Install Raspi

History

V 0.3.2 07.jan.2026

Se2net admin

V 0.3.1 09.aug.2025

Use sshkeys

V 0.3.0 31.jul.2025

Use sshkeys

V 0.2.0 14.oct.2023

Add desktop entry for tyra

V 0.1.0 30.sep.2023

First Creation

Intro

Goal

Install Raspi for using as dev Station

Setup 4 Raspi Imager

Setup Standard OS with desktop; without recommended Software.

Before burning image select:

Hostname: aewinter

SSH User: aeningning

SSH Password: sldsld1023

WIFI: nothing

TimeZone: Eu/Berlin

Keyboard; de

Services: auth by password

Raspi-config

- Display options
  - VNC Reslolution
    - 1280x720
- Interface options
  - VNC
    - Enable Yes

  Sudo reboot

Copy files to target

scp watchmen.jar install_basics.sh install_services.sh siu.sh siu.cfg siu_load.sh siu.elf zena.sh zena.cfg zena_load.sh marty.elf watchmen.service t0.sh t1.sh t2.sh tyra_debug.sh tyra.jar tyra.sh tyra.desktop aeningning_sshkey aeningning@aewinter.kwangya:~

scp aeningning_sshkey.pub ser2net.yaml aeningning@aewinter.kwangya:~

ssh aeningning@aewinter.kwangya chmod a+rwx *.sh

Execute install_basics.sh script (as root)

```
mkdir .ssh
mv aeningning_sshkey.pub .ssh/authorized_keys

chown aeningning:aeningning .ssh/authorized_keys
chown aeningning:aeningning .ssh
chmod 600 .ssh/authorized_keys
chmod 700 .ssh


apt update
apt upgrade -y

apt install ca-certificates-java -y
apt install openjdk-17-jre -y
apt install libpangoft2-1.0-0 -y
apt install libgles-dev -y

apt install openocd -y

#apt install x2goserver

apt install mc -y
apt install xoscope -y

apt install minicom -y
apt install telnet -y

apt install ser2net -y

# virtual midi keyboard
apt install vmpk -y
```

Run setup script

Activate watchmen

```
sudo ./install_services.sh
```

Script contains

```
sudo cp watchmen.service /lib/systemd/system
sudo cp ser2net.yaml /etc/
sudo systemctl enable watchmen.service
sudo systemctl start watchmen.service
cp tyra.desktop .local/share/applications/tyra.desktop
```

Ser2Net control port

Insert in ser2net.yaml

    admin: &admin
        accepter: tcp,2000

Last step before reboot

    ! sudo apt install git ist schon
    ! sudo apt install code geht nicht (!32bit)

    Rpi Connect anmachen (wegen ChromeOSFlex)

    Enable in raspi-config
    Use local VNC to go on desktop
    Sign-in at
    https://id.raspberrypi.com/sign-in

    Create a device and sign in as aewinter.kwangya

    Check by using a ChromOSFlex device to view

    raspi-config:
    interface options / set overlay file system

Last step reboot

    Sudo reboot

Questions

Vncserver or x2goserver or raspi light without desktop

xoscope for signalling

develop tyra

use netcat nc as raw terminal for ser2net

Problems

xoscope run through x2goserver

Info

Locatoion of .desktop files

/usr/share/applications
(created in raspi but empty)

/usr/local/share/applications
(not used in raspi)

~/.local/share/applications
(created in raspi but empty)

Links

https://specifications.freedesktop.org/desktop-entry-spec/desktop-entry-spec-latest.html

Culture

Profiles

Other