

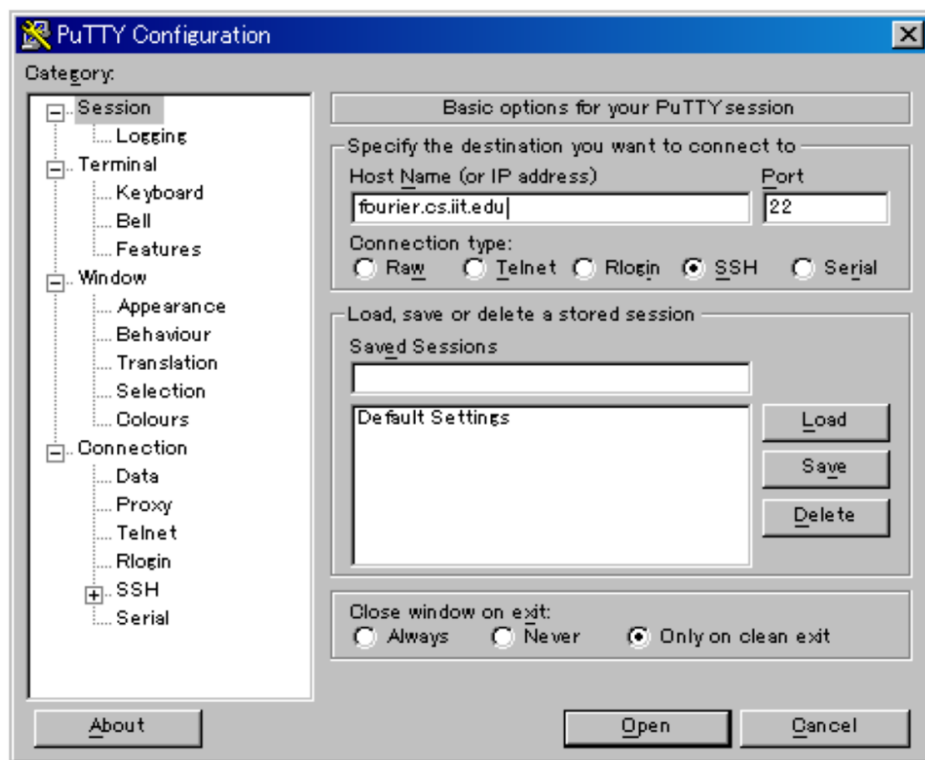
1 Fourier and Oracle

In CS425, you will be using the database Oracle for your homework assignments. Accounts have been created for you on the school's server, `fourier.cs.iit.edu`. Login information will be posted for you on blackboard or course website, so please refer to that announcement for this semester's default password and logins. This document will guide you through the process of logging onto `fourier.cs.iit.edu` and Oracle, changing your password for both, and how to transfer files between your machine and `fourier.cs.iit.edu`.

1.1 Logging into `fourier.cs.iit.edu` and changing your Unix password

Required software: You must have an SSH client installed on your machine. This tutorial uses the free software, Putty.

Launch putty, and enter `fourier.cs.iit.edu` as the host name (see image below).



After you click on "open," a terminal will open up. When prompted, you should enter your login and the default password. After that, the very first thing you should do is to change your password.

To change your Unix password, use the command 'passwd' and follow the prompts. For example:

```
[username@fourier ~]$ passwd
Changing password for user yourusername.
Changing password yourusername.
(current) Unix password: (what you type is not shown)
New password: (what you type is not shown)
Retype new password: (what you type is not shown)
```

1.2 Logging into Oracle and changing your Oracle password

Required software: Oracle is already installed on `fourier.cs.iit.edu`, so you are not required to install any software for this step.

To launch Oracle, type 'sqlplus' into the command prompt. When prompted, type in the provided default *username* and *password*.

```
[username@fourier ~]$ sqlplus
SQL*Plus: Release 11.2.0.1.0 Production on Thu Aug 29 17:25:38 2013

Copyright (c) 1982, 2009, Oracle. All rights reserved.

Enter user-name: username
Enter password: (what you type is not shown)

Connected to:
Oracle Database 11g Enterprise Edition Release 11.2.0.1.0 - 64bit Production
With the Partitioning, OLAP, Data Mining and Real Application Testing options

SQL> (this is SQLPlus prompt)
```

Again, the very first thing you want to do is to change your password using the password command. For 'password' command, after you press Enter, you will be prompted to input the old password and new password interactively. You will see something like this:

```
SQL> password
Changing password for yourusername
Old password: *****
New password: *****
Retype new password: *****
```

1.3 Verifying that your Oracle account is set up properly

Required software: Oracle is already installed on `fourier.cs.iit.edu`, so you are not required to install any software for this step.

Now we will verify that all of the permissions in your account have been set up properly. You should issue the following set of commands to the oracle command prompt:

```
SQL> Create table test(a int, b char(10), primary key(a));
SQL> Insert into test values(1, 'foo');
SQL> Select * from test;
SQL> Drop table test;
```

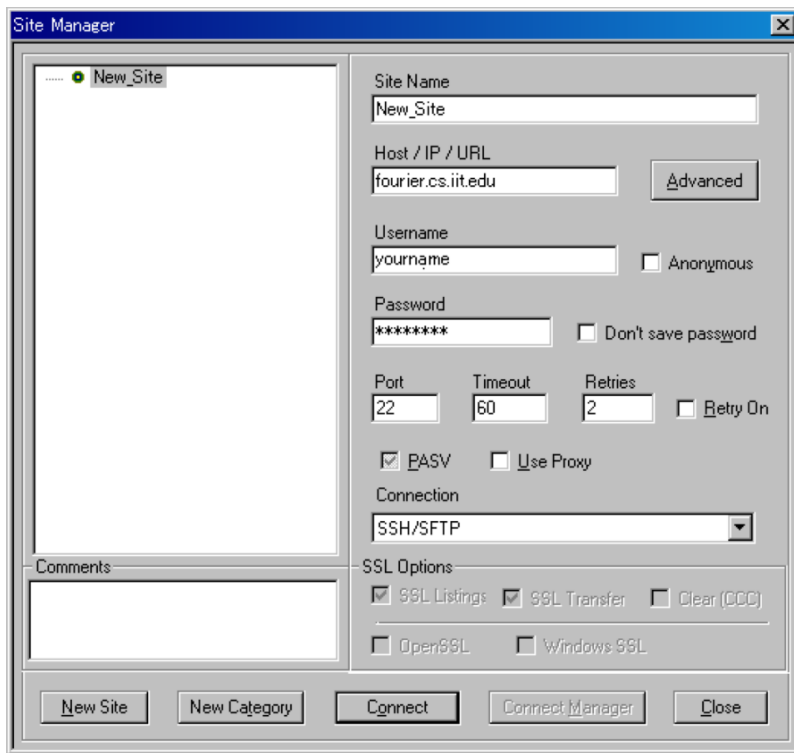
It is okay if you do not understand what these commands do right now - they will be covered in the course. The output should look like this:

1.4 Transferring files to and from `fourier.cs.iit.edu`

Required software: An sftp client. This example uses the free software Core FTP Lite.

```
smaruyam@fourier:~$
SQL>
SQL>
SQL>
SQL> Create table test(a int, b char(10), primary key(a));
Table created.
SQL> Insert into test values (1, 'foo');
1 row created.
SQL> Select * from test;
  A B
-----
  1 foo
SQL> Drop table test;
Table dropped.
SQL>
SQL>
SQL>
```

To transfer files back and forth between `fourier.cs.iit.edu` and your machine, you should use an sftp client. Launch the sftp client, enter `fourier.cs.iit.edu` in the host field, and your login and password into the appropriate fields. (See the image below)



Once you have connected, you can use the software to transfer files back and forth between the two machines. (You should see the documentation of the particular software you are using for further details).

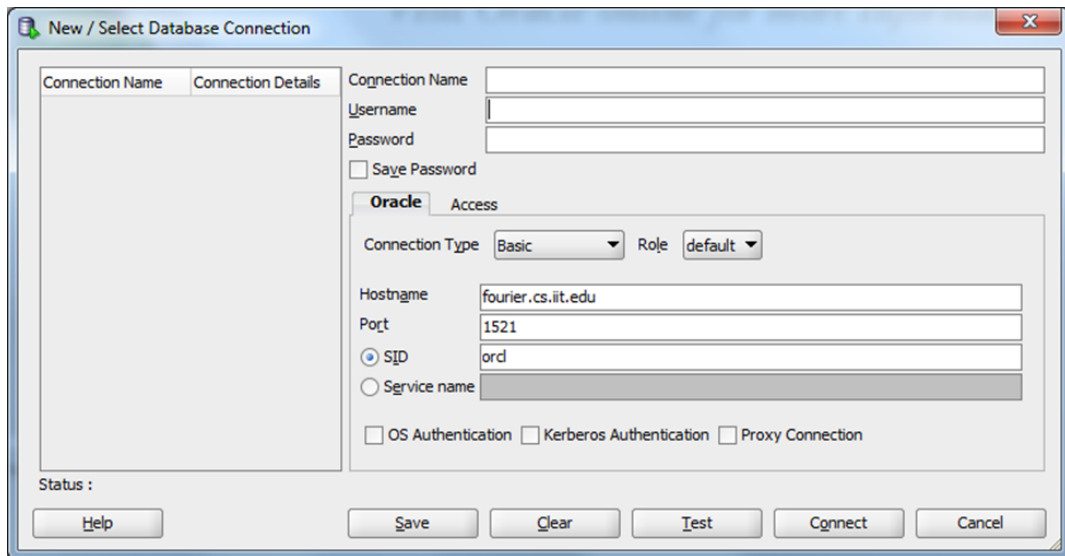
If you are unable to get any part of this tutorial working, you should see the TA or the instructor as soon as possible for help. Good luck!

1.5 Connecting to Oracle using SQL Developer

Required Software: Oracle SQL Developer

To connect to Oracle using SQL Developer, launch *SQL Developer* and create a new connection. To create a new connection click new connection button ('+' sign button) in the 'Connection' panel, on the left. Type in the corresponding fields and press *Connect* (See image bellow):

- **Connection name:** give a name to the connection e.g. fourier
- **Username and password:** use your corresponding user and password
- **Connection type:** Basic with port 1521
- **Role:** default
- **Hostname:** fourier.cs.iit.edu
- **SID:** orcl



Once you have connected, you will see the connection on the left panel with the name you provided. You can use the software to explore your database, run scripts and statements. You should see the documentation of SQL Developer for further details.