

SCDTR 2017/2018 Raspbian Image

A custom image of raspbian was prepared for the SCDTR labs in order to let the Raspberry PI be accessible without requiring an keyboard, mouse and HDMI connection to a monitor. Using the Ethernet connection, the user can run a VNC client, or use ssh, to access the PI.

The image was based on the raspbian distribution:

- 2016-09-23-raspbian-jessie.img

A link to the image is provided in the course web page. For anyone interested in replicating the process of preparation the image, or do the same with more recent version of raspbian, the steps to create the image are given in Appendix.

How to access the SCDTR RPI's from your computer?

Set your laptop Ethernet card with fixed ip address 10.0.0.2

Now you can ssh to 10.0.0.1

User: pi

Pass: raspberry

To connect via VNC (use real vnc client) you have to connect via ssh and issue the command vncserver. The server will display an address on the terminal. Now use that address to start the vnc client.

How to set a fixed ip on your computer?

Windows:

Go to Network devices \ Ethernet \ TCP-IP V4 Properties dialog box.

IP ADDRESS 10.0.0.2

SUBNET MASK 255.255.255.0

Ubuntu:

Check the name of your Ethernet interface. Say eth0.

Issue command:

```
>> sudo ifconfig eth0 10.0.0.2 netmask 255.255.255.0
```

Check if the setting is ok with:

```
>> ifconfig
```

This creates a temporary setting. You have to repeat this command everytime you connect or restart the computer.

Make sure you are not connected to any other subnet 10.0.0.x (e.g. wifi)

Appendix

Steps to create the SCDTR image:

- `sudo -i`
- `raspi-config`
- Advanced options: enable ssh, enable vnc
- `nano /etc/dhcpd.conf`
- In the end of the file introduce:
- `interface eth0`
- `static ip_address 10.0.0.1/24`
- `ctrl-x`
- `Y`
- Reboot