

# Monitoring and alerting | Monitoring USB device availability

A simple script is checking if the Smart Steppers are connected by USB.

```
vim /opt/monitorUSBdevices.sh
```

```
#!/bin/bash
while true; do
    A_MOT=$(ls -aLF /dev |grep "ttyUSB-SMART-A-AXIS")
    B_MOT=$(ls -aLF /dev |grep "ttyUSB-SMART-B-AXIS")
    C_MOT=$(ls -aLF /dev |grep "ttyUSB-SMART-C-AXIS")
    D_MOT=$(ls -aLF /dev |grep "ttyUSB-SMART-D-AXIS")
    DUET=$(ls -aLF /dev |grep "ttyUSB-DUET2ETHERNET")
    WEBCAM=$(ls -aLF /dev |grep "ttyUSB-LOGITECH-C920")
    HUB=$(ls -aLF /dev |grep "ttyUSB-MINI-4PORT-HUB")

    if [[ ! -z $A_MOT ]]; then
        A_AVAIL=1
    else
        A_AVAIL=0
    fi

    if [[ ! -z $B_MOT ]]; then
        B_AVAIL=1
    else
        B_AVAIL=0
    fi

    if [[ ! -z $C_MOT ]]; then
        C_AVAIL=1
    else
        C_AVAIL=0
    fi

    if [[ ! -z $D_MOT ]]; then
        D_AVAIL=1
    fi
done
```

```
else
    D_AVAIL=0
fi

if [[ ! -z $DUET ]]; then
    DUET_AVAIL=1
else
    DUET_AVAIL=0
fi

if [[ ! -z $WEBCAM ]]; then
    WEBCAM_AVAIL=1
else
    WEBCAM_AVAIL=0
fi

if [[ ! -z $HUB ]]; then
    HUB_AVAIL=1
else
    HUB_AVAIL=0
fi

curl -k -XPOST "http://localhost:8086/write?db=trikarus" --data-binary
"usb_devices,host=hangdevice.fablabchemnitz.de
a_avail=${A_AVAIL},b_avail=${B_AVAIL},c_avail=${C_AVAIL},d_avail=${D_AVAIL},duet_avail=${DUET_
AVAIL},webcam_avail=${WEBCAM_AVAIL},hub_avail=${HUB_AVAIL}" --user user:password
sleep 1
done
```

```
chmod +x /opt/monitorUSBdevices.sh
```

```
vim /opt/monitorUSBdevices.service
```

```
[Unit]
After=network.target
Description=USB device availability Monitoring Service

[Service]
Type=simple
ExecStart=/opt/monitorUSBdevices.sh
```

```
KillMode=process
Restart=on-failure
RestartSec=10
RemainAfterExit=no
User=root
Group=root
```

```
[Install]
```

```
WantedBy= multi-user.target
```

```
systemctl enable /opt/monitorUSBdevices.service
```

```
service restart monitorUSBdevices && journalctl -f -u monitorUSBdevices.service
```

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Version #1

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