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Home

教程

工控配置

qt启动命令及代码启动命令

创建qtcreator启动脚本（可sudo）

```
#!/bin/bash
# command content
sudo /opt/Qt5.12.2/Tools/QtCreator/bin/qtcreator.sh
exit 0
```

创建视觉代码启动脚本

```
#!/bin/bash
# command content
sudo ~/build-rm_vision-Desktop_Qt_5_12_2_GCC_64bit-Debug/rm_vision
exit 0
```

串口及摄像头映射

通用设置（串口及摄像头映射配置 /etc/udev/rules.d中的udev文件,分别实现STM32设备虚拟串口和激光雷达的设备绑定：

首先连接STM32设备的虚拟串口， `lsusb` 可以查看Vendor和Product的ID，然后创建并配置/etc/udev/rules.d/robots.rules文件

[查看详细](#)

```
udevadm info --attribute-walk --name=/dev/video0
```

如果是廉价相机，可能串口号也相同，可以由连接HUB的物理端口不同（KERNEL或KERNELS绑定）来配置，例如：

```
SUBSYSTEM=="usb", KERNEL=="2-3", ATTR{idVendor}=="1871", ATTR{idProduct}=="0101", MODE:="0777",SYMLINK+="camera0" SUBSYSTEM=="usb", KERNE
```

实例：

```
#KERNEL=="video*", ATTRS{idVendor}=="15aa", ATTRS{idProduct}=="1555", MODE:="0777", SYMLINK+="camera" KERNEL=="ttyUSB*", ATTRS{idVendor}=="10c",  
KERNELS=="1-1.3", KERNEL=="video*", MODE:="0777", SYMLINK+="camera6mm" KERNELS=="1-1.2", KERNEL=="video*", MODE:="0777", SYMLINK+="camera
```

```
sudo service udev reload  
sudo service udev restart
```

重启配置rules文件映射，运行玩上述两个命令后，拔插设备后即重映射。

工业相机配置

大恒工业相机驱动 链接: <https://pan.baidu.com/s/1SE0g6eLXIQkHIJQKvenKrw> 提取码: r3zf 复制这段内容后打开百度网盘手机App，操作更方便哦

1. pro 修改路径

```
LIBS += -lgxiapi -ldximageproc
#-L/home/nyx/dhcam_install_20181107/dh_camera/daheng-sdk-x64/sdk/genicam/bin/Linux64_x64
#-L$(GENICAM_ROOT_V2_3)/bin/Linux64_x64
#-lGCBBase_gcc40_v2_3 -lGenApi_gcc40_v2_3 -llog4cpp_gcc40_v2_3 -lLog_gcc40_v2_3 -lMathParser_gcc40_v2_3\

#INCLUDEPATH += (GENICAM_ROOT_V2_3)/library/CPP/include
#INCLUDEPATH +=(GENICAM_ROOT_V2_3)/../sdk/include

INCLUDEPATH += /home/nyx/dhcam_install_20181107/dh_camera/daheng-sdk-x64/sdk/genicam/library/CPP/include
INCLUDEPATH += /home/nyx/dhcam_install_20181107/dh_camera/daheng-sdk-x64/sdk/include
```

2.设置环境变量（若qt驱动失败，需要此步） env 命令查看工业相机环境

```
sudo gedit /etc/environment
```

例如：

```
GENICAM_CACHE_V2_3="/usr/local/daheng/genicam_xml_cache"
GENICAM_ROOT_V2_3="/home/oem/dhcam_install_20181107/dh_camera/daheng-sdk-x64/sdk/genicam"
GENICAM_GENTL64_PATH="/usr/lib"
LD_LIBRARY_PATH="/usr/local/lib:/home/oem/dhcam_install_20181107/dh_camera/daheng-sdk-x64/sdk/genicam/bin/Linux64_x64:/home/oem/dhcam_install_20181107/dh_camera/daheng-sdk-x64/sdk/genicam/library/CPP/include:/home/oem/dhcam_install_20181107/dh_camera/daheng-sdk-x64/sdk/include"
```

```
GENICAM_CACHE_V2_3="/usr/local/daheng/genicam_xml_cache"
GENICAM_ROOT_V2_3="/home/infantry/dhcam_install_20181107/dh_camera/daheng-sdk-x64/sdk/genicam"
GENICAM_GENTL64_PATH="/usr/lib"
LD_LIBRARY_PATH="/usr/local/lib:/home/infantry/dhcam_install_20181107/dh_camera/daheng-sdk-x64/sdk/genicam/bin/Linux64_x64:/home/infantry/dhcam_install_20181107/dh_camera/daheng-sdk-x64/sdk/genicam/library/CPP/include:/home/infantry/dhcam_install_20181107/dh_camera/daheng-sdk-x64/sdk/include"
```

开机自动启动

0.设置用户sudo无密码 使用 `sudo visudo` 调用nano对 `/etc/sudoers` 进行修改

```
$ sudo visudo
```

在想修改的对象最后加上 `NOPASSWD: ALL` 例如：

```
# Allow members of group sudo to execute any command
%sudo  ALL=(ALL:ALL) ALL
oem    ALL=(ALL) NOPASSWD: ALL
```

(`chmod 777 join ~/ .config/autostart`) --- `gnome-terminal`

```
sudo chmod 777 .config/autostart/
```

1.终端方式，适合工业摄像头

```
sudo nano .bashrc
```

(在将工业摄像头设置为系统变量的时候可以不加 `-E`)

```
sudo -E ~/build-sentry_vision-Desktop_Qt_5_12_2_GCC_64bit-Debug/sentry_vision
```

或有编写`rm_vision.sh`

```
sudo -E ~/rm_vision.sh
```

2.利用桌面自启软件开机自启终端

```
sudo gnome-session-properties
gnome-terminal -x /home/river/startupRun.sh
```

按键关机设置

1.the last setting brigness lock never

shutdown setting

1. `sudo gedit /etc/acpi/events/powerbtn`
2. 注释掉最后一行action （前面加#） `#action=/etc/acpi/powerbtn.sh`
3. 添加一行：`action=/sbin/poweroff`
4. 重启acpi或者重启机器：`acpid restart`

