

Pycharm Bluepebble

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1 Background

This guideline explains how PyCharm can be connected to Bluepebble, so that files can be edited in PyCharm and then uploaded onto Bluepebble directly (i.e. Remote server set-up). It also includes a section on how to open Bluepebble terminal in PyCharm (i.e. SSH terminal).

2 Requirements:

- PyCharm Professional (available for free to students)
- UoB VPN
- a BluePebble account

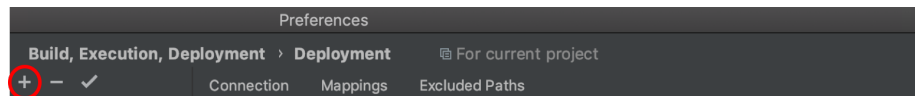
3 Remote server set-up

First of all, connect to UoB VPN, then in PyCharm go to:

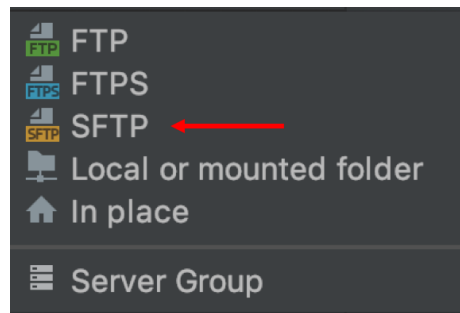
File | Settings | Build, Execution, Deployment | Deployment for Windows and Linux

PyCharm | Preferences | Build, Execution, Deployment | Deployment for macOS

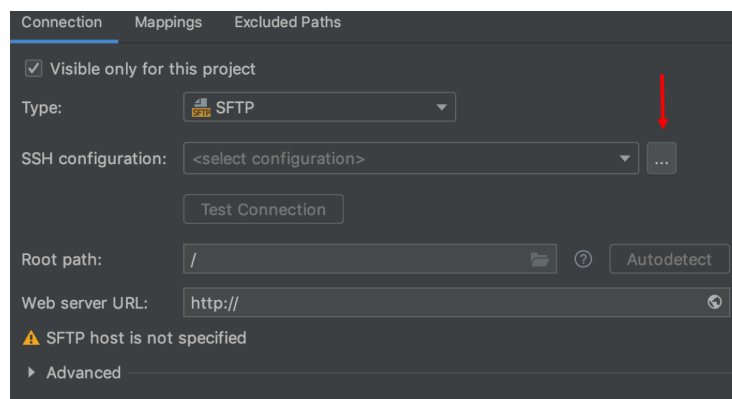
Then select the plus symbol on the top menu to create a new remote server configuration:



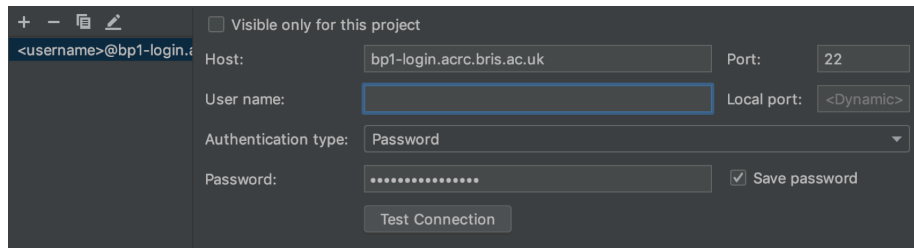
Choose SFTP and input a desired name to the sever (e.g Bluepebble):



In the page that opens up, press on the three dots next to "SSH configurations":

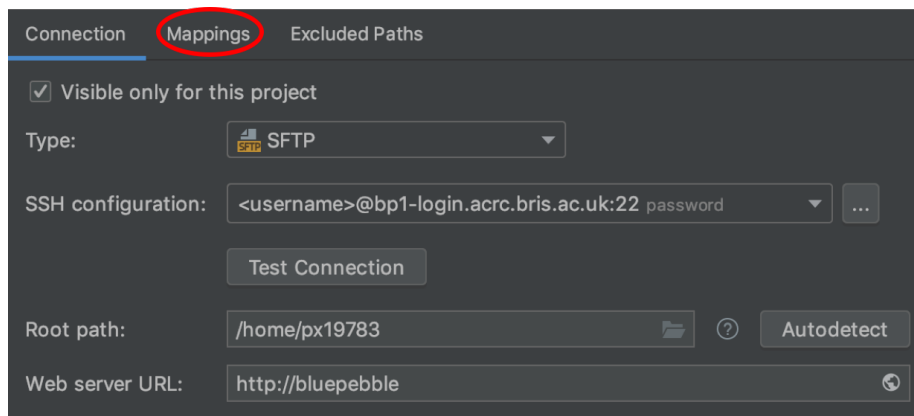


Another page will open up. In the Host section type " bp1-login.acrc.bris.ac.uk". Successively, write your BluePebble username and password in the corresponding sections.

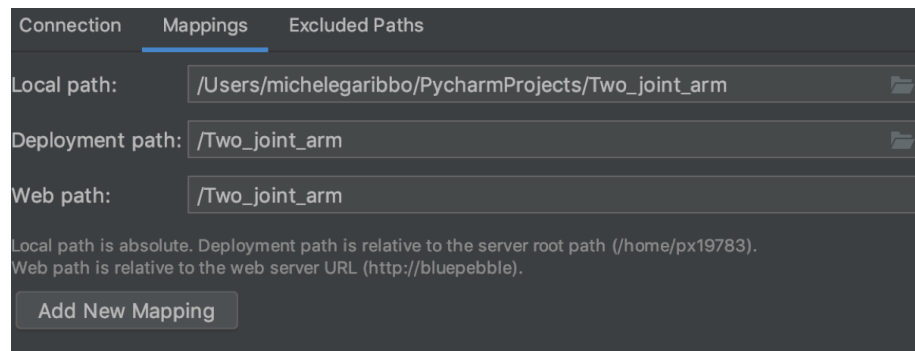


Press "Test Connection" to make sure the connection was successful, it should say so, then press "OK". If it does not connect successfully, make sure you are currently connected to UoB VPN. In the "Connection" menu, choose the desired Root path on Bluepebble, you can press "Autodetect" to let PyCharm find it for you. This will be set to the default path when you log-in BluePebble (i.e. /home/username). If it asks you to specify a Web server URL, you can write anything in there (e.g. "http://bluepebble"). In the same page, you can also tick "visible only for this project" to make sure the server connection is only established for your current PyCharm project.

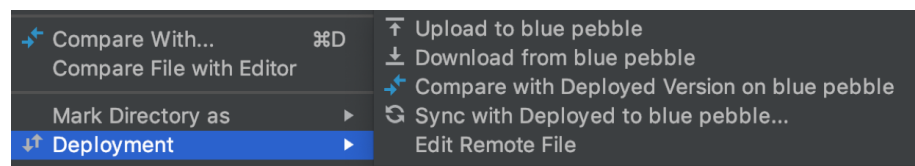
Successively, press on "Mappings" on the top menu:



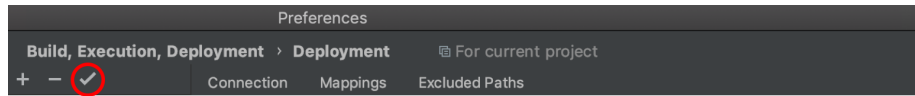
In this section, you can specify what folders on your local computer you would like PyCharm to upload onto the remote server (i.e. BluePebble). For instance, you can map your PyCharm project folder to a folder on BluePebble. I think mapping the entire project folder onto BluePebble is the best way. Note that the "Deployment path" onto BluePebble needs to be specified relative to the previously specified root path (i.e. no need to specify the root path again in front of the desired folder). If it requires a Web path, you can again write anything. Find below an example of a mapping from a PyCharm project folder to a folder on BluePebble:



Once all of the above is completed, you can edit your files in PyCharm and whenever you want to upload the changes onto BluePebble, you can right-click on file or the folder containing multiple files, and select "Deployment". Here, several options should be available, including upload the file to BluePebble or sync the two mapped folder. Note that you can also write your "job" files in PyCharm and then upload them onto Bluepebble to be executed there.

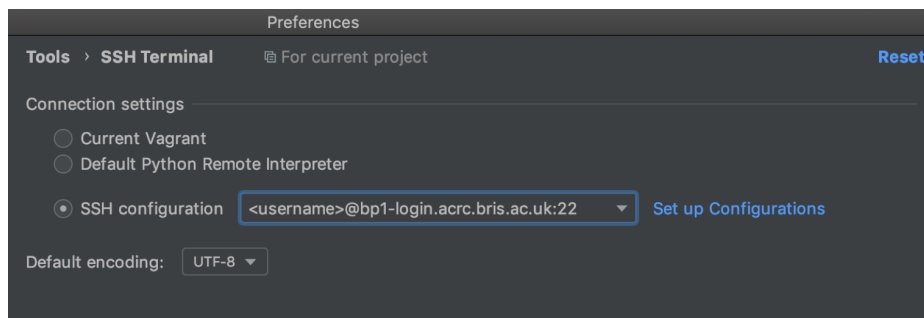


Finally, you can also make Bluepebble the default remote server, so that changes to the files are automatically uploaded onto BluePebble. This can be done by clicking on the "V" in Deployment menu in Preferences:



4 SSH terminal

You can operate Bluepebble directly from PyCharm by starting a SSH session in PyCharm. Note, you need to be connected to UoB VPN for this to work. In PyCharm, go to "Tools — Start a SSH session...". This should open a SSH terminal session in Bluepebble, logging-in the default directory (i.e. "home/username"). If this does not work, in PyCharm go to "Preferences — Tools — SSH configurations" and make sure the Bluepebble server configuration is there. Go also to "Preferences — Tools — SSH Terminal" and make sure "SSH configuration" is selected with the corresponding Bluepebble configuration, as below:



I am not sure if this only works if you set BluePebble as the default server, as explained above.

5 Further info and preferences

- Some preferences can be specified in PyCharm by going to: "tools — Deployment — Options..."

- Further info on setting-up the server configuration can be found at <https://www.jetbrains.com/help/pycharm/creating-a-remote-server-configuration.html>
- Further info on setting-up the SSH terminal can be found at <https://www.jetbrains.com/help/pycharm/running-ssh-terminal.html>