

Home Automation with Python on Raspberry Pi

Network Configuration

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WLAN

- Raspberries are connected via WLAN to a Fritz!Box
 - SSID: FRITZ!Box3490
 - WPA-Key: 10047479101647916929
- Within the WLAN, the Raspberries have the following IP Addresses

Host	IP
rpi01	192.168.188.23
rpi02	192.168.188.28
rpi03	192.168.188.25
rpi04	192.168.188.26
rpi05	192.168.188.27

- The Raspberries have access to the Internet
- Student PC can connect directly to the WLAN



Accessing Raspberries from Lab PCs

- The Fritz!Box is connected to the Lab Network
- IP Address of Fritz!Box: 10.28.4.77
- IP Addresses of Lab PCs: 10.28.4.1 ... 17
- The Raspberries can be accessed via special Ports

Host	SSH	HTTP
rpi01	222	223
rpi02	230	231
rpi03	224	225
rpi04	226	227
rpi05	228	229

Example: <http://10.28.4.77:223> (HTTP access to rpi01)



Accessing Raspberries from Student PCs via VPN

- Access through Fritz!Box ports (as for Lab PCs)
- On the Raspberry, back-routes must be configured:
 - In configuration file `/etc/network/interfaces`

```
route add -net 10.159.2.0 mask 255.255.255.0 gw 10.28.63.254/p
route add -net 10.159.3.0 mask 255.255.255.0 gw 10.28.63.254/p
route add -net 10.159.4.0 mask 255.255.255.0 gw 10.28.63.254/p
route add -net 10.159.5.0 mask 255.255.255.0 gw 10.28.63.254/p
```

