

BEFORE WE GET STARTED

- Make sure you are connected to internet

- **Windows:** PuTTY

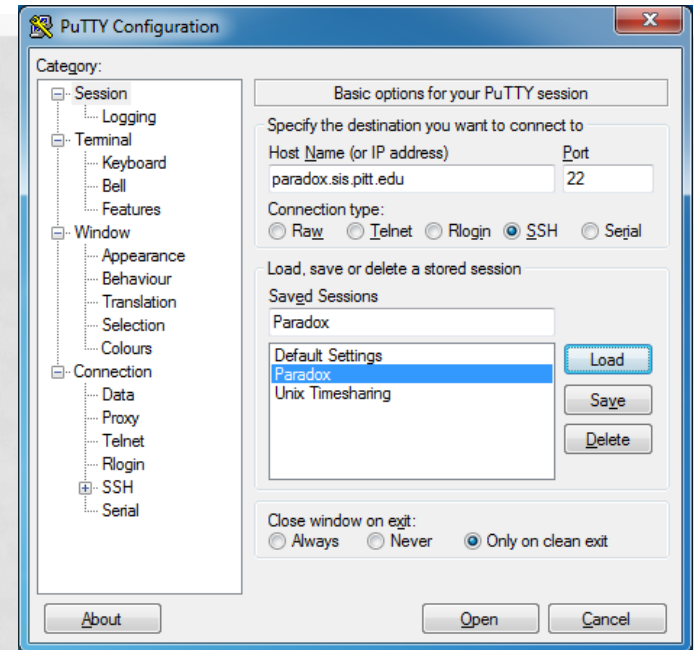
(<http://www.chiark.greenend.org.uk/~sgtatham/putty/>)

1. Enter host name: **paradox.sis.pitt.edu**
2. Choose connection type: **SSH**
- 2a. Save it
3. Hit open

- **Linux, Mac:**

1. Start "Terminal"
2. Enter **ssh -l user_name paradox.sis.pitt.edu**
3. Hit Enter

Don't be confused while entering your password if nothing is being displayed, it's OK.



REFRESHING MEMORY

- What is UNIX?
- pwd
- cd dir1, cd .., cd ~, cd ~user_name
- mkdir dir1
- rmdir dir1
- ls, ls -l
- echo 'hello world', echo 'hello world' > f2
- cat f1 > f2, cat f1 >> f2
- chmod u=rwx,g+w,o-wr f1, chmod ugo= f1
- man, info

SOMETHING NEW BEFORE NEW TOPIC

- File editors: pico, nano, vi, ...

- [DEMO]

ORACLE AND SQL

INFSCI 1022: DATABASE MANAGEMENT SYSTEMS

UNIX/ORACLE LAB 2

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CONNECTING TO ORACLE

- Make sure you are on `paradox.sis.pitt.edu`
- Enter `sqlplus`
- Then your `Login` and `Password`
- If you see `SQL>` then your are doing great
- First, change editor: `SQL> define _editor=pico`

SQL

- Structured Query Language
 - Oracle
 - MS SQL
 - MySQL
 - PostgreSQL
 - Others
- Many functions, small syntax
 - Tell a DB to do things
 - Ask a DB questions

SQL STATEMENTS WE ARE GOING TO USE TODAY

- create table
- drop table
- alter table

- insert
- update
- delete

- select

LAB TASK

- Check what tables you already have
- Create table with two attributes (integer and char)
 - Check that you have that table
- Drop that table
- Create table people with id (PK) and name
 - Insert 2 tuples into that table and check it
 - Update one tuple in that table and check it
 - Delete one tuple from that table and check it
- Create a script with table track album, disk, posn, song attributes, make first three of them as PK
 - Run that script, make sure you have that table in DB now
 - Drop that table
 - Add another table album with id (PK), title and artist attributes
 - Add foreign key to track table referencing album table
 - Try to drop album table, what do you see? How to solve that?
 - Insert a tuple into album and track tables
 - Try to delete the tuple from album table, what do you see?
 - Edit foreign key in track table so you will be able to delete tuples from album table
- Create table with 2 integer attributes
 - Insert a tuple into that table
 - Add one more attribute to that table and check it
 - Drop that attribute and check it
 - Add Check constraint and check it

LET'S DO THAT TOGETHER???

[DEMO]

Don't forget ";" at the end of your SQL statement

SOME SIMPLE QUERIES IF WE HAVE TIME

- select from one table
- select from two or more tables
- select with where statement

TWO WORDS ABOUT PROJECTS

- Term project

HOMework

- Create a simple database (at least 3 tables with primary and foreign keys. At least 3 attributes and 5 rows in each table) – 1st file (only create and insert statements)
- Create several delete and update statements – 2nd file
- (only
- Create several alter statements – 3rd file

- Email me those 3 files,
- DUE DATE AND TIME – February 1st, 11:59 pm by email

- How can you get files from paradox?
- Simplest way is to type <ftp://paradox.sis.pitt.edu/> in your browser