This document records how to run GPU tasks **step by step** in CCR of University of Notre Dame.

1 Software installation

Note that Putty is used to send SSH controls to the server, while FileZilla is to transport files between your computer and the server. Other softwares can also be used instread of the following two: Putty and FileZilla.

1.1 Putty

- Step 1: configuration as shown below

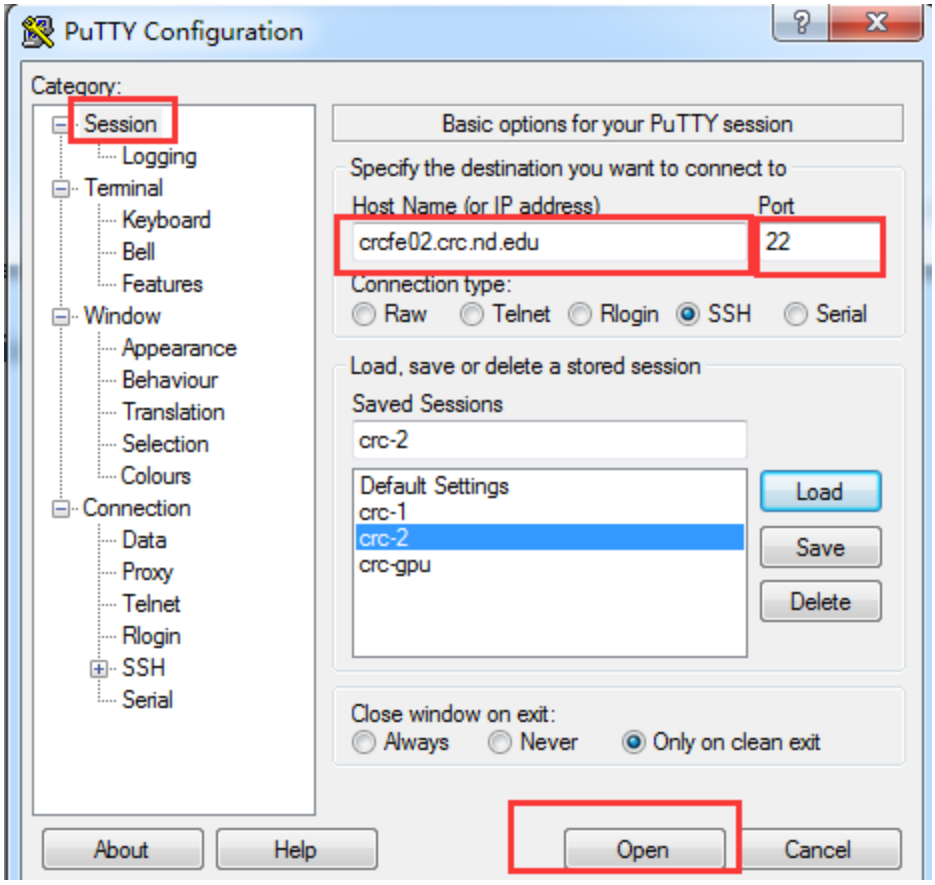

Figure 1 Configuration of Putty

Syep 2: connected to server and login with your NetID

Figure 2 login to the CRC server

1.2 FileZilla

The configuration is as follows:

Host: sftp://crcfe01.crc.nd.edu, and the port can be left blank.

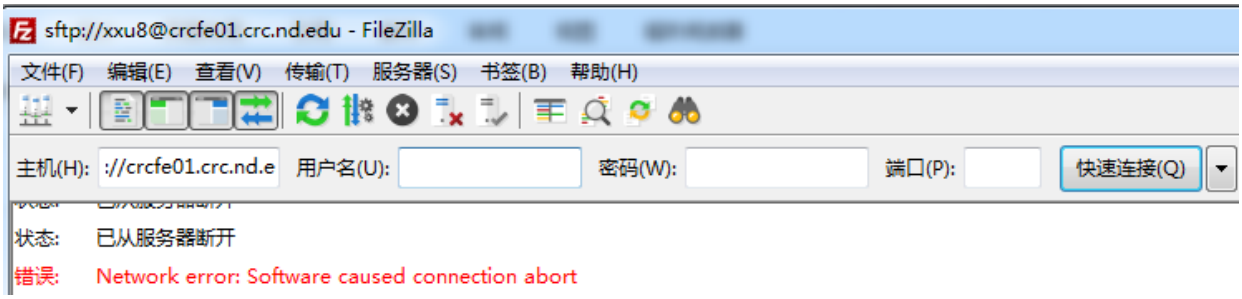

Figure 3 FileZilla configurations

2 How to run the GPU task

2.1 File prepare with FileZilla

- File path configuration:

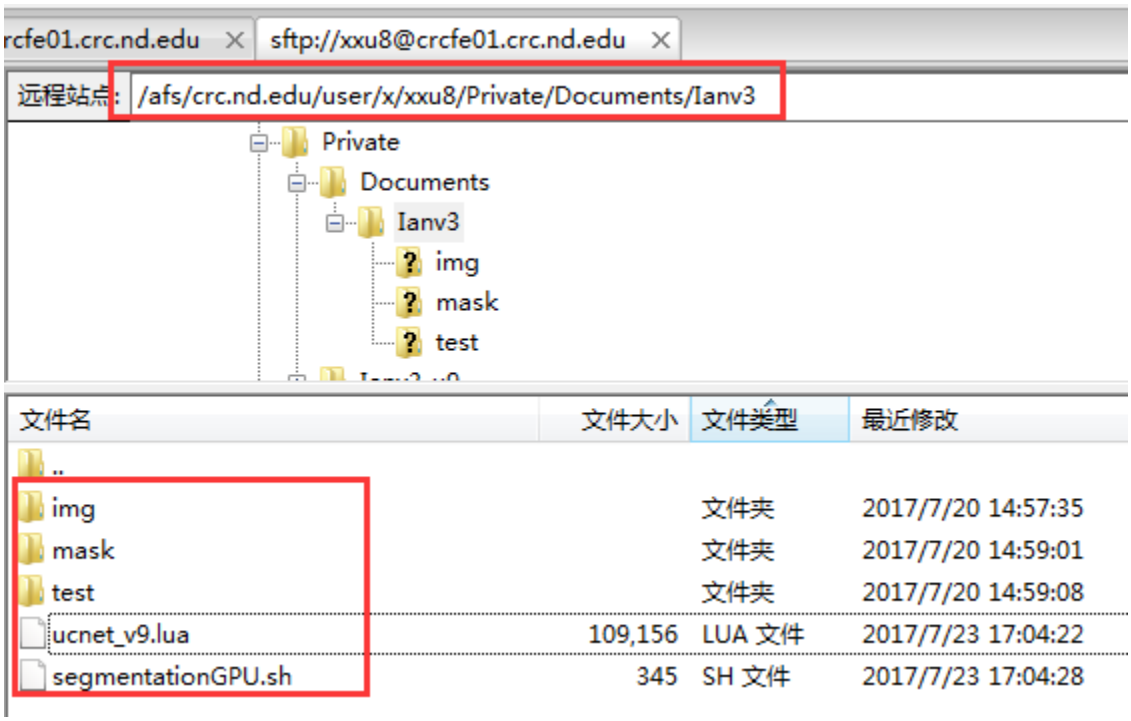

Figure 4 File path configuration

- Dataset: the folder *img*, *mask* and *test*
- The task: ucnet_v9.lua
- The job script: segmentationGPU.sh

2.2 Command with Putty

There are two modes: debug mode and running mode.
The debug mode is for debug, and the result can be returned immediately. However, the running time for one-time debug is limited to one hour, which means we cannot use it for general runnings with hundreds of hours.
The running mode is to send the task to the task queue which is handled by the CRC.

- Debug mode:

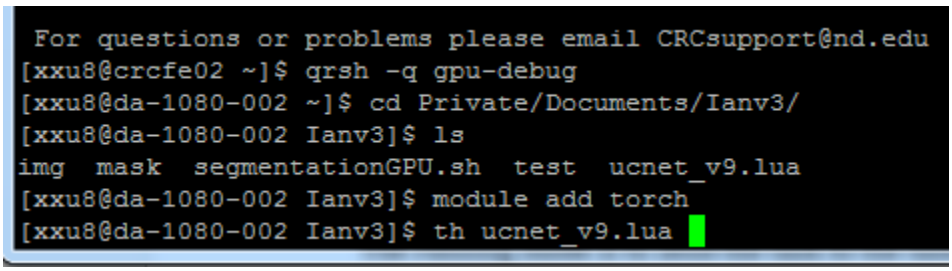

Figure 5 Debug mode configuration for GPU

- Running mode:

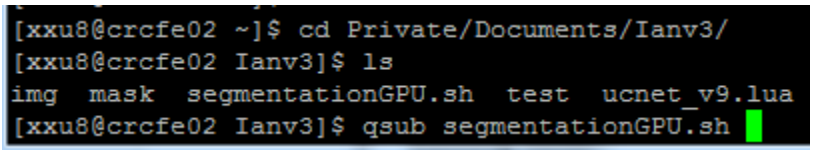

Figure 6 Running mode configuration for GPU