**DRL Global Routing Problem Parametric Study Instruction**

Haiguang Liao

Apr.17.2019

1. **Install X2go** (in order to monitor and operate remotely)

2. **Connect SSH**

$ ssh [wentai@128.2.115.40](mailto:wentai@128.2.115.40)

Password: QWErty123!

Enter Working directory Directory with ‘cd’

/Documents/Xuliang/DRL\_GlobalRouting/Apr2019\_ParametricStudy

**3. Doing experiment on Lab Server**

**From X2go**

(1) Check excel sheet for parameters

(2) Create new folder in “Apr2019\_ParametricStudy” by copying a mother “GlobalRouting…” file and rename based on the address in excel sheets, such as: “Apr1719\_Shuffle16”

(3) Clean up folder: enter the folder you just created and enter GlobalRoutingRLSmallBenchmarkWentaiChange\_TryBenchmarkPipelined;

Command:

pwd: print working direction

cd: change work direction

ls: list document in current directory

clear: clear screen

CTRL + C: stop program

**From screen in terminal**

(1) Make sure you are connected to ssh (Terminal start with wentai@VDEL...)

(2) Open a new screen to do experiment

$ screen -ls (check existing screen)

$ screen -S xuliangdong (create new screen)

$ Enter: CONTROL + A + D (log out from screen)

$ screen -ls (check existing screen)

$ screen -r xxx.xuliangdong (enter the screen of experiment)

\*Write down screen of experiment in

$ cd experiment\_folder\_name/ (such as: Apr1719\_Shuffle16)

$ cd GlobalRoutingRLSmallBenchmarkWentaiChange\_TryBenchmarkPipelined/

$ python GenSolEvalComp\_Pipeline.py --benchNumber 100 --gridSize 8 --netNum 20 --capacity 4 --maxPinNum 5 --reducedCapNum 3 (run experiment according to parameters on excel sheets)

When you see the episodes running well, log our from screen by Enter: CTRL + A + D

$ kill screen after experiment done

$ Log out from SSH: CTRL+A+D

\*while running

Check CPU utilization of server from X2Go