

Notes: Theia RTSP Streaming via Wifi

Connect WiFi

```
adb shell wpa_cli -i wlan0 -p /tmp/wpa_supplicant remove_network all
adb shell wpa_cli -i wlan0 -p /tmp/wpa_supplicant add_network
adb shell wpa_cli -i wlan0 -p /tmp/wpa_supplicant set_network 0 ssid '"B21F-2V0X-VIT"'
adb shell wpa_cli -i wlan0 -p /tmp/wpa_supplicant set_network 0 key_mgmt WPA-PSK
adb shell wpa_cli -i wlan0 -p /tmp/wpa_supplicant set_network 0 psk '"vit@123456"'
adb shell wpa_cli -i wlan0 -p /tmp/wpa_supplicant select_network 0
adb shell dhcpcd wlan0
```

Start streaming

```
adb push theia-rtp-send-FullSize.sh /data/
adb shell chmod a+x /data/theia-rtp-send-FullSize.sh
adb shell "cd /data && bash theia-rtp-send-FullSize.sh 192.168.1.25"
```

Note: 192.168.1.25 is the IP address of the PC to receive RTSP stream.

Browse live stream

- 在 PC 上建立一個檔案，填入以下內容，命名為 `play.sdp`，使用 vlc 執行

```
v=0
m=video 5000 RTP/AVP 96
c=IN IP4 192.168.1.24
a=rtpmap:96 H264/90000
```

Note: 192.168.1.24 is the IP of the streaming server (here is the theia camera)

Script: theia-rtp-send-FullSize.sh

```
#!/bin/sh

# Set target IP address for stream
TARGET_IP=$1
if [ "$TARGET_IP" == "" ]
then
    echo "Must specify target IP address"
    exit -1
fi

echo "Sending to $TARGET_IP"

gst-launch-1.0 v4l2src device=/dev/video3 ! \
video/x-raw,format=YUY2,width=2688,height=1944,framerate=30/1 ! \
mtkmdp width=1920 height=1080 ! video/x-raw,format=I420 ! \
tee name=videoraw \
\
videoraw. ! \
queue ! \
videoconvert ! \
video/x-raw,format=I420 ! \
v4l2mthk264enc bitrate=15000000 gop=1 name=enc ! \
h264parse config-interval=-1 ! \
tee name=videoh264 \
```

```
\
videoh264. ! \
rtph264pay ! \
application/x-rtp,media=video, clock-rate=90000, encoding-name=H264, payload=96 ! \
udpsink host=$TARGET_IP port=5000
```