

Install Raspi

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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: sldslsld1023

WIFI: nothing

TimeZone: Eu/Berlin

Keyboard: de

Services: auth by password

Raspi-config

- Display options
 - VNC Resolution
 - 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)  
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