

Please refer to “software installation” at the last session of this document before you proceed with vglrun steps below!

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Vglrun steps On Mac:

Open one terminal:

```
ssh -X jin6@login.palmetto.clemson.edu
qsub -I -l select=1:ncpus=1:ngpus=1:gpu_model=k40,walltime=06:00:00
/software/cuda-toolkit/8.0.44/samples/1_Uutilities/deviceQuery/deviceQuery
/software/cuda-toolkit/9.0.176/samples/1_Uutilities/deviceQuery/deviceQuery
```

```
LANG=C && /opt/TurboVNC/bin/vncserver
```

this will give you the following information:

```
“Desktop 'TurboVNC: node0564.palmetto.clemson.edu:1 (jin6)' started on display
node0564.palmetto.clemson.edu:1
```

```
Starting applications specified in /home/jin6/.vnc/xstartup.turbovnc
```

```
Log file is /home/jin6/.vnc/node0564.palmetto.clemson.edu:1.log”
```

```
Or: “Desktop 'TurboVNC: node0524.palmetto.clemson.edu:16 (jin6)' started on display
node0524.palmetto.clemson.edu:16
```

```
Starting applications specified in /home/jin6/.vnc/xstartup.turbovnc
```

```
Log file is /home/jin6/.vnc/node0524.palmetto.clemson.edu:16.log”
```

Open a new terminal:

```
ssh -L 9234:node0564.palmetto.clemson.edu:5901 jin6@login.palmetto.clemson.edu
Or: ssh -L 9234:node0564.palmetto.clemson.edu:5916 jin6@login.palmetto.clemson.edu
Run your turbovnc (or tigervnc) in your local machine (localhost:9234) and type the password
you set in the LANG step (Clemson password)
module purge
module load cuda-toolkit
module list
navigate to your rayTracer directory for example
vglrun ./rayTracer
```

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Vglrun steps On Windows:

Open one putty: Session Host Name (or IP address): jin6@login.palmetto.clemson.edu
Login with your Palmetto account

```
qsub -l -l select=1:ncpus=1:ngpus=1:gpu_model=k40,walltime=06:00:00
```

```
LANG=C /opt/TurboVNC/bin/vncserver
```

this will give you the following information:

“Desktop 'TurboVNC: node0564.palmetto.clemson.edu:1 (jin6)' started on display

node0564.palmetto.clemson.edu:1

Starting applications specified in /home/jin6/.vnc/xstartup.turbovnc

Log file is /home/jin6/.vnc/node0564.palmetto.clemson.edu:1.log”

Open another putty:

(http://realprogrammers.com/how_to/set_up_an_ssh_tunnel_with_putty.html)

Go to SSH->Tunnels: Add new forwarded port:

Source port: 10000

Destination: node0564.palmetto.clemson.edu:5901

Click Add

Go to Session: Host Name (or IP address): login.palmetto.clemson.edu

Login

Run your turbovnc viewer in your local machine (localhost:10000) and type the password you set in the LANG step (Clemson password)

```
module purge
```

```
module load cuda-toolkit/8.0.44
```

navigate to your rayTracer directory for example

```
vglrun ./rayTracer
```

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Software installation:

Please download and install VNC viewer from this site for your OS platform on your laptop: <https://sourceforge.net/projects/turbovnc/files>

For Windows users please download and install PuTTY to be able to connect to the Palmetto cluster from this site: <https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html>