

PDIH - UGR

Seminario reglas udev - Ángel Gómez Ferrer

Ejecutando: udevadm monitor --environment --udev

Podemos ver que tipos de mensajes se producen a la hora de añadir un USB:

```
UDEV [7647.492712] add /devices/pci0000:00/0000:00:08.1/0000:04:00.3/usb3/3-1/3-1.4 (usb)
ACTION=add
DEVPATH=/devices/pci0000:00/0000:00:08.1/0000:04:00.3/usb3/3-1/3-1.4
SUBSYSTEM=usb
DEVNAME=/dev/bus/usb/003/040
DEVTYPE=usb_device
PRODUCT=41e/324d/8201
TYPE=0/0/0
BUSNUM=003
DEVNUM=040
SEQNUM=143010
USEC_INITIALIZED=7646777261
ID_VENDOR=Creative_Technology_Ltd
ID_VENDOR_ENC=Creative\x20Technology\x20Ltd
ID_VENDOR_ID=041e
ID_MODEL=Sound_Blaster_Play_3
ID_MODEL_ENC=Sound\x20Blaster\x20Play\x21\x203
ID_MODEL_ID=324d
ID_REVISION=8201
ID_SERIAL=Creative_Technology_Ltd_Sound_Blaster_Play__3_YDSB17302350025445
ID_SERIAL_SHORT=YDSB17302350025445
ID_BUS=usb
ID_USB_INTERFACES=:010100:010200:030000:
ID_VENDOR_FROM_DATABASE=Creative Technology, Ltd
ID_PATH=pci-0000:04:00.3-usb-0:1.4
ID_PATH_TAG=pci-0000_04_00_3-usb-0_1_4
DRIVER=usb
MAJOR=189
MINOR=295

UDEV [7647.513817] add /devices/pci0000:00/0000:00:08.1/0000:04:00.3/usb3/3-1/3-1.4/3-1.4:1.0 (usb)
ACTION=add
DEVPATH=/devices/pci0000:00/0000:00:08.1/0000:04:00.3/usb3/3-1/3-1.4/3-1.4:1.0
SUBSYSTEM=usb
DEVTYPE=usb_interface
PRODUCT=41e/324d/8201
TYPE=0/0/0
INTERFACE=1/1/0
MODALIAS=usb:v041Ep324d8201dc00dsc00dp00ic01isc01p00in00
SEQNUM=143011
USEC_INITIALIZED=7647512245
ID_VENDOR_FROM_DATABASE=Creative Technology, Ltd
ID_PATH=pci-0000:04:00.3-usb-0:1.4:1.0
ID_PATH_TAG=pci-0000_04_00_3-usb-0_1_4_1_0
DRIVER=snd-usb-audio

UDEV [7647.515726] add /devices/pci0000:00/0000:00:08.1/0000:04:00.3/usb3/3-1/3-1.4/3-1.4:1.3 (usb)
ACTION=add
DEVPATH=/devices/pci0000:00/0000:00:08.1/0000:04:00.3/usb3/3-1/3-1.4/3-1.4:1.3
SUBSYSTEM=usb
```

Y retirarlo:

```
angel@angel-760brrw-014:~$ udevadm monitor --environment --udev
monitor will print the received events for:
UDEV - the event which udev sends out after rule processing

UDEV [7824.920480] remove /devices/pci0000:00/0000:00:08.1/0000:04:00.3/usb3/3-1/3-1.4/3-1.4:1.0/sound/card3/controlC3 (sound)
ACTION=remove
DEVPATH=/devices/pci0000:00/0000:00:08.1/0000:04:00.3/usb3/3-1/3-1.4/3-1.4:1.0/sound/card3/controlC3
SUBSYSTEM=sound
DEVNAME=/dev/snd/controlC3
SEQNUM=145492
USEC_INITIALIZED=7820881203
ID_VENDOR=Creative_Technology_Ltd
ID_VENDOR_ENC=Creative\x20Technology\x20Ltd
ID_VENDOR_ID=041e
ID_MODEL=Sound_Blaster_Play_3
ID_MODEL_ENC=Sound\x20Blaster\x20Play\x21\x203
ID_MODEL_ID=324d
ID_REVISION=8201
ID_SERIAL=Creative_Technology_Ltd_Sound_Blaster_Play__3_YDSB17302350025445
ID_SERIAL_SHORT=YDSB17302350025445
ID_TYPE=audio
ID_BUS=usb
ID_USB_INTERFACES=:010100:010200:030000:
ID_USB_INTERFACE_NUM=00
ID_USB_ENDPOINT=snd-usb-audio
ID_PATH=pci-0000:04:00.3-usb-0:1.4:1.0
ID_PATH_TAG=pci-0000_04_00_3-usb-0_1_4_1_0
MAJOR=116
MINOR=6
DEVLINKS=/dev/snd/by-path/pci-0000:04:00.3-usb-0:1.4:1.0 /dev/snd/by-td/usb-Creative_Technology_Ltd_Sound_Blaster_Play__3_YDSB17302350025445-00
TAGS=:uaccess:

UDEV [7824.924018] remove /devices/pci0000:00/0000:00:08.1/0000:04:00.3/usb3/3-1/3-1.4/3-1.4:1.0/sound/card3/pcnc3D0p (sound)
ACTION=remove
DEVPATH=/devices/pci0000:00/0000:00:08.1/0000:04:00.3/usb3/3-1/3-1.4/3-1.4:1.0/sound/card3/pcnc3D0p
SUBSYSTEM=sound
DEVNAME=/dev/snd/pcnc3D0p
DEVTYPE=pcn
SEQNUM=145493
USEC_INITIALIZED=7820886290
MAJOR=116
MINOR=4
TAGS=:uaccess:

UDEV [7824.926036] remove /devices/pci0000:00/0000:00:08.1/0000:04:00.3/usb3/3-1/3-1.4/3-1.4:1.0/sound/card3/pcnc3D0c (sound)
ACTION=remove
DEVPATH=/devices/pci0000:00/0000:00:08.1/0000:04:00.3/usb3/3-1/3-1.4/3-1.4:1.0/sound/card3/pcnc3D0c
SUBSYSTEM=sound
DEVNAME=/dev/snd/pcnc3D0c
DEVTYPE=pcn
SEQNUM=145494
USEC_INITIALIZED=7820876256
MAJOR=116
MINOR=5
TAGS=:uaccess:

UDEV [7824.932349] remove /devices/pci0000:00/0000:00:08.1/0000:04:00.3/usb3/3-1/3-1.4/3-1.4:1.0/sound/card3 (sound)
ACTION=remove
DEVPATH=/devices/pci0000:00/0000:00:08.1/0000:04:00.3/usb3/3-1/3-1.4/3-1.4:1.0/sound/card3
SUBSYSTEM=sound
SEQNUM=145495
USEC_INITIALIZED=7820884580
ID_PATH=pci-0000:04:00.3-usb-0:1.4:1.0
ID_PATH_TAG=pci-0000_04_00_3-usb-0_1_4_1_0
ID_FOR_SEAT=sound-pci-0000_04_00_3-usb-0_1_4_1_0
SOUND_INITIALIZED=1
ID_VENDOR_FROM_DATABASE=Creative Technology, Ltd
ID_VENDOR=Creative_Technology_Ltd
ID_VENDOR_ENC=Creative\x20Technology\x20Ltd
```

Creación de una nueva regla

Script para retirar:

```
retirar.sh x ins
#!/bin/bash
echo RETIRADO >> /root/log.txt
date >> /root/log.txt
echo " " >> /root/log.txt
```

Script de insertar:

```
retirar.sh x insertar.sh x
1  #!/bin/bash
2  echo INSERTADO >> /root/log.txt
3  date >> /root/log.txt
4  echo " " >> /root/log.txt
```

Creamos las reglas con el siguiente comando una vez que tenemos los scripts en /root/:

```
cat << EOF | sudo tee /etc/udev/rules.d/busKill.rules
ACTION=="unbind", SUBSYSTEM=="usb", RUN+="/root/retirar.sh"
ACTION=="add", SUBSYSTEM=="usb", RUN+="/root/insertar.sh"
EOF
```

tras esto recargamos las reglas con:

```
sudo udevadm control --reload
```

Y además le he tenido que dar permisos a los .sh para que funcionara.

Resultados después de desconectar y conectar un par de veces el usb:

```
root@angel-Zephyrus-G14:~# cat /root/log.txt
RETIRADO
Mon Jun 12 00:06:36 CEST 2023

INSERTADO
Mon Jun 12 00:06:39 CEST 2023

root@angel-Zephyrus-G14:~# cat /root/log.txt
RETIRADO
Mon Jun 12 00:06:36 CEST 2023

INSERTADO
Mon Jun 12 00:06:39 CEST 2023

RETIRADO
Mon Jun 12 00:07:00 CEST 2023

INSERTADO
Mon Jun 12 00:07:05 CEST 2023

root@angel-Zephyrus-G14:~#
```