

1. How the IP address of your RPi can be heard before authentication? In which configuration file in /etc this setting is made? We call the script `"/etc/rc.local"` on boot .

2. Which software is used for the vocal synthesis of the IP ? The vocal synthesis uses "festival" with option `-tts`¹ and pipes the value of our ip to the vocal synthesis.

3. Which configuration should be made to modify this setting by a new one allowing the sending of the IP to your personal mailbox? Before starting we would need to need to install and configure a mailing service we would chose "mailutils" in order to use "mail". We would simply have to add a line in the script a usage of "mail" : **mail -s <subject of mail> <my mail address> < < < \${ <variable containing our IP> } (or) hostname -I**

4. Using the command ifconfig, retrieve the IP address of your RPi.
`ifconfig wlan0` gets

5. How to scan the different WiFi networks detected by your dongle ?
`iwlist wlan0 scan | grep ESSID`

6. Describe the content of the network configuration files /etc/wpa.conf and /etc/network/interfaces and guess the relationship between them. wpa.conf lists saved network configurations with the name, ssid and hash of the password, whereas interfaces lists all the possible connection to the different interfaces with their valid parameters. We can act upon the default behaviours regarding connecting to networks.

7. How the setting of the above files can be changed in order to make your RPi recognizes your home WiFi network? If you do it, don't forget to make backups! You would have to add a new configuration under network with ssid , password next to #psk and our security key hash if we had one under psk. This last would depend on the security our local networks security configuration, you would have to use the proper hash be it md5, sha512 , ect ...

8. By which command the pre-configured image was created after the modification of the official lite version of Raspbian provided by the Raspberry Pi foundation ? We would use the "dd" command to create a

1. To convert text files to speech.

bootable image with usage : **dd if=<input dir> of=<file to create with .img format> count=<size of file in Mbs> .**

Later you can additionally use **mkfs <filesystem> -F <file to format>** to format your created file for a different file system.