INTRODUCTION TO INSPEM HPC

Introduction

The Institute for Mathematical Research (INSPEM) High Performance Computing operates a IBM System x3650 M4 Cluster running on PUTRAGRID cluster distribution. The main purpose of the cluster is to support the computing needs of UPM staffs and students.

System Overview

11 nodes IBM System x3650 M4 cluster

- 4 x Intel Xeon 6C processor @ 2.0 GHz (Model E5-2620, 95W)
- 8 x 8GB ECC DDR3 Memory
- 2 x 146GB IBM SAS hard drives for compute nodes (8 nodes)
- 5 x 146GB IBM SAS hard drives for virtualization node server A (1 node)
- 5 x 146GB, 2x 900GB IBM SAS hard drives for virtualization node server B & storage element (2 nodes)
- Operating System : Scientifix Linux 6.2
- Interconnected with a Infiniband network
- Middleware : CREAM CE, TORQUE + MAUI, WN, MPI, site BDII

Application Software in HPC

a. Matlab
b. Mathematica
c. Amber
d. ClustalW
e. OpenFoam
f. Blast
g. Scilab
h. Gromacs
i. NWchem
j. CHARMM
k. R
l. NS3

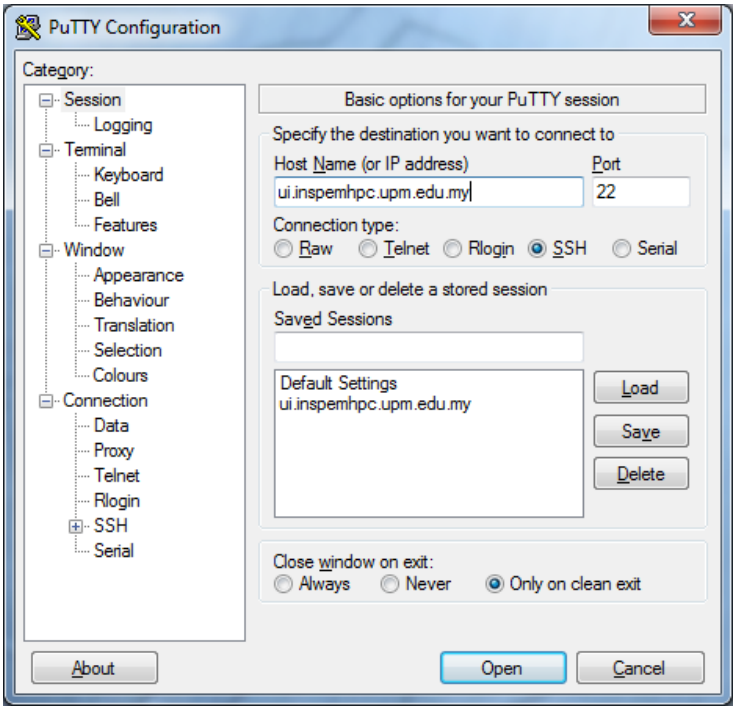
Operating System

- Scientific Linux

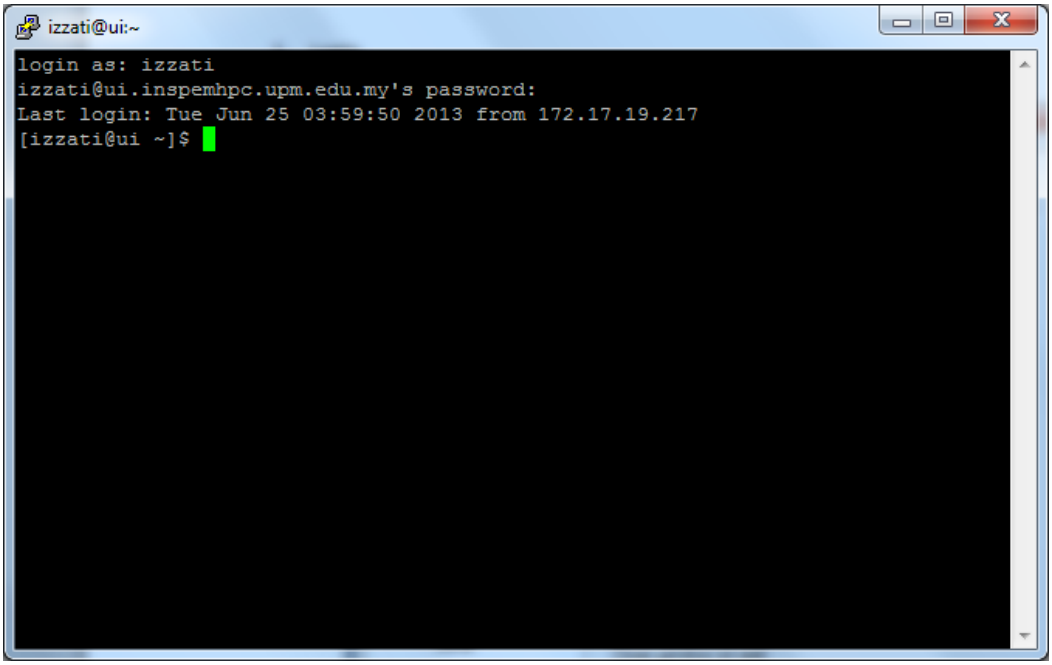
Login To INSPEM HPC

After creating an account with the INSPEM officer, please do the following steps to be able to login to INSPEM HPC:

1. Download and run the putty.exe tool
2. Choose Session tree node, enter the host name: ui.inspemhpc.edu.my.



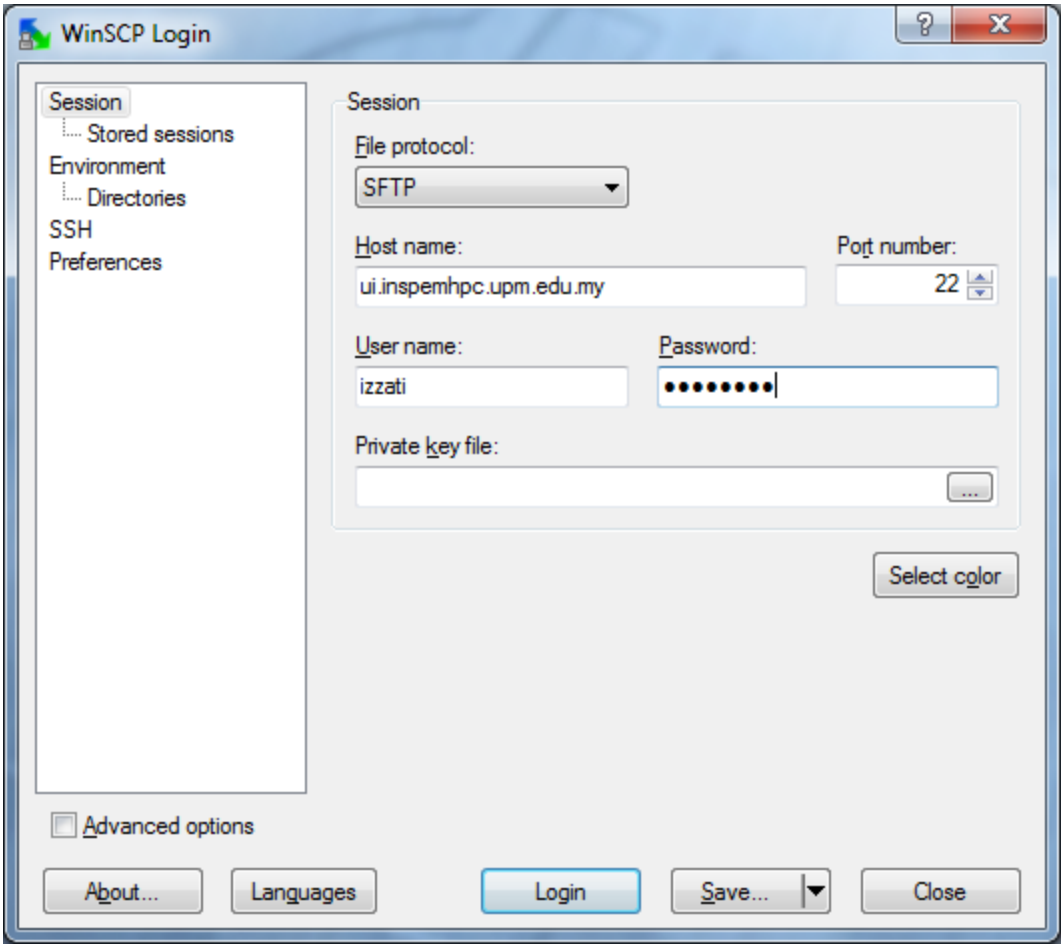
3. Press Open, then enter your username when prompted and press enter.



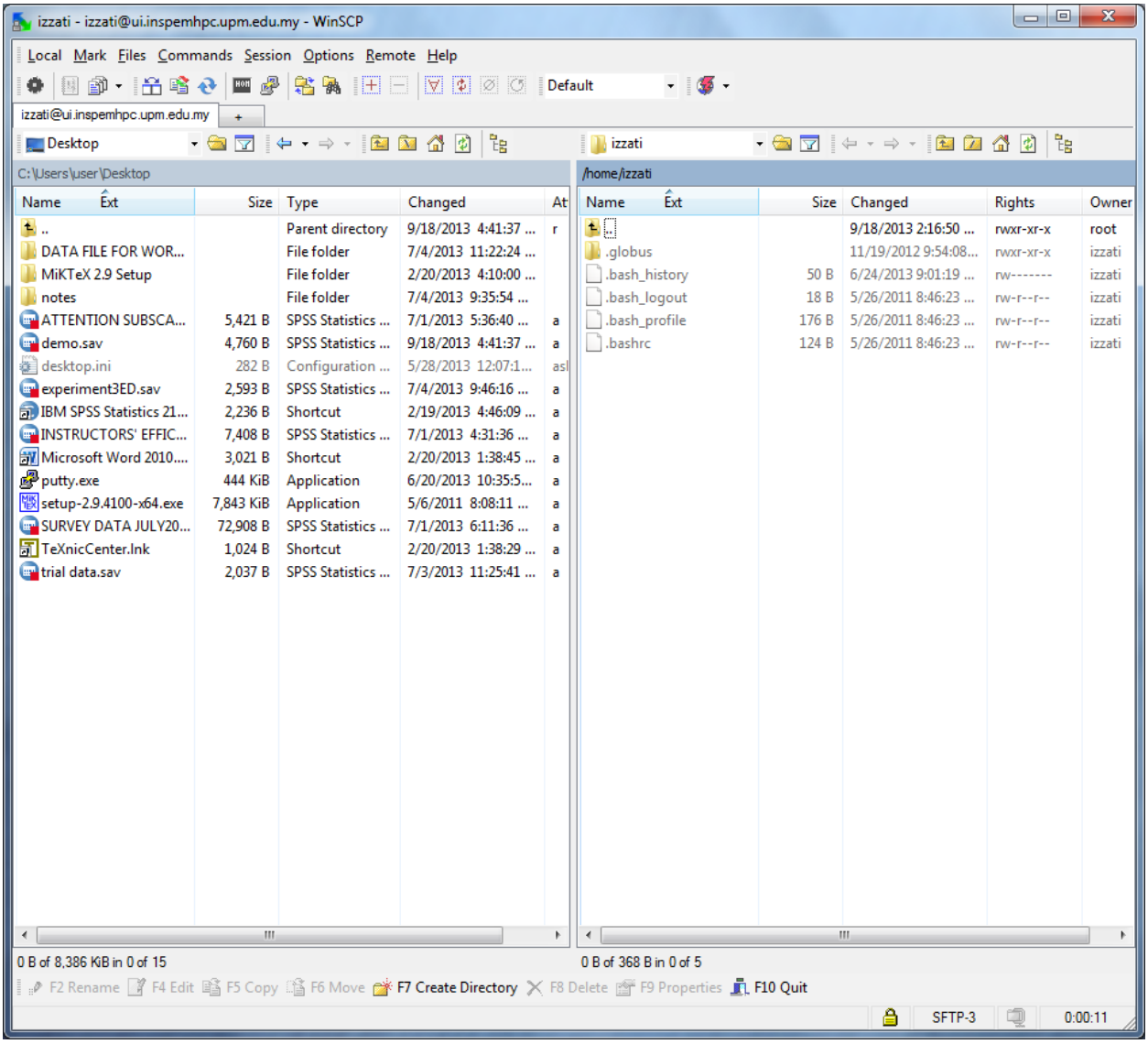
File Transfers

You can use the free WinSCP software to transfer files from local (your workstation) to the HPC server. Steps:

1. Download and install WinSCP to your computer.
2. Login using the same credentials used for PuttY (Protocol: SFTP)



3. A dual window would as below showing both local and remote sites would appear after the successful login. You can even drag the files to be copied from one to another site to transfer.



For GRID access please refer to : http://myifam.upm.my/requestusercert.php