GPU Cluster User Guide

Quick Start

1. Log into the cluster via SSH. (Recommended SSH client software: PuTTY/MobaXterm for Windows, iterm2/Terminus for Mac.)

For example:

```
ssh [username]@[hostname]
```

IMPORTANT! If this is your first time logging into the system, please update your account IMMEDIATELY with a strong password using the command line:

```
passwd [username]
```

2. Log into the Docker Container using received `container-id`.

```
sudo docker attach [container-id]
```

3. You are sudo user in the container now. Get started with your program!

4. Detach from the container using the command: `Ctrl+P` followed by `Ctrl+Q`. The container will be stopped if you exit the container (e.g., using the command `exit`). If you want to keep the container running, please use the detach command.

Start the container if you accidentally exit it:

```
sudo docker start [container-id]
```

Restart the container if required:

```
sudo docker restart [container-id]
```

Copy files from/to the container

```
sudo docker cp [OPTIONS] [container-id]:[src_path] [dest_path]
sudo docker cp [OPTIONS] [src_path] [container-id]:[dest_path]
```

More details at https://docs.docker.com/engine/reference/commandline/cp/

If you need a large space of storage (>200GB), please contact the administrator to create a volume for your container without the need of copying the files.

Tips

1. Want to keep your program running after network disconnection?

   Try SSH session management tools, e.g., Byobu (https://www.byobu.org/home), screen (https://www.digitalocean.com/community/tutorials/how-to-install-and-use-screen-on-an-ubuntu-cloud-server).

2. Check the status of GPU devices

   ```
   nvidia-smi
   ```

3. Select a GPU device for your program if you have multiple GPUs

   ```
   CUDA_VISIBLE_DEVICES=[GPU-IDs] python your_program.py
   ```