

Use Guide of online_CUDA_node

This guide written for Parallel Programming22 Spring

Account and password

For a student whose studentID as 2019011011, the online_CUDA_node Account and Password would be like:

Account : pp2019011011 password:2019011011

To login

use ssh to login,according to the server,your way as below:

a100: ssh your_account@a100n.ssslslab.cn -p 20010

intel80: ssh your_account@intel80n.ssslslab.cn -p 20014

By the way, we suggest that use **Linux** systems to operation, whether virtual machines or dual systems. If you use windows series, you may encounter a series of unexpected problems

Example to refer

for example, my account to login is `pp11124`

When you start logging in, enter your password and enter this interface, it indicates that it has been successful. Start uploading the code in your folder and testing it !

```
david@david-KLV-WX9:~$ ssh pp11124@a100n.ssslslab.cn -p 20010
pp11124@a100n.ssslslab.cn's password:
Welcome to Ubuntu 20.04.4 LTS (GNU/Linux 5.11.0-27-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

2 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

Your Hardware Enablement Stack (HWE) is supported until April 2025.
Last login: Tue May  3 14:24:14 2022 from 127.0.0.1
pp11124@paralle1-MS-7C76:~$
```

After you log in successfully, you can use the command `nvidia-smi` and `nvcc -v` to query the hardware configuration and CUDA.

```
pp11124@parallel1-MS-7C76:~$ nvidia-smi
Tue May 3 14:28:04 2022

+-----+
| NVIDIA-SMI 510.60.02      Driver Version: 510.60.02      CUDA Version: 11.6      |
+-----+-----+-----+-----+-----+-----+
| GPU  Name           Persistence-M| Bus-Id        Disp.A | Volatile Uncorr. ECC |
| Fan  Temp  Perf    Pwr:Usage/Cap|      Memory-Usage | GPU-Util  Compute M. |
|====+=====+=====+=====+=====+=====+
|  0  NVIDIA GeForce ...  Off    | 00000000:01:00.0 On  |         0%      Default
|  0%   45C    P8      7W /  75W | 305MiB / 4096MiB |             MIG M.   |
|                                     |                     | N/A                  |
+-----+-----+-----+-----+-----+-----+
|  1  NVIDIA GeForce ...  Off    | 00000000:02:00.0 Off |         0%      Default
|  0%   46C    P8      4W /  75W | 10MiB / 4096MiB |             MIG M.   |
|                                     |                     | N/A                  |
+-----+-----+-----+-----+-----+-----+

+-----+
| Processes: |
| GPU   GI    CI          PID    Type    Process name                  GPU Memory |
|      ID    ID                          |            | Usage      |
+-----+-----+-----+-----+-----+-----+
|   0   N/A   N/A         1079     G   /usr/lib/xorg/Xorg             41MiB |
|   0   N/A   N/A         1729     G   /usr/lib/xorg/Xorg             84MiB |
|   0   N/A   N/A         1881     G   /usr/bin/gnome-shell           40MiB |
|   0   N/A   N/A         2304     G   /usr/lib/firefox/firefox       127MiB |
|   1   N/A   N/A         1079     G   /usr/lib/xorg/Xorg              4MiB |
|   1   N/A   N/A         1729     G   /usr/lib/xorg/Xorg              4MiB |
+-----+-----+-----+-----+-----+-----+
```

For more question, come to your TA