CSE 344 Introduction to Data Management

Section 4: SQL Azure

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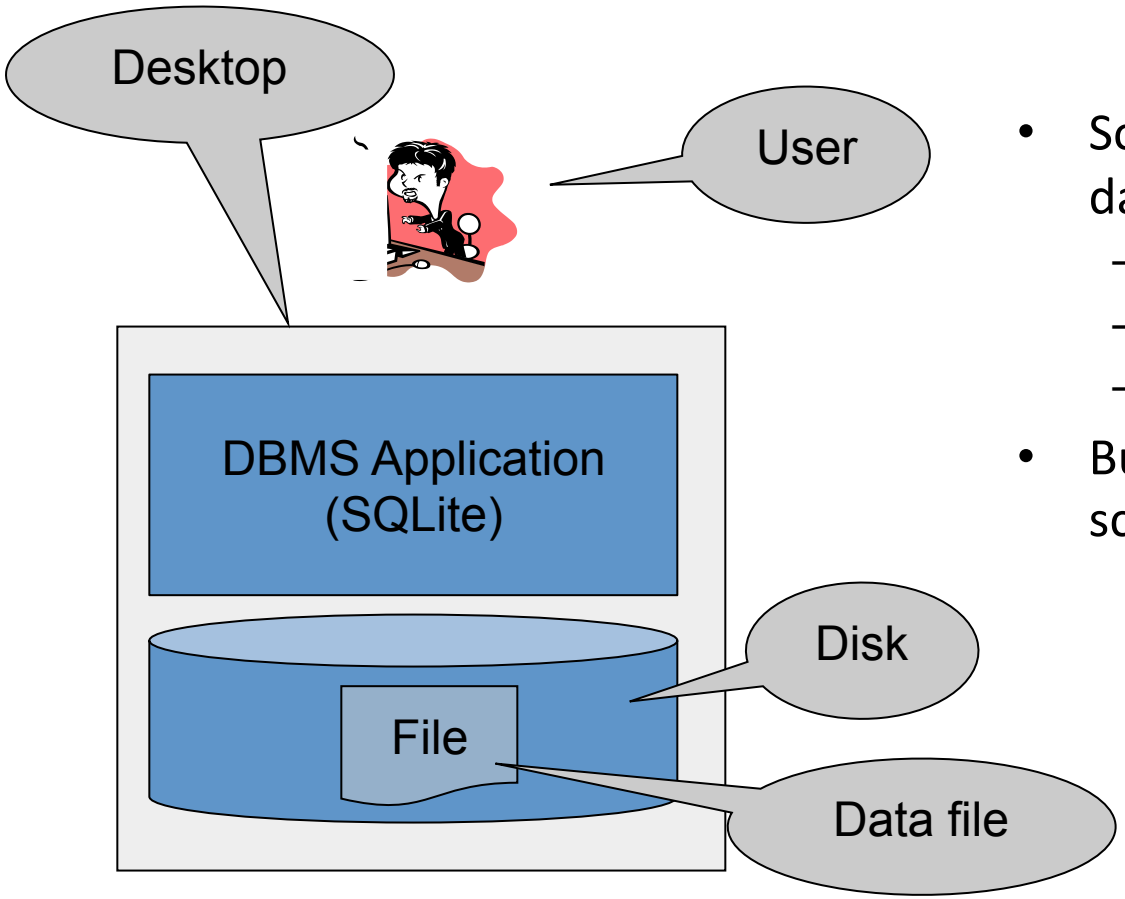
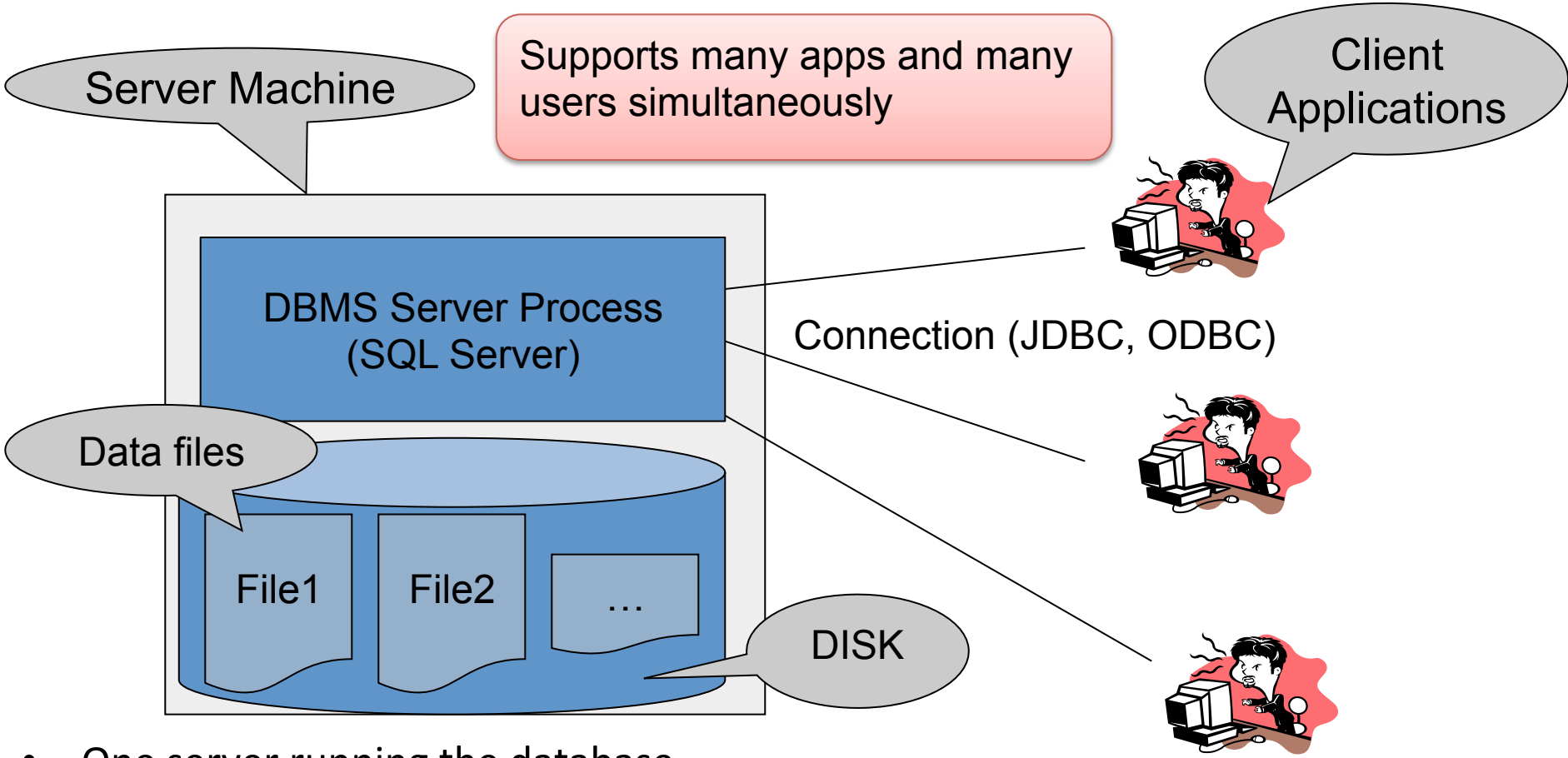
Review

Data Management with SQLite



- So far, we have been managing data with SQLite as follows:
  - One data file
  - One user
  - One DBMS application
- But only a limited number of scenarios work with such model

Client-Server Architecture



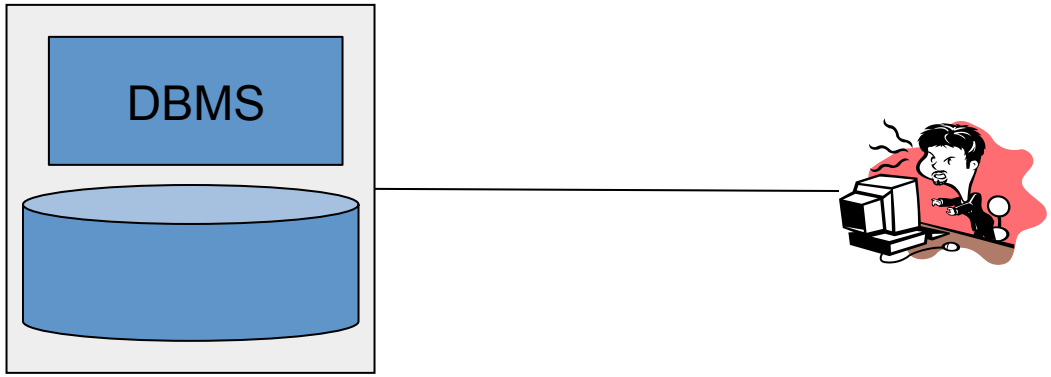
- One server running the database
- Many clients, connecting via the ODBC or JDBC (Java Database Connectivity) protocol

Client-Server Architecture

- One *server* that runs the DBMS (or RDBMS):
  - Your own desktop, or
  - Some beefy system, or
  - A cloud service (SQL Azure)
- Many *clients* run apps and connect to DBMS
  - Microsoft's Management Studio (for SQL Server), or
  - psql (for postgres)
  - Some Java program (HW5) or some C++ program
- Clients "talk" to server using JDBC/ODBC protocol

Using a DBMS Server

1. Client application establishes connection to server
2. Client must authenticate self
3. Client submits SQL commands to server
4. Server executes commands and returns results



Homework 3

Homework 3

- Connect to an instance of SQL Server on Windows Azure and practice advanced SQL
- Due October 25, 2013, at 11:00 pm
- We had an issue with Azure log-in, so please follow the new instruction here.

Server

- Microsoft SQL Server
  - a commercial RDBMS developed by Microsoft
  - has different editions, each of which targets different audience and use cases
- Windows Azure
  - a cloud-based service using a special version of SQL server as its backend
  - supports a subset of SQL server functionalities

Client

We have two options for HW3

1. Web browser

   https://m01rrgdwg2.database.windows.net/

   (Doesn't work with Chrome in Mac OS X)

2. SQL Server Management Studio 2008 R2

   Already installed on the Windows lab machine or VDI machines (http://vdi.cs.washington.edu/vdi/)

1. Web browser

https://m01rrgdwg2.database.windows.net/

(Doesn't work with Chrome in Mac OS X)

Option A. Use a shared account (Do not change this password)

login: suciu

password: (emailed)

database: IMDB

```
ALTER LOGIN yourlogin WITH
PASSWORD='some_new_password'
OLD_PASSWORD = 'old_password'
```

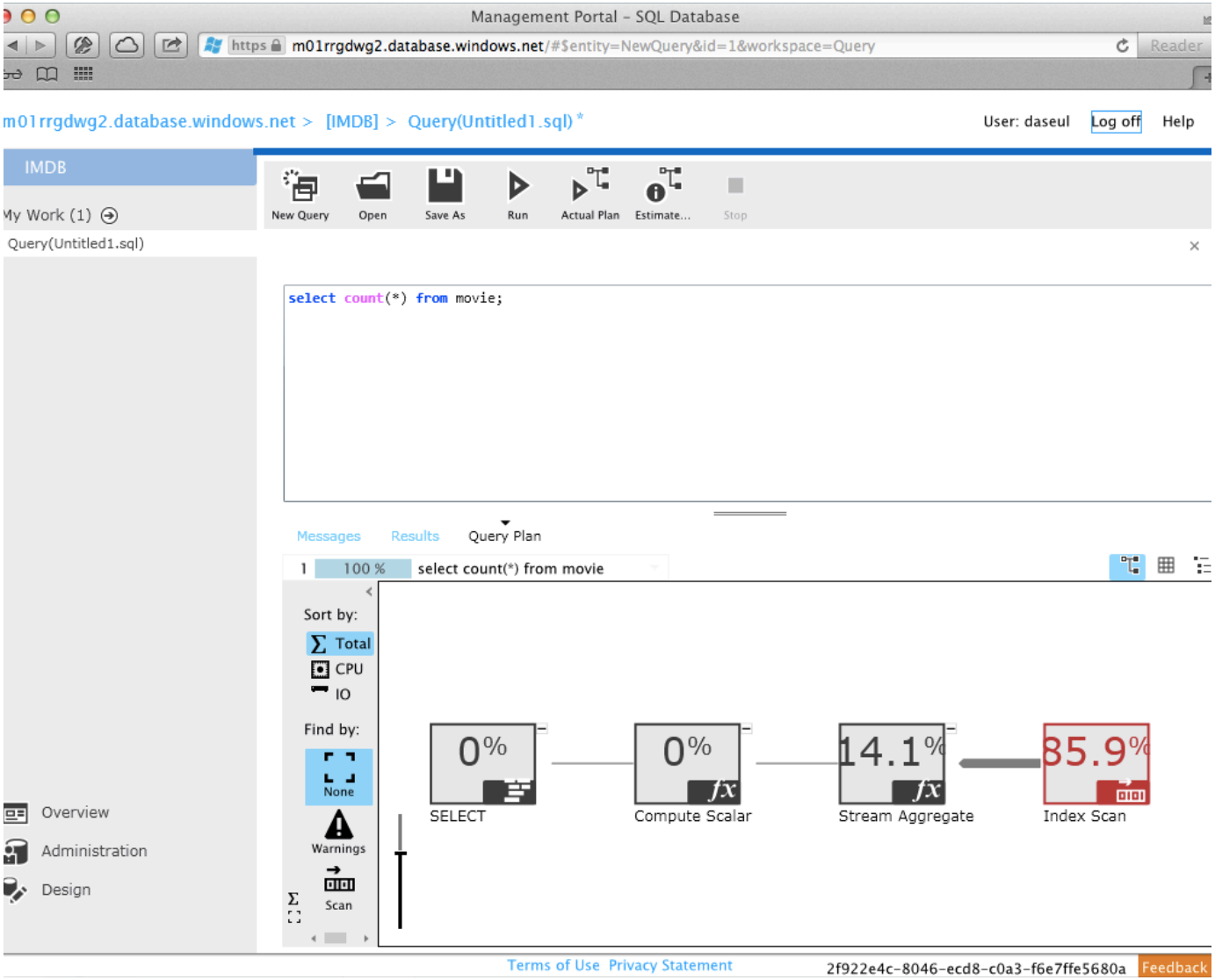
Option B. Use a shared account to log into master (instead of IMDB) and change your account password. Then, log into IMDB using:

login: (Your UW NetID)

password: (set from master using the shared account)

database: IMDB

1. Web browser



2. SQL Server Management Studio

Already installed on the Windows lab machine or VDI machines (http://vdi.cs.washington.edu/vdi/)

- Server type: Database Engine
- Server name: m01rrgdwg2.database.windows.net
- Authentication: SQL Server Authentication
- Login: (Your UW NetID) or suciu
- Password: (set from master using shared account) or (emailed)

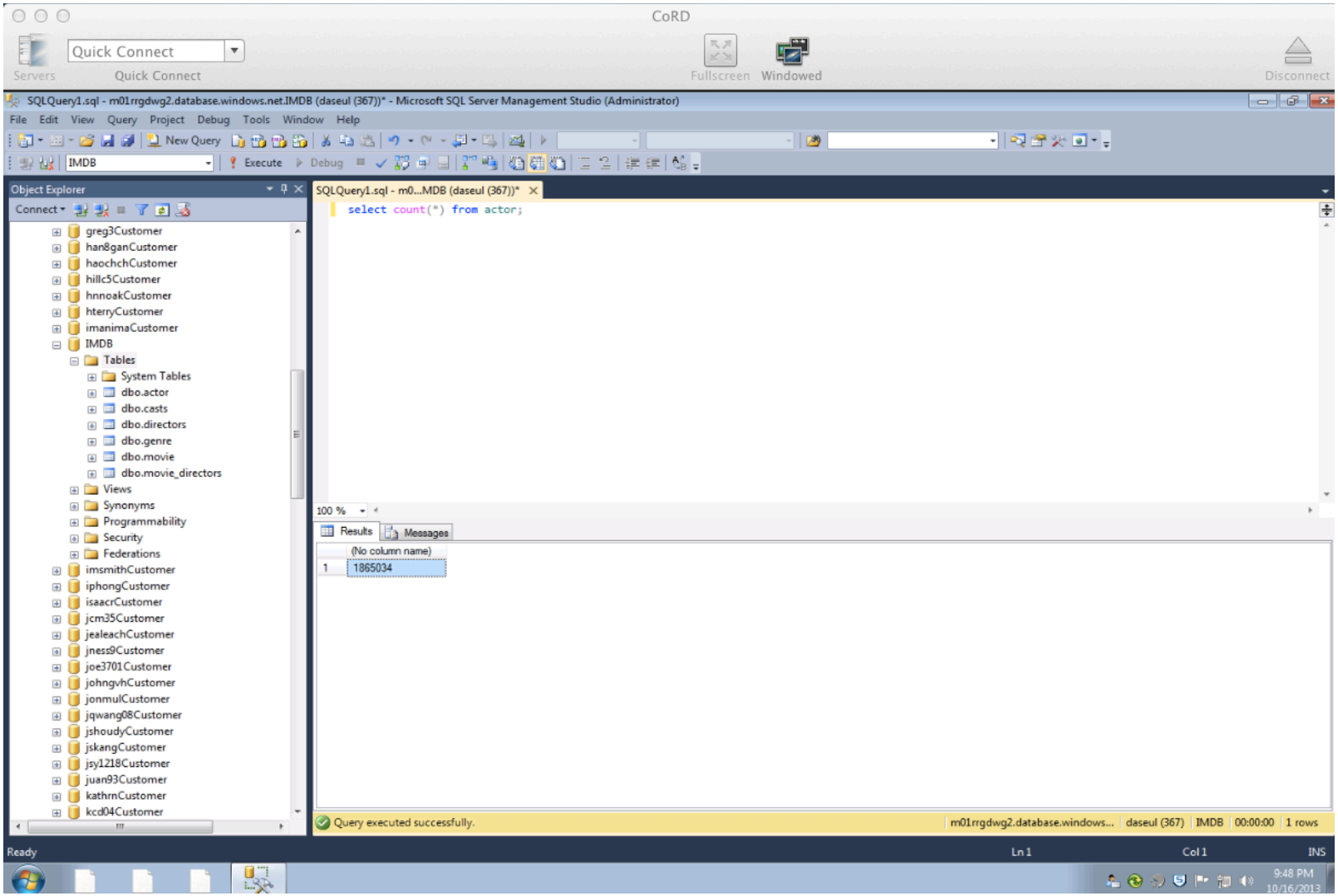
2. SQL Server Management Studio

Q. How to connect to VDI?

- See availability here: http://vdi.cs.washington.edu/vdi/

- Mac Users: Use CoRD to connect
- Windows Users: All Programs -> Accessories -> Remote Desktop connection
- Linux Users: You need an RDP client (rDesktop or similar)

2. SQL Server Management Studio



Questions?