# To generate the key for box64-1, for cpu-001, apcpu-006 and gup-002:

1. follow: https://www.ssh.com/ssh/keygen/ to understand 'SSH KEY'

2. to skip the password to login box64-1, then the local host is hean@linux-hau6

all the following is done in the local host "hean@linux-hau6"

the main procedure is:

1. cd to folder .ssh; if there is no .ssh, then you need do one time “ssh anyremote” (example: ssh -Y cpu-001).

1. generate key: ssh-keygen;

**hean@linux-hau6:~/.ssh> ssh-keygen**

then the private key "id\_rsa" and the public key "id\_rsa.pub" will be generated in the [hean@linux-hau6:~/.ssh](mailto:hean@linux-hau6:~/.ssh)

1. copy the publice key to the remote server which you want to skip the password (i.e., box64-1);

**hean@linux-hau6:~/.ssh> ssh-copy-id** [**ahe@box64-1.nsls2.bnl.gov**](mailto:ahe@box64-1.nsls2.bnl.gov)

then you will find the content of “id\_rsa.pub” was added to the end of the file “authorized\_keys” in [ahe@box64-1:~/.ssh](mailto:ahe@box64-1:~/.ssh)

3. to skip the password to login cpu-001, apcpu-006, gpu-002, then box64-1 is the local host.

If you never do the password skip for any one of the three servers, then you need follow the similar procedure as “2.”. Here I take “cpu-001” as an example:

1. in the remote, i.e., ahe@cpu-001, cd to folder .ssh; if there is no .ssh, then you need do one time “ssh anyremote” (example: ssh -Y anhe@cori.nersc.gov).

1. In the local host, i.e., ahe@box64-1;

generate key: ssh-keygen;

**ahe@box64-1:~/.ssh> ssh-keygen**

then the private key "id\_rsa" and the public key "id\_rsa.pub" will be generated in the [ahe@box64-1:~/.ssh](mailto:ahe@box64-1:~/.ssh)

1. In the local host, i.e., ahe@box64-1;

copy the public key to the remote server which you want to skip the password (i.e., box64-1);

**ahe@box64-1:~/.ssh> ssh-copy-id** [**ahe@cpu-001**](mailto:ahe@box64-1.nsls2.bnl.gov)

then you will find the content of “id\_rsa.pub” was added to the end of the file “authorized\_keys” in [ahe@box64-1:~/.ssh](mailto:ahe@box64-1:~/.ssh)

4. because I have the same password for cpu-001, apcpu-006, gup-002, then skip the login password, I can just copy the file “.ssh/authorized\_keys” in cpu-001 to the folder [ahe@apcpu-006:~/.ssh/](mailto:ahe@apcpu-006:~/.ssh/) and [ahe@gpu-002:~/.ssh/](mailto:ahe@gpu-002:~/.ssh/)