1. System installation

1. Download “raspbian”

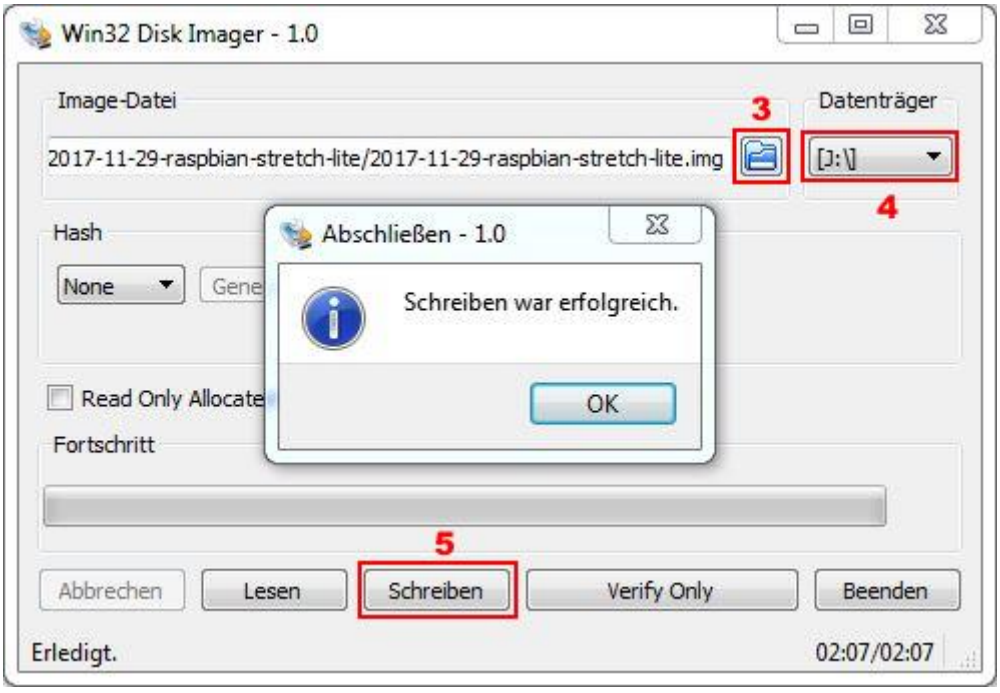
https://www.raspberrypi.org/downloads/raspbian/

2. Download “**Win32 Disk Imager**”

http://www.chip.de/downloads/Win32-Disk-Imager_46121030.html

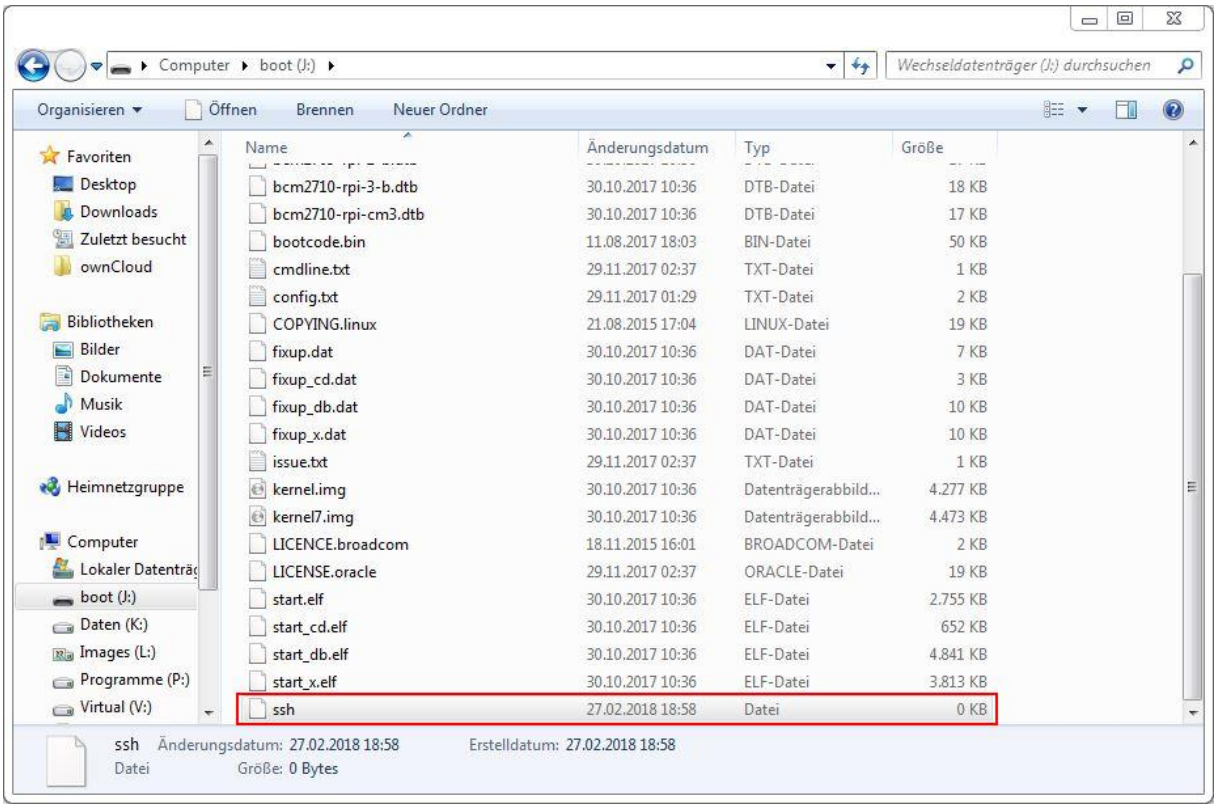
3. Flash the “raspbian“ image with “Win32 Disk Imager”

1. Unzip the raspbian image
2. Open Win32 Disk Imager
3. Select the image file
4. Select your SD-Card
5. “Write” to the SD-Card



4. Enable SSH

Open your SD-Card with the windows explorer and create a file called “ssh”



5. First run

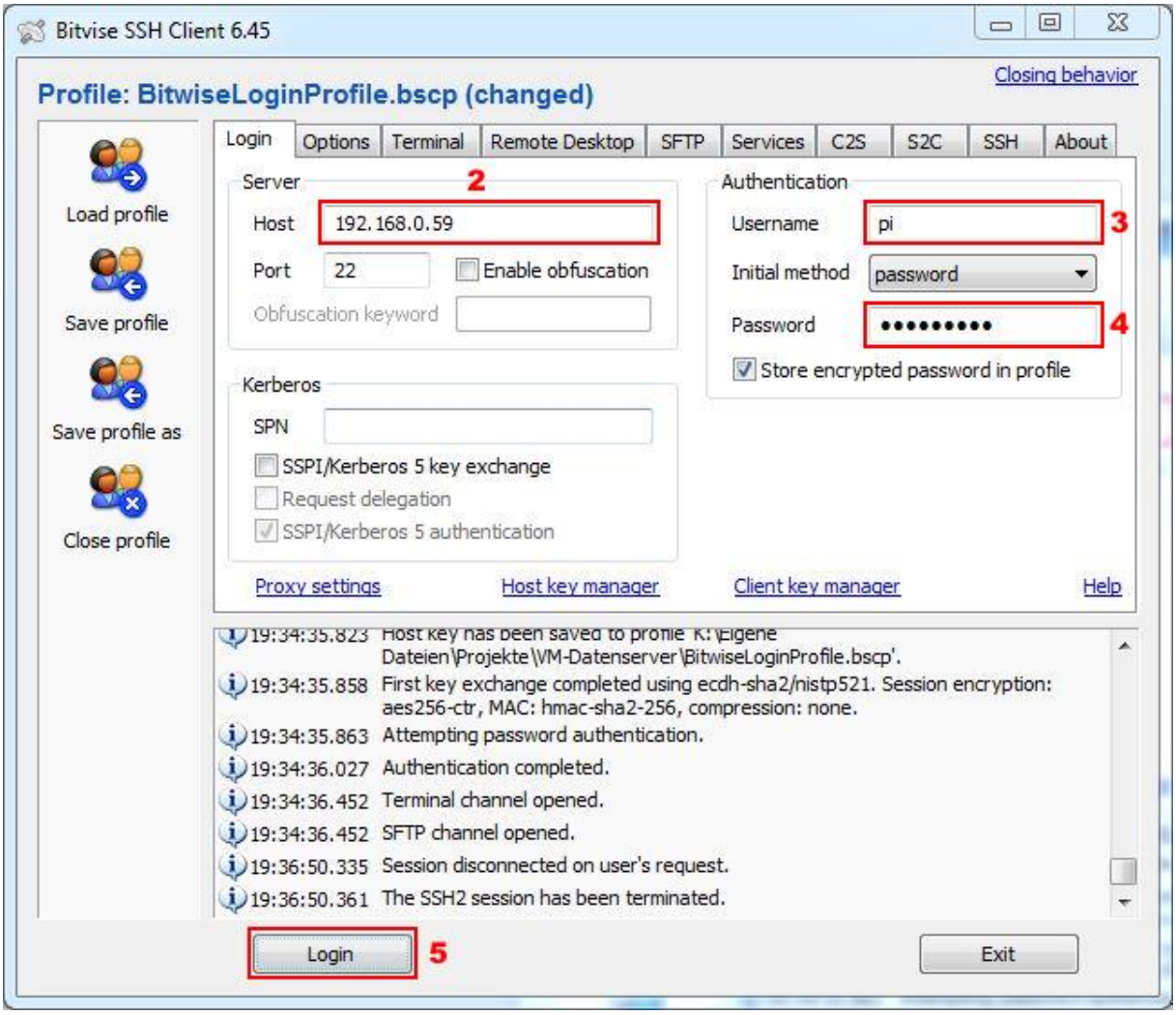
- Put the SD-Card into your raspberry
- connect the patch cable with your local network
- plug in the power supply

Find out the ip address of your raspberry:

- Using the client list of your router
- Or an app on your smartphone like “Fing”: https://play.google.com/store/apps/details?id=com.overlook.android.fing&hl=de

Connect to your raspberry:

1. Get a SSH-Client like “Bitwise-SSH”
2. Type in the IP-Address of your pi
3. Type in the username “pi”
4. Type in the password “raspberry”
5. Login to the raspberry

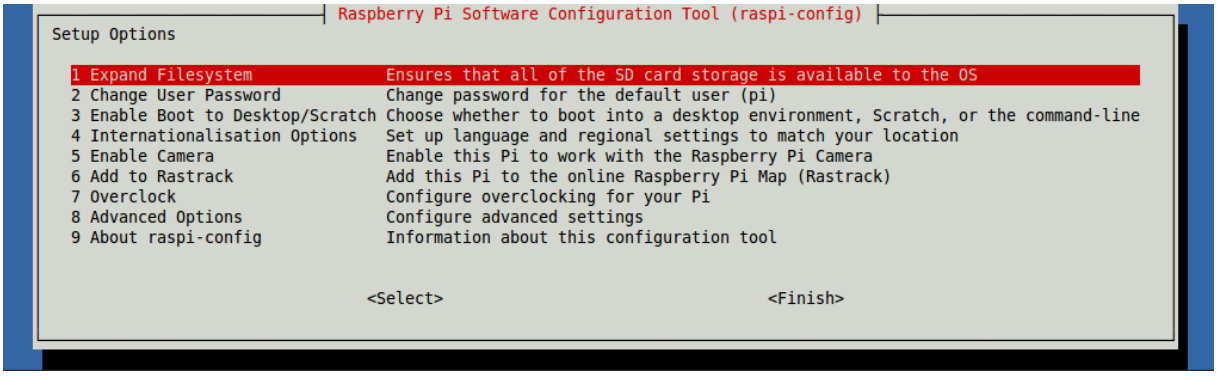


2. System configuration

1. Change default settings

Use raspi-config to change the default system settings

```
sudo raspi-config
```



Some useful changes:

- User password
- Internationalization Options

2. Upgrade packages

Update the package lists

```
sudo apt-get update
```

Upgrade the packages

```
sudo apt-get upgrade
```

The system will display all packages with have upgrades available and ask for installation. Confirm by entering “y” and press “Return”.

3. Configure wifi

Open the network configuration file

```
sudo nano /etc/network/interfaces
```

Add the following code at the end of the file

```
# WLAN
allow-hotplug wlan0
iface wlan0 inet manual
wpa-ssid "WLAN-NAME"
wpa-psk "WLAN-PASSWORD"
```

Change “WLAN-NAME” to your wifi network name.
Change “WLAN-PASSWORD” to your wifi network password.
Press “Strg” + “C” and confirm with “y” and “Return”.

Deactivate the wifi interface

```
sudo ifdown wlan0
```

Activate the wifi interface

```
sudo ifup wlan0
```

Get the list of your network interfaces

```
ifconfig
```

There should be an IP-Address assigned to the “wlan0” interface

Add Picture

You can now disconnect the patch cable from your raspberry pi.

3. Pimatic installation

1. Prepare for installation

Download “nodejs”

```
wget https://nodejs.org/dist/v4.6.2/node-v4.6.2-linux-armv7l.tar.gz -P /tmp
```

Move to local directory

```
cd /usr/local
```

Unpack the folder

```
sudo tar xzvf /tmp/node-v4.6.2-linux-armv7l.tar.gz --strip=1
```

Install “essential”

```
sudo apt-get install build-essential git
```

Install “sqlite3”

```
npm install sqlite3 --save
```

Move to user directory

```
cd /home/pi
```

Create a directory for pimatic

```
mkdir pimatic-app
```

2. Install pimatic

Run the installation of pimatic

```
npm install pimatic --prefix pimatic-app --production
```

This will take a while

Move to the installation directory

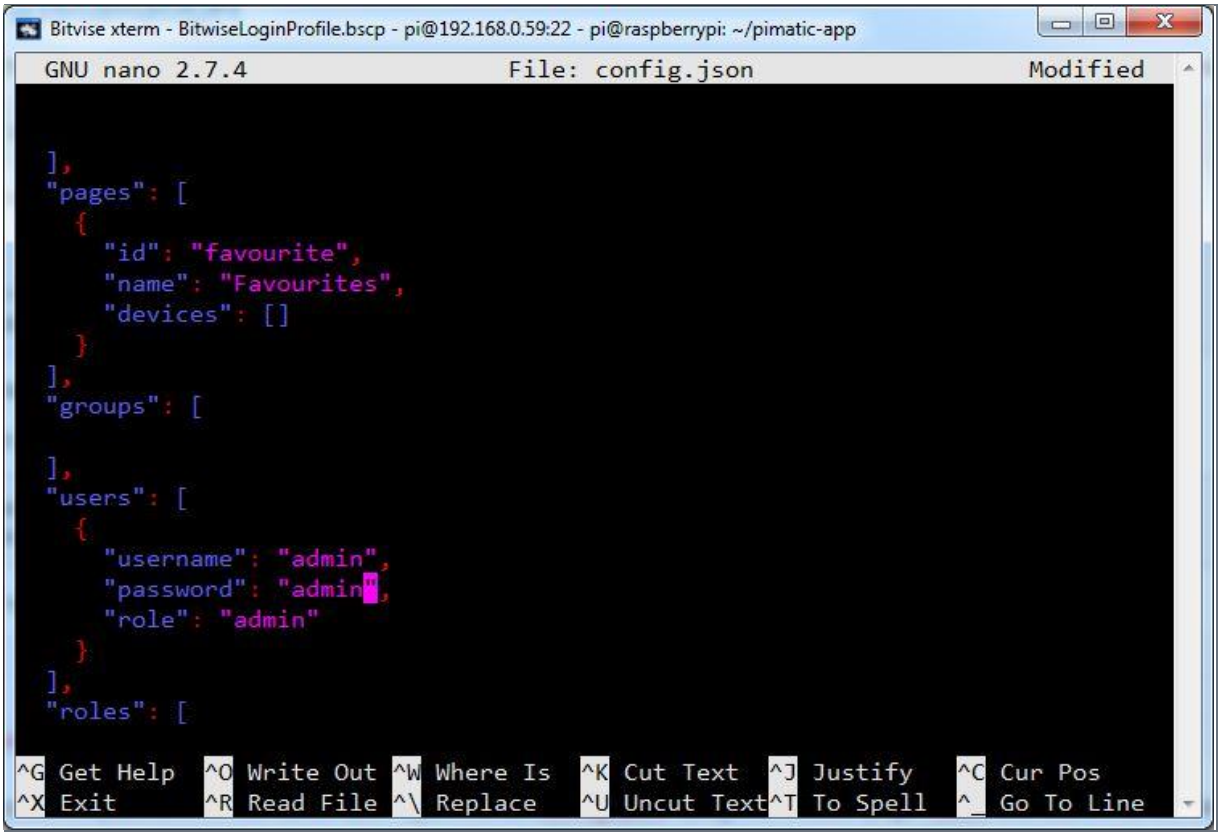
```
cd pimatic-app
```

3. Setup user

Open the configuration file

```
nano config.json
```

Set a password for the admin user



Save and close the file by entering “Strg” + “C” and confirm with “y” followed by “Return”

4. Configure auto start

Download “pimatic-init-d” file

```
wget https://raw.githubusercontent.com/pimatic/pimatic/v0.9.x/install/pimatic-init-d
```

Copy the file to pimatic

```
sudo cp pimatic-init-d /etc/init.d/pimatic
```

Make the file executable

```
sudo cp pimatic-init-d /etc/init.d/pimatic
```

Change the owner of the file to “root”

```
sudo chown root:root /etc/init.d/pimatic
```

Call the system to auto start the file

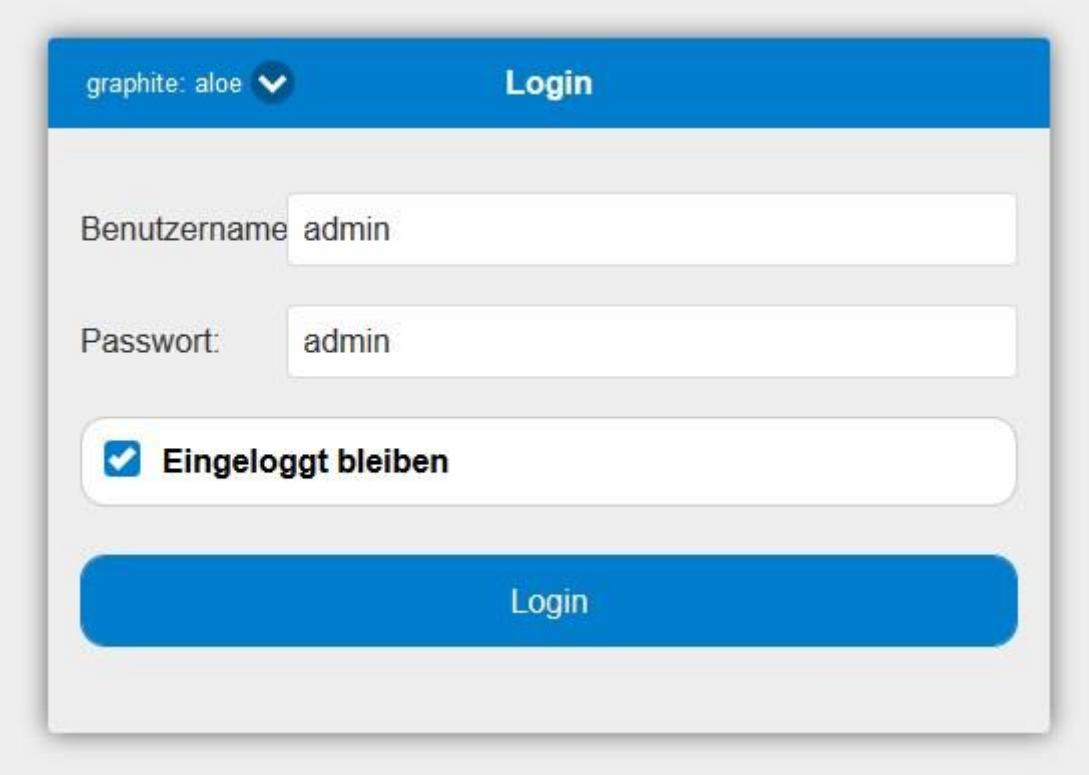
```
sudo update-rc.d pimatic defaults
```

5. Run pimatic

Start pimatic

```
sudo service pimatic start
```

Open your internet browser and type in the IP-Address of your raspberry pi.
The login screen should show up.



Enter the user name “admin” and the password you have set.