Quick Start Guide to Use the Remote Server

This is a simple example showing how to run MATLAB code using the remote server.

Hereinafter, "terminal" refers to "Powershell" in Windows or "Terminal" in Mac OS. Both of them are built-in terminals in corresponding operating system.

Login the server and change the default password

- 1. Please contact the administrators of the remote server to apply for an account.
- 2. Open the terminal. Type ssh <username>@202.121.180.27 -p 996 in the terminal and press Enter button to login. For instance, ssh abc@202.121.180.27 -p 996 (note: do not type "<" and ">" in the terminal. If you type the wrong characters, press C key while holding down the Ctrl key to abort.)
- 3. Type the default password: 123. (Note: since it is a password, you will not see what you type.)
- 4. Change the default password using the command passwd. The terminal will ask for the current password. Type 123. Then, the terminal will ask for the new password. Type your new password to replace the old one.

Copy a file from the local computer to the server

- 1. In the remote server, create a new folder named 'example': mkdir example.
- 2. Type exit to logout the server and return to local.
- 3. Create a new file named 'demo.m' in the local computer. Write in a=1; save('a', 'a');.
- 4. Type scp <path>/demo.m <username>@202.121.180.27:example to copy the file to the remote server. <path> is referred to as the path of 'demo.m' in the local computer. Note that \ in <path> should be replaced by /, and do not type '<' and '>'. Also, Chinese and space should not appear in <path>. You will need to type the password to run this command.
- 5. Open the terminal. Login the server. Use cd example command to go into the 'example' folder. Use 1s command to check the files and folders in the current path. If you see 'demo.m', then it means that you have successfully copied the file to the remote server.

Run the MATLAB script in the server

- 1. In the 'example' folder in the remote server, run MATLAB by silent mode: matlab nodesktop -nosplash.
- 2. Type 'run demo.m' to run the script.
- 3. List all files in folder 'example' using command 1s. A file 'a.mat' should appear.

Copy a file from the server to the local computer

- 1. Type exit to return to the local.
- 2. Use scp <username>@202.121.180.27:example/a.mat <local_destination_path> to copy the file to the local computer. Again, \ in <local_destination_path> should be

- replaced by //, do not type '<' and '>', and Chinese and space should not appear in <local_destination_path>.
- 3. You will see a file 'a.mat' copied to your local computer in <local_destination_path>.

Useful commands

- 1. If your programs are running in the server, you have to keep connecting the server all the time. However, the command <u>tmux</u> allows you to keep programs running after you disconnect.
- 2. Copy multiple files and folders between the local computer and the server: <u>scp</u>. Windows users can also use a user-friendly software <u>WinSCP</u> to copy files between the local and the remote.
- 3. Basic shell commands in Linux

Softwares installed in the server

- 1. Python 2.7.12, Python 3.5.2;
- 2. MATLAB 2018a.
- 3. R 4.0.2 + RStudio Server 1.3.959

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