



居家安全方案

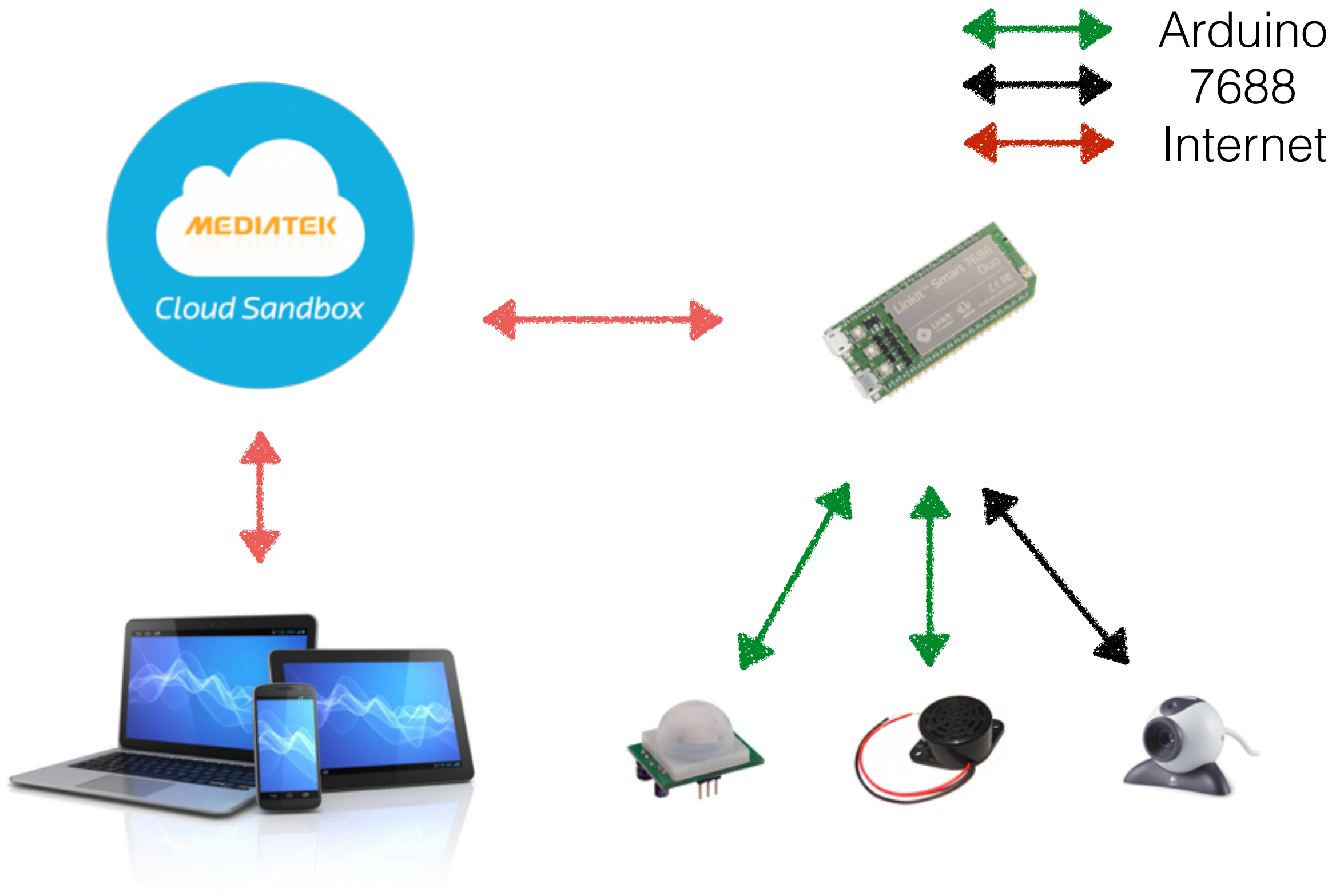
- 情境：
透過人體紅外線感測器，去偵測家裡是否有人走動，如果有人的話會以蜂鳴器及燈光驅離，並啟動攝像鏡，讓使用者查看



條件設定

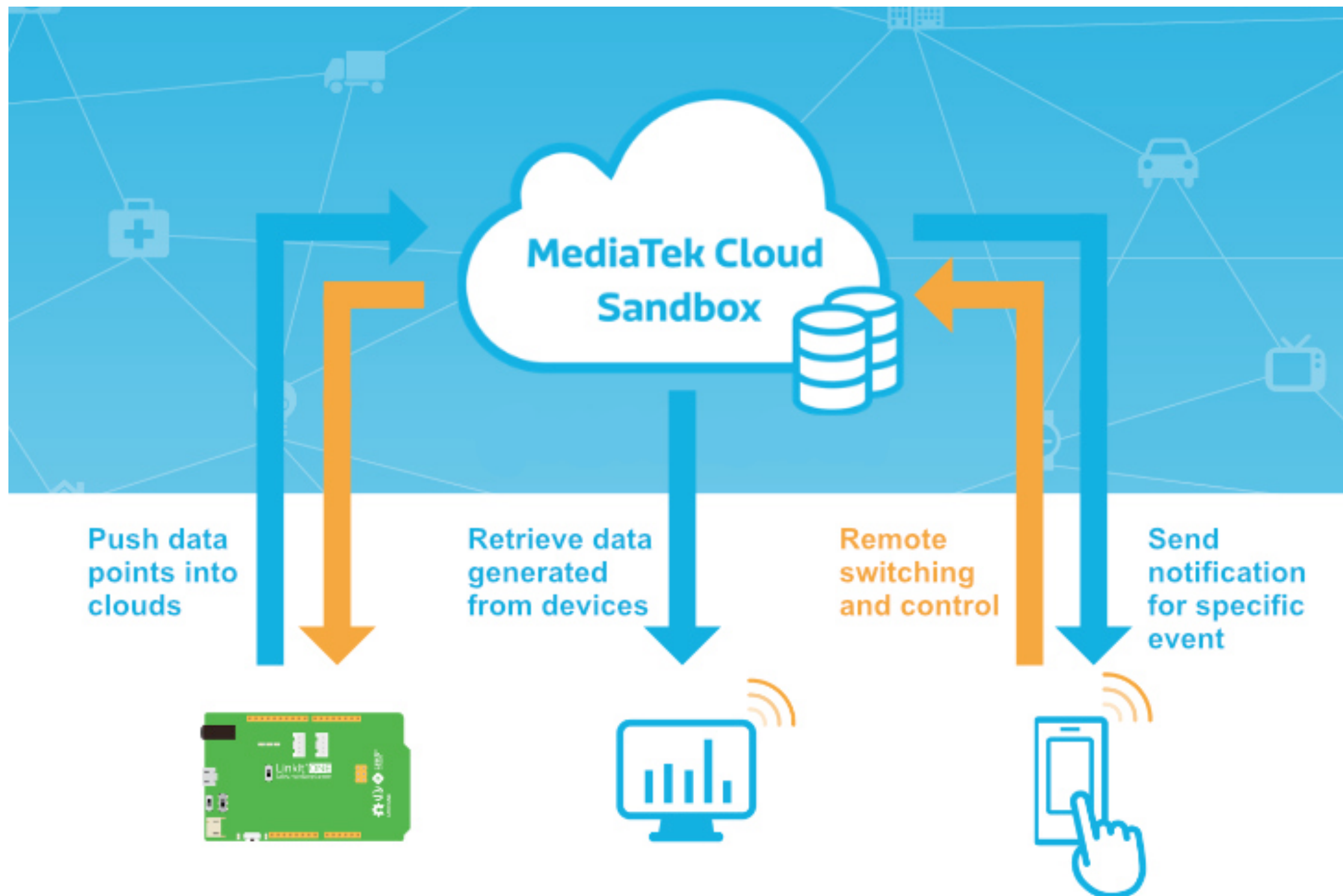
- 觸發機制：人體紅外線感測器有反應
- 觸發項目：
 - 1. 蜂鳴器
 - 2. LED燈光
 - 3. WebCam

運作架構



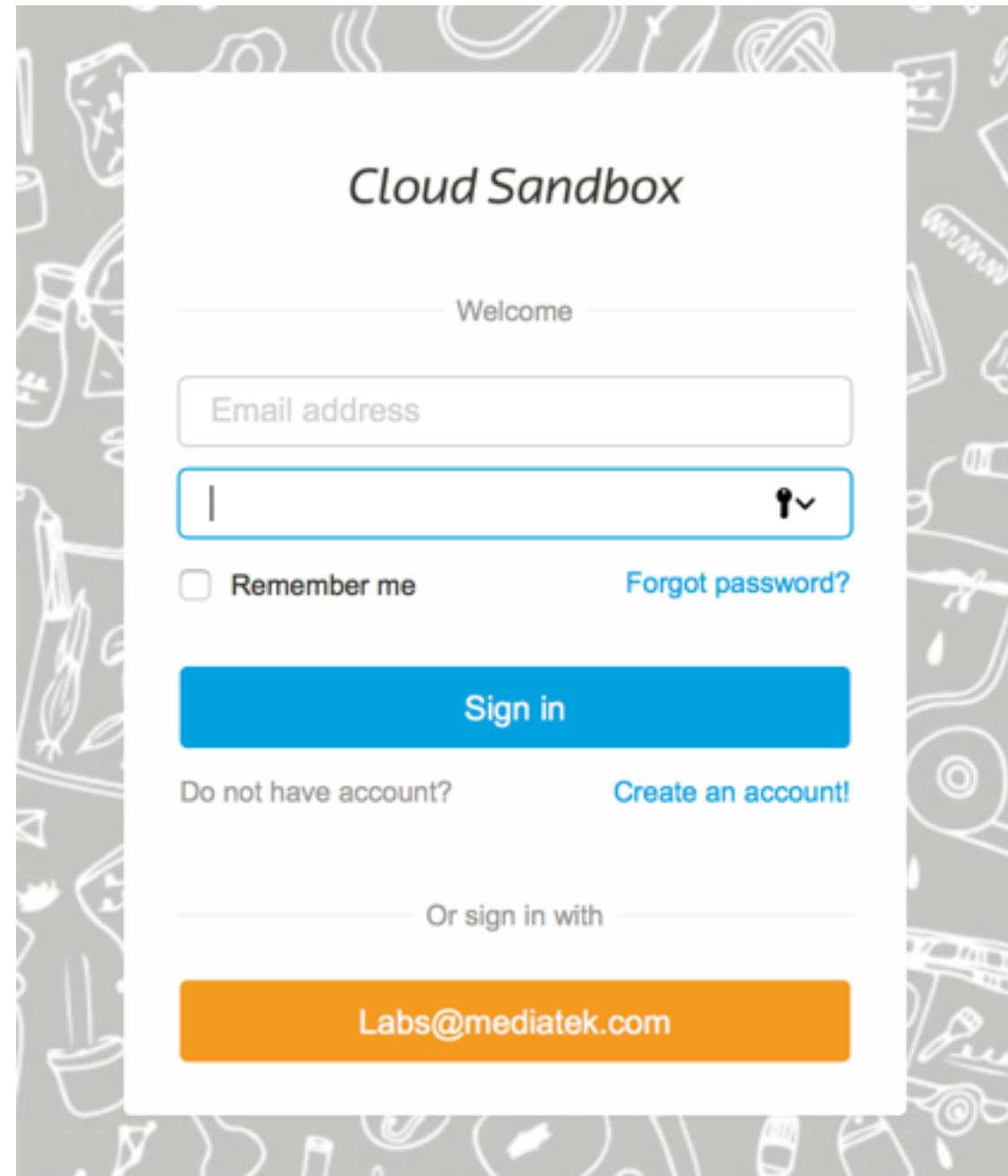
準備項目

- YunBridge
- Python Library
- MCS



使用MCS



<https://mcs.mediatek.com/>

The image shows a login form for 'Cloud Sandbox' overlaid on a background of various white line-art icons on a grey field. The form is white with a thin grey border. At the top, it says 'Cloud Sandbox' in a bold, sans-serif font. Below that is a 'Welcome' message. The form contains an 'Email address' input field, a password input field with a key icon and a dropdown arrow, a 'Remember me' checkbox, and a 'Forgot password?' link. A large blue 'Sign in' button is centered below these. At the bottom of the form, there are links for 'Do not have account?' and 'Create an account!'. Below the form, there is a section 'Or sign in with' followed by a large orange button with the text 'Labs@mediatek.com' in white.

Cloud Sandbox

Welcome

Email address

|  

☐ Remember me [Forgot password?](#)

[Sign in](#)

[Do not have account?](#) [Create an account!](#)

Or sign in with

[Labs@mediatek.com](#)

MCS使用流程

- 建立Prototype
- 建立Template
- 建立Test Device

MCS - 建立原型

Mediatek Labs Cloud Sandbox Development Management Resources Help wild0.chen

Development > Prototype

Prototype list Search

Create your prototype now!
[Create](#)

Prototype Name	Hardware	Version	Status	Test device	Device	Action
home	Linkit Smart 7688 (MT7688)	0.2	Under Development	1	0	Detail
mtk7688-home-secure	Linkit Smart 7688 (MT7688)	0.1	Beta released	2	0	Detail

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MCS - 建立原型

The screenshot shows the 'Create prototype' dialog box in the Mediatech Cloud Sandbox. The background interface includes a top navigation bar with 'Mediatech Labs Cloud Sandbox', 'Development' dropdown, and user 'wild0.chen'. A sidebar on the left shows 'Development > Prototype' and a 'Prototype list' section with a 'Create your prototype now!' button. The dialog box itself has a title 'Create prototype' and a subtitle 'Fill in the following information or [import from JSON file](#) .'. It contains several form fields: 'Prototype name' (text input), 'Prototype version' (text input), 'Hardware platform' (dropdown menu), 'Description' (text area), 'Industry' (dropdown menu), and 'Image upload' (a dashed box with an image icon and text 'Drop an image here to upload! Recommended 300 x 160 pixels.'). At the bottom of the dialog are 'Cancel' and 'Save' buttons, with an 'Upload' button positioned above the 'Save' button.

Mediatech Labs Cloud Sandbox

Development

sources Help wild0.chen

Development > Prototype

Prototype list

Create your prototype now!

Create

Create prototype

Fill in the following information or [import from JSON file](#) .

Prototype name * Input the prototype name

Prototype version * Input the prototype version

Hardware platform * Choose the hardware platform

Description Input the prototype description

Industry * Choose the industry

Image upload

Drop an image here to upload!
Recommended 300 x 160 pixels.

Upload

Cancel Save

MCS - 建立Channel

MediaTek LogoCloud Sandbox

DevelopmentManagement


ResourcesHelpwild0.chen

Development > Prototype > home

home (ID: PvHuqa6TcCTV)

Creator: wild0.chenVersion: 0.2Hardware platform: Linkit Smart 7688 (MT7688)

Create test deviceBeta ReleaseMore



Status: Under Development

Industry: Education

Application: College/Universities

Description:

1

Test device

Create test device or beta release the prototype to try out and collect real data!

Data channelTrigger & ActionUser privilegesFirmwareTest device

Add Data channel now!

Add

LowHigh

rf

Data channel id: mtardirf

EX:100(only input integer)

ClearOK

buzzer

Data channel id: buzzer

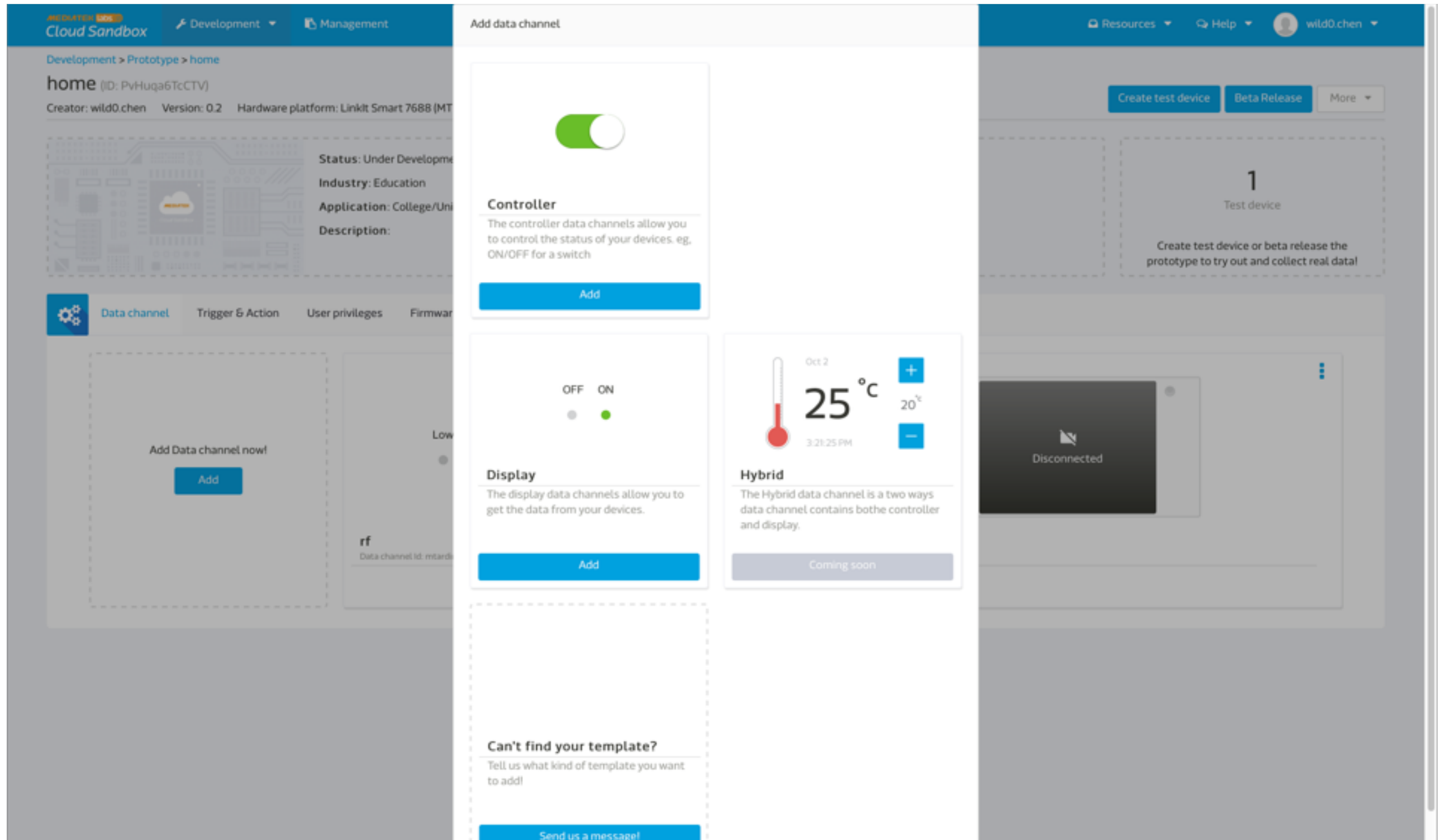
Disconnected

video

Data channel id: video

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MCS - 建立Channel



MCS - 建立Channel

The screenshot displays the MediaTek Cloud Sandbox (MCS) web interface. At the top, a blue navigation bar contains the 'MEDIATEK Cloud Sandbox' logo, 'Development' and 'Management' tabs, and links for 'Resources', 'Help', and a user profile 'wild0.chen'. Below the navigation bar, the breadcrumb 'Development > Prototype > home' is visible. The main content area shows a prototype named 'home' (ID: PvHuqa6TcCTV) created by 'wild0.chen' with version '0.2' on a 'Linkit Smart 7688 (MT7688)' hardware platform. A modal dialog titled 'Add data channel' is open in the center, featuring input fields for 'Data channel name', 'Data channel Id', and 'Description', and a dropdown menu for 'Data type' with options: GPS, GPIO, PWM, Image, and Video Stream. The background interface includes a 'Data channel' tab, a 'Trigger & Action' section, and a 'Test device' section with a 'Create test device' button and a 'Beta Release' button. A footer at the bottom reads '© 2015 MediaTek Inc. All Rights Reserved.'

MCS - 建立Test Device

The screenshot displays the Mediatek Cloud Sandbox web interface. At the top, a blue navigation bar contains the 'Mediatek Cloud Sandbox' logo, 'Development' and 'Management' tabs, and links for 'Resources', 'Help', and a user profile 'wild0.chen'. Below the navigation bar, the breadcrumb 'Development > Prototype > home' is visible. The main header area shows the device name 'home (ID: PvHuqa6TcCTV)', the creator 'wild0.chen', version '0.2', and hardware platform 'LinkIt Smart 7688 (MT7688)'. Action buttons for 'Create test device', 'Beta Release', and 'More' are on the right. The background is dimmed, showing a circuit board graphic and a 'Status: Under Development' section. A modal dialog box titled 'Create test device' is centered, featuring input fields for 'Device name' and 'Device description', and 'Cancel' and 'Create' buttons. To the right of the dialog, a box indicates '1 Test device' and prompts the user to 'Create test device or beta release the prototype to try out and collect real data!'. At the bottom, a 'Data channel' section includes an 'Add' button and a list of channels: 'rf' (Data channel id: mtardirf) and 'buzzer' (Data channel id: buzzer), each with a 'Low' and 'High' status indicator and a 'Clear' button.

Mediatek Cloud Sandbox

Development Management

Resources Help wild0.chen

Development > Prototype > home

home (ID: PvHuqa6TcCTV)

Creator: wild0.chen Version: 0.2 Hardware platform: LinkIt Smart 7688 (MT7688)

Create test device Beta Release More

Status: Under Development

Create test device

Device name * Input the device name

Device description Input the device description

Cancel Create

1 Test device

Create test device or beta release the prototype to try out and collect real data!

Add Data channel now!

Add

Low High

rf Data channel id: mtardirf

buzzer Data channel id: buzzer

EX:100(only input integer)

Clear OK

MCS - 建立Test Device

MediaTek Labs
Cloud Sandbox

Development Management


Resources Help wilid0.chen

Development > Prototype > home

home (ID: PvHuqa6TcCTV)

Creator: wilid0.chen Version: 0.2 Hardware platform: Linkit Smart 7688 (MT7688)


Create test device Beta Release More




Status: Under Development
Industry: Education
Application: College/Universities
Description:

1
Test device

Create test device or beta release the prototype to try out and collect real data!

 Data channel Trigger & Action User privileges Firmware **Test device**

Devices (1)

	Name	DeviceId	DeviceKey	Registered date	
1	home-mtk7688	Dn7nTI0I	5Cd1NtXHWAAKx0TB	2016-03-16 23:22	

+ Add test device

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MCS - 建立Test Device

MediaTek LogoCloud Sandbox

DevelopmentManagement


ResourcesHelpwild0.chen

Development > Test devices > home-mtk7688

home-mtk7688

Creator: wild0.chenVersion: 0.2Hardware platform: Linkit Smart 7688 (MT7688)

DeleteBack to prototype



Industry: Education

Application: College/Universities

Description:

You will need the deviceId and deviceKey when calling our API to access this device

DeviceId: 0n7nT10ICopy

DeviceKey: 5Cd1NLXHWAAXx0TBCopy

Data channelTrigger & ActionUser privilegesAPI hint

LowHigh

rf

Data channel id: mtdarf

EX:100(only input integer)

Clear

OK

buzzer

Data channel id: buzzer

Disconnected

video

Data channel id: video

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下載Sample code

- 在PC下可以去<https://github.com/makee-workshop/home-secure-basic.git>下載code
- 在7688 Openwrt console mode下執行
git clone <https://github.com/makee-workshop/home-secure-basic.git>

初始化環境與執行

- 初始化程序

```
cd home-secure-basic
```

```
sh init.sh
```

此程序會將所有運作此範例需到的套件安裝於Openwrt內

- 將deviceId與deviceKey替換至variable.py
- 執行python home-secure.py

範例說明

- 待續