Raptor Network Configuration Guide

Raptor Wifi SSID : raptor
Password : raptor@sutd

ROS Master
ROS master resides on a separate system. Containing all the ros dependencies.The overall Raptor system is set to run on ROS Master IP of 192.168.1.150.
The bashrc file of ros master should contain below lines to configure IP

```
#raptor wifi
export ROS_HOSTNAME=192.168.1.150
export ROS_MASTER_URI=http://192.168.1.150:11311
export ROS_IP=192.168.1.150
```

Raptor robots
All the raptors IP are set to 192.168.1.1xx.
Where xx is from 51 t0 60 representing raptor 1 to raptor 10 respectively.

These are instructions to setup all the robots to function under a single ROS master of IP 192.168.1.150.

1) Set up raptor wifi and turn it on
2) you can turn on every robot one by one.
3) open terminal (Alt + Ctrl + T) for a robot.
4) open the bashrc file by this command on terminal ---> nano ~/.bashrc
5) then look for this particular line
   export ROS_MASTER_URI=http://xxx.xxx.x.xxx:11311
6) Then change the IP to 192.168.1.150
7) The modified one looks like
   export ROS_MASTER_URI=http://192.168.1.150:11311
8) Save it (Ctrl +S) and close it (Ctrl + X)

Repeat steps 3-8 for each robot.

Note: All the raptors are connected to raptor wifi and their IP is made static so that whenever that robot is connected on that network it connects to the same IP.
The IP addresses are chosen randomly and it's up to the user to choose the IP for a particular robot.
Users have to make sure that all the raptors are connected to the same ROS_MASTER_URI.
If the user wants to change the network he wants to connect the robots then make sure required IP and Network SSID changes have to be made in the “sh_files” folder containing documents so that the robot connects automatically to the network and ROS master on booting..