

# Assignment

- Setting up an SSH server with a proper access method
  - Setup 1 VM using Ubuntu in your laptop computer
  - Generate an SSH Key Pair
  - Place Private Key at Host OS
  - Place Public Key at Ubuntu VM
  - Give proper setup to SSH Server
  - Demonstrate that your SSH login properly uses Public Key Authentication
- Deadline: 23:59 January 14<sup>th</sup>, 2017 (UPDATED!!)
  - Demo slots/venues will be announced by TAs
- Hints / References  
<https://help.ubuntu.com/community/SSH/OpenSSH/Keys>

# Marks Distribution of Assignment

- Point 1: 10 Marks
  - Is /etc/ssh/sshd\_config is properly configured?
  - 5 Marks PermitRootLogin: no
  - 5 Marks PermitPasswordAuthentication: no
- Point 2: 10 Marks
  - Does remote login use Public Key Authentication?
  - If his/her key pair is properly generated and configured, then the default mode of authentication shall be Public Key Authentication.
  - If Public Key Authentication is not initiated properly for the remote login, misplacement of the keys, wrong file permission, etc. maybe the course.
  - The marks must be given only successful remote login using Public Key Authentication is confirmed.
- Point 3: 10 Marks
  - 5 Marks Make sure that root login is refused immediately.
  - 5 Marks Make sure that the login procedure DOES NOT fall back to Password Authentication
  - If the Public Key Authentication fails AND password authentication is still allowed, then the password authentication may come up. It is not allowed in this assignment. To check this, type wrong pass phrase (empty password) several times. If the authentication is terminated after the failure of entering pass phrase, that mean the configuration is correct 5 marks will be given.
- Point 4: 10 Marks (Bonus)
  - If any students tries to setup the source address filter in the sshd or any other possible configuration, confirm that the configuration works properly and give 10 bonus marks.
- Why Point 1 and other points must be separately checked?
- Answer: The sshd configuration gets active after the sshd is restarted with the updated configuration. If there is an inconsistency in the configuration, then the sshd will not be launched properly. I want you to check both configuration and actual behavior of the remote longin.