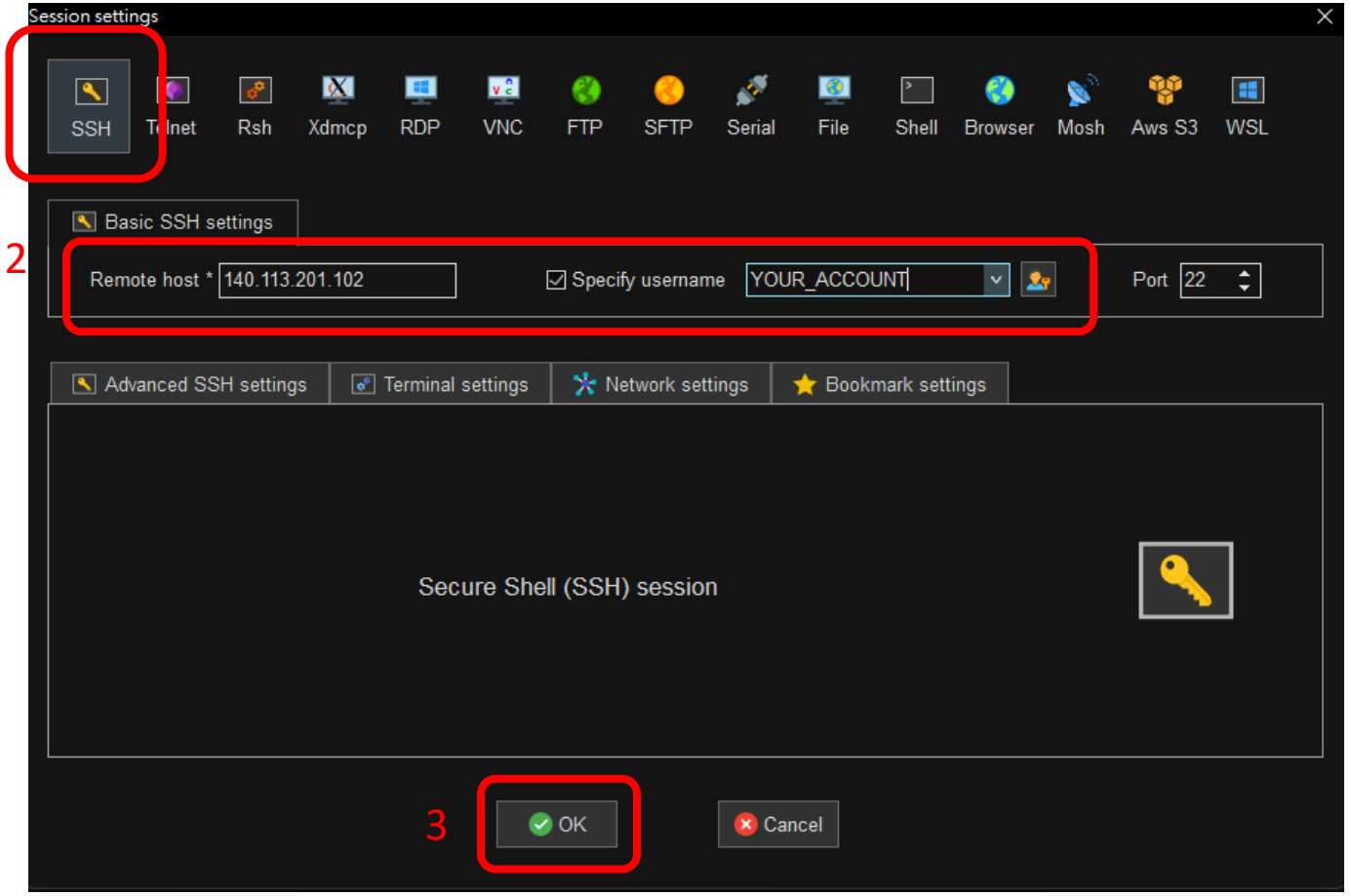
Environment setup

Outline

- Environment setup
- How to Get GPU Resource

MobaXterm Setting

- Ip: **140.113.201.102**
- Password: **pc414**



- Change your password
  - $ passwd

```
ca2019fta01@414server:~$ passwd
Changing password for ca2019fta01.
(current) UNIX password:
```

- At the first time login to your account, you have to run
  - $ /opt/script/autokeygen.sh

```
spawn ssh-keygen -t rsa
Generating public/private rsa key pair.
Enter file in which to save the key (/home/NFS/hanchun/.ssh/id_rsa):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/NFS/hanchun/.ssh/id_rsa
Your public key has been saved in /home/NFS/hanchun/.ssh/id_rsa.pub
The key fingerprint is:
SHA256:omlXoos53vlaKdUDjCnlQaPiHOqbePl4qCSoS/9VzRo hanchun@414server
The key's randomart image is:
+---[RSA 3072]----+
|    •=           |
|   + *           |
|  ..o + o        |
| +...   o  o     |
| .o    + SE o    |
| o    = =..o     |
|o+ o* +. .       |
|* O*.*.          |
|=B=B+.           |
+----[SHA256]-----+
```

How to Get GPU Resource

- Run command to open a shell with GPU resource
  - `$ srun --pty --gres=gpu:1 -u bash -i`

```
ca2019fta01@414server:~$ srun --pty --gres=gpu:1 -u --x11=first bash -i
The authenticity of host 'pc414-82 (140.113.201.82)' can't be established.
ECDSA key fingerprint is SHA256:CKVB1zQcEdCPBH9vZDZqMQbsIs0lZn2OyVAos94nL30.
Are you sure you want to continue connecting (yes/no)?
ca2019fta01@pc414-82:~$
```

Enter: “yes”

You shall see host name pc414-xxx

- PC414 Rules:
  1. PC414 allocate each user only 1 GPU
  2. Each allocation of resources limits in 24 hours. After that, the process will be terminated.

How to Release GPU Resource

- If you want to exit GPU node, enter exit in terminal (or press Ctrl+D)
  - This will release GPU resource, and return to 414server

```
user@414server:~$ srun --pty --gres=gpu:1 -u bash -i
user@pc414-82:~$ exit
user@414server:~$
```

How to Get GPU Resource

- If your process not terminated successfully and get the bellow message after you open new srun bash:

```
user@414server:~$  srun --pty --gres=gpu:1 -u bash -i
srun: job 10 queued and waiting for resources
```

- Press (Ctrl+C), then run the command to kill the previous process

```
$ scancel --user=YOUT_USER_NAME
```

```
user@414server:~$ scancel --user=user
user@414server:~$ srun --pty --gres=gpu:1 -u bash -i
user@pc414-82:~$
```

How to Get GPU Resource

- If you think the command is complicate, you can use “alias” to enter less word with aliasing command

```
$ echo "alias sbash='srun --pty --gres=gpu:1 -u bash -i'" >> ~/.bashrc
$ source ~/.bashrc
```

- The command will be replaced with “sbash”
  (you can use other word you prefer, be sure not conflicting any command)

```
ca2019fta01@414server:~$ echo "alias sbash='srun --pty --gres=gpu:1 -u --x11=first bash -i'" >> ~/.bashrc
ca2019fta01@414server:~$ source ~/.bashrc
ca2019fta01@414server:~$ sbash
ca2019fta01@pc414-82:~$
```

Notice!!!!

- After you finish running your code and will not use it for a short time.
  - You should logout(Ctrl+D) the shell to release resources for others.
  - Or just close your terminal (MobaXterm)