

Week 5

openwifi

<https://github.com/open-sdr/openwifi>

Supported SDR platforms: (Check [Porting guide](#) for your new board if it isn't in the list)

board_name	board combination	status	SD card img	Vivado license
zc706_fmcs2	Xilinx ZC706 board + FMCOMMS2/3/4	Done	32bit img	Need
zed_fmcs2	Xilinx zed board + FMCOMMS2/3/4	Done	32bit img	NO need

sdr platform chosen for the project: zed_fmcs2, with board combination Xinlinx ZC706 + FMCOMMS2/3/4.

1. Restore the img file into a SD card;
2. Confog the corresponding file in the BOOT partition;
3. 2 antennas are connected to RXA/TXA port on FMC radio board;
4. Config the board to SD card boot mode ;
5. Connect the zedboard with PC usinga ethernet cable;
6. Change the IP address of the PC used to connect the zedboard
7. Login to the board from PC

```
ssh root@192.168.10.122
```

However, the above step is not successfully completed, since the authencication of 'PermitRootLogin' is negative. The following operations refer the following link,

'How to allow the root user to log in to Linux using SSH'
<https://blog.csdn.net/allway2/article/details/108815503>

It can be checked using cmd

```
grep -i "rootlogin" /etc/ssh/sshd_config
```

```
~ ssh root@192.168.10.122 ok | base.py | 05:40:44 下午
ssh: connect to host 192.168.10.122 port 22: Network is unreachable
~ grep -i "rootlogin" /etc/ssh/sshd_config
#PermitRootLogin prohibit-password
# the setting of "PermitRootLogin without-password".
~ ok | base.py | 05:42:51 下午
```

If there is a hash # before PermitRootLogin, this means you should edit the corresponding file using cmd

```
vim /etc/ssh/sshd_config
```

Notice: for Linux users, you can confirm the changes by restart the ssh server using cmd

```
sudo /etc/init.d/ssh restart
```

however, for Mac user, you should use the following cmd to operate as an administrator.

```
sudo su vim /etc/ssh/sshd_config
```

The configuration after modification is as follows:

```
~ grep -i "rootlogin" /etc/ssh/sshd_config ok | base py | 12:03:40 pm
PermitRootLogin yes
# the setting of "PermitRootLogin without-password".
~ ok | base py | 12:03:47 pm
```