Workbench Central



Welcome to MySQL Workbench

→ What's New in This Release?

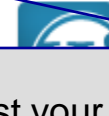
Read about all changes in this MySQL Workbench release.



MySQL Doc
Library



MySQL
Re



To test your work, go back to the main workbench screen and open a connection to start querying, but login as client2.

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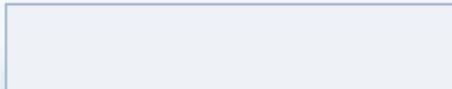
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MySQL Workbench Admin (mysqld@127.0.0.1) x SQL Editor () x

File Edit View Query Database Plugins Scripting Community Help

Object Browser SCHEMAS project4 Tables jobs parts shipments suppliers Views Routines

SQL File 1* x

```
1 • select * from suppliers
```

Filter: Edit: Export: Autosize:

snum	sname	status	city
S1	Michael Schumacher	1	Berlin
S10	David Coulthard	2	London
S11	Bernard Hinault	7	Paris
S12	Eddy Merckx	1	Brussels
S17	Rubens Barichello	3	Sao Paulo
S2	Juan Pablo Montoya	9	Interlagos
S22	Jan Ullrich	5	Bonn
S3	Dietrich Thureau	1	Berlin
S32	Bernd Schnieder	2	Berlin
S4	Mark Webber	5	Melbourne
S5	Jenson Button	4	London

suppliers 3 x Apply Cancel Snippets

Information Output

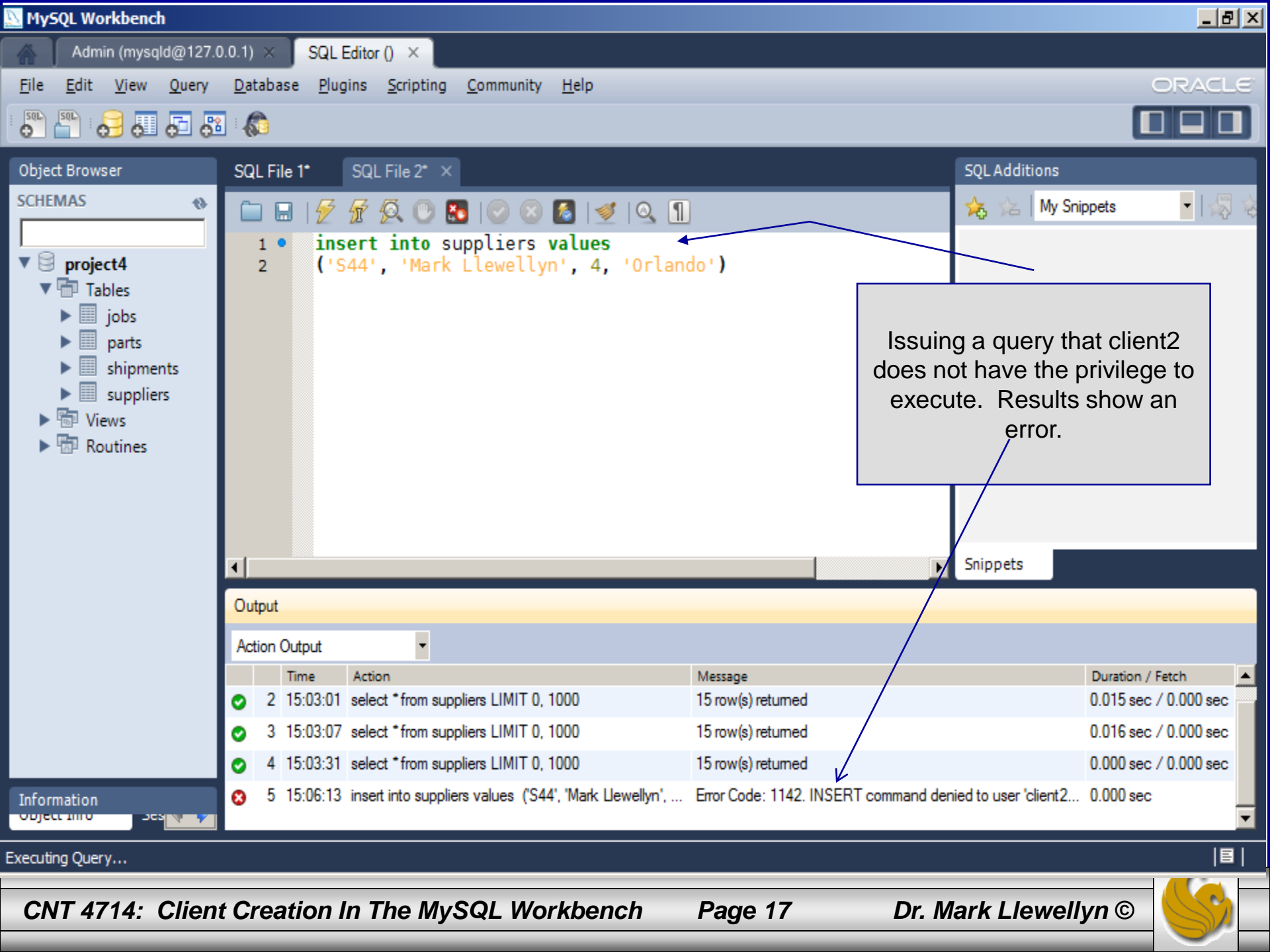
Query Completed

ORACLE

SQL Additions

Issuing a query that client2 has the privilege to execute. Results are displayed correctly.





```
1 insert into suppliers values
2 ('S44', 'Mark Llewellyn', 4, 'Orlando')
```

Issuing a query that client2 does not have the privilege to execute. Results show an error.

	Time	Action	Message	Duration / Fetch
✓	2 15:03:01	select *from suppliers LIMIT 0, 1000	15 row(s) returned	0.015 sec / 0.000 sec
✓	3 15:03:07	select *from suppliers LIMIT 0, 1000	15 row(s) returned	0.016 sec / 0.000 sec
✓	4 15:03:31	select *from suppliers LIMIT 0, 1000	15 row(s) returned	0.000 sec / 0.000 sec
✗	5 15:06:13	insert into suppliers values ('S44', 'Mark Llewellyn', ...	Error Code: 1142. INSERT command denied to user 'client2...	0.000 sec

