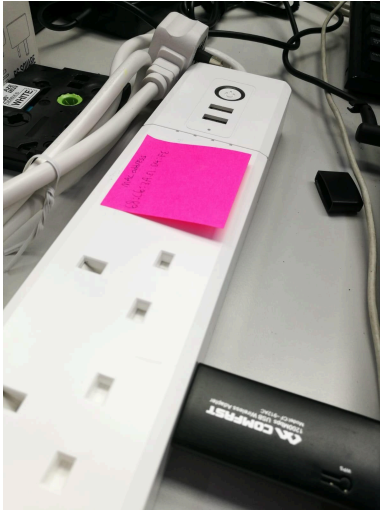


Tested on:



Smart Power Strip



Anoopsyche JH-G01B1 Power Monitoring Plug

[https://blakadder.github.io/templates/anoopsyche\\_JH-G01B1.html](https://blakadder.github.io/templates/anoopsyche_JH-G01B1.html)



<https://www.ifreeeq.cn/product-page/ps-17-wsb-uk-standard-tuya-wi-fi-wall-socket>  
[https://blakadder.github.io/templates/vigica\\_VGSPK00815.html](https://blakadder.github.io/templates/vigica_VGSPK00815.html)



Slitinto NX-SM110 Power Monitoring Plug

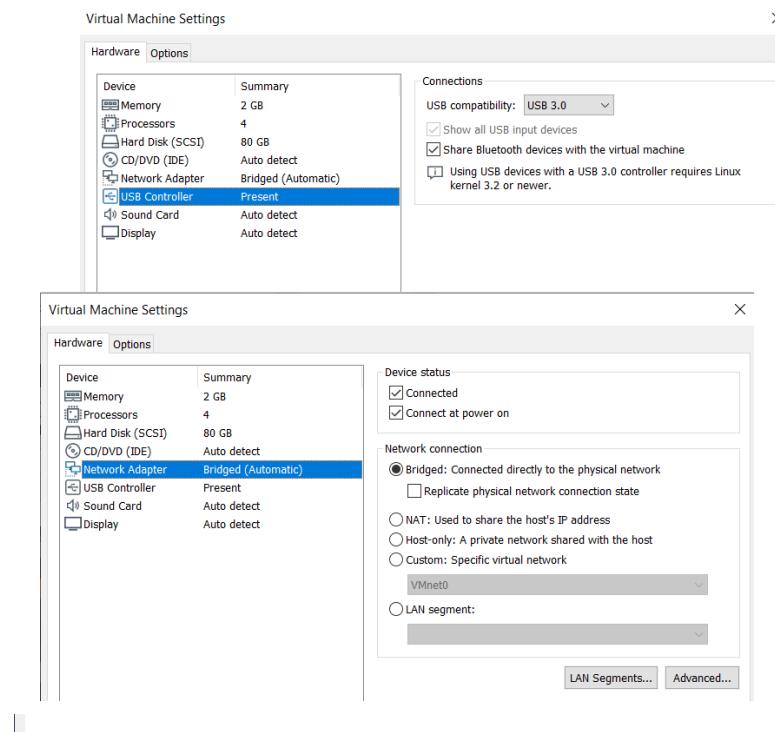
[https://blakadder.github.io/templates/stilinto\\_NX-SM110.html](https://blakadder.github.io/templates/stilinto_NX-SM110.html)

1. Download Utorrent/Bit Torrent

<https://www.utorrent.com/>

<https://www.bittorrent.com/downloads/win>

2. Download Kali Linux VM torrent  
<https://www.offensive-security.com/kali-linux-vm-vmware-virtualbox-image-download/>
3. Extract the zip file using Winrar <https://rarlab.com/rar/winrar-x64-58b2.exe>
4. Download VMware Workstation or virtual box  
[https://my.vmware.com/en/web/vmware/info/slug/desktop\\_end\\_user\\_computing/vmware\\_workstation\\_pro/15\\_0](https://my.vmware.com/en/web/vmware/info/slug/desktop_end_user_computing/vmware_workstation_pro/15_0)  
<https://www.virtualbox.org/wiki/Downloads>
5. Click “Open a new virtual machine” and navigate to kali linux .vmx file
6. Right click on kali linux VM and go to settings
7. Start kali linux and log in using  
Username: root  
Password: toor
8. Under USB controller change USB compatibility to 3.0 and click ok.  
Change the Network adapter to bridge



9. Connect the USB wifi adapter to the virtual machine
10. Install USB wifi adapter driver in terminal using:  
`Apt-get install realtek-rtl88xxau-dkms`

11. Type “iwconfig” and check, save a snapshot here.

```
root@kali: ~
File Edit View Search Terminal Help
(Reading database ... 353675 files and directories currently installed.)
Preparing to unpack .../git_1%3a2.23.0-1_amd64.deb ...
Unpacking git (1:2.23.0-1) over (1:2.23.0-rc1-1) ...
Preparing to unpack .../git-man_1%3a2.23.0-1_all.deb ...
Unpacking git-man (1:2.23.0-1) over (1:2.23.0-rc1-1) ...
Setting up git-man (1:2.23.0-1) ...
Setting up git (1:2.23.0-1) ...
Processing triggers for man-db (2.8.6.1-1) ...
root@kali:~# iwconfig
wlan0 IEEE 802.11 ESSID:"SQX-1"
Mode:Managed Frequency:5.22 GHz Access Point: FC:EC:DA:3C:8F:4D
Bit Rate=400 Mb/s Tx-Power=18 dBm
Retry short limit:7 RTS thr:off Fragment thr:off
Encryption key:off
Power Management:off
Link Quality=49/70 Signal level=-61 dBm
Rx invalid nwid:0 Rx invalid crypt:0 Rx invalid frag:0
Tx excessive retries:0 Invalid misc:0 Missed beacon:0

lo no wireless extensions.

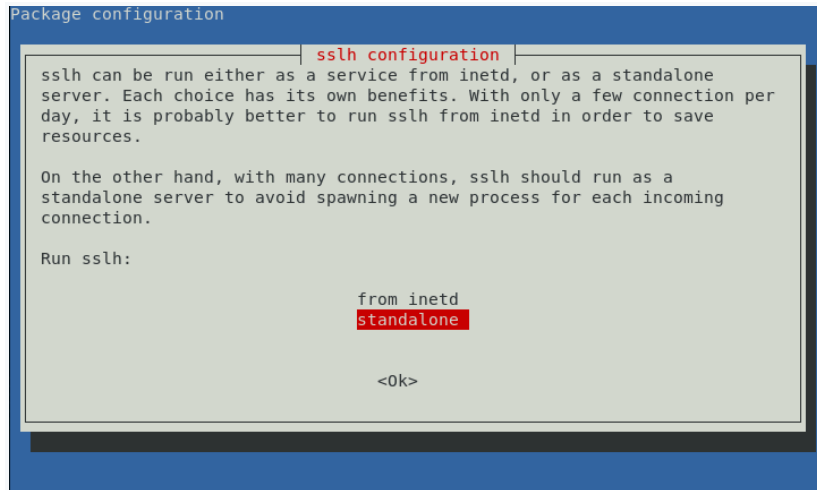
eth0 no wireless extensions.

root@kali:~#
```

12. Installation :


```
# apt-get install git
# git clone https://github.com/ct-Open-Source/tuya-convert
# cd tuyu-convert
# ./install_prereq.sh
```

```
root@kali:~# git clone https://github.com/ct-Open-Source/tuya-convert
Cloning into 'tuya-convert'...
remote: Enumerating objects: 146, done.
remote: Counting objects: 100% (146/146), done.
remote: Compressing objects: 100% (87/87), done.
remote: Total 738 (delta 85), reused 101 (delta 59), pack-reused 592
Receiving objects: 100% (738/738), 2.55 MiB | 1.75 MiB/s, done.
Resolving deltas: 100% (438/438), done.
root@kali:~# ls
Desktop Downloads Pictures rtl8812AU_8821AU_linux tuyu-convert
Documents Music Public Templates Videos
root@kali:~# cd tuyu-convert
root@kali:~/tuya-convert# ls
config.txt install_prereq.sh README.md start_flash.sh
files LICENSE scripts stop_flash.sh
root@kali:~/tuya-convert# ./install_prereq.sh
Get:1 http://ftp.yzu.edu.tw/Linux/kali kali-rolling InRelease [30.5 kB]
Get:2 http://ftp.yzu.edu.tw/Linux/kali kali-rolling/main amd64 Packages [16.6 MB]
]
Get:2 http://ftp.yzu.edu.tw/Linux/kali kali-rolling/main amd64 Packages [16.6 MB]
]
28% [2 Packages 1,711 kB/16.6 MB 10%] 3,055 PB/s 0s
```




- 13.
- Select Standalone then No
14. After it is done, save a snapshot here.
15. Type `./start_flash.sh`
16. Follow the instructions in the `start_flash` script. It will install the flash loader onto the ESP and connect to the access point created by your wifi adapter.
17. Use a phone or another laptop and find vtrust-flash wifi
18. WIFI: vtrust-flash  
PASS: flashmeifyoucan


## Wi-Fi


Wi-Fi 


Wi-Fi+ Off >  
Enhanced Internet experience


### Available networks

vtrust-flash  
Connected 

SQX-1  
Saved, encrypted 

104  
Encrypted (WPS available) 

Okada Fibernet\_5G  
Encrypted (WPS available) 

LanTro\_Guest  
Encrypted (WPS available) 

Scanning...

Add network... >



Scan



Wi-Fi Direct



Menu

19. Put the device in fast pairing mode (blinking LED) and press Enter to continue.

```
generic-tasmota-0.0.0.7-generic-wimman-2.3.0.bin Find file Copy
IMPORTANT
1. Connect any other device (a smartphone or something) to the WIFI vtrust-flash
The wpa-password is flashmeifyoucan
This step is IMPORTANT otherwise the smartconfig will not work!
2. Put your IoT device in autoconfig/smartconfig/pairing mode (LED will blink fast). This is usually done by pressing and holding the primary button of the device
3. Press ENTER to continue Download History

===== View raw =====
Starting pairing procedure in screen
RTNETLINK answers: File exists
~/Downloads/tuya-convert
Waiting for the upgraded device to appear
If this does not work have a look at the '*.log'-files in the 'scripts' subfolder
[?] Help Contact GitHub Pricing API Training B
.....
```

20. Check that it is Active Userspace: user2 and not user 1

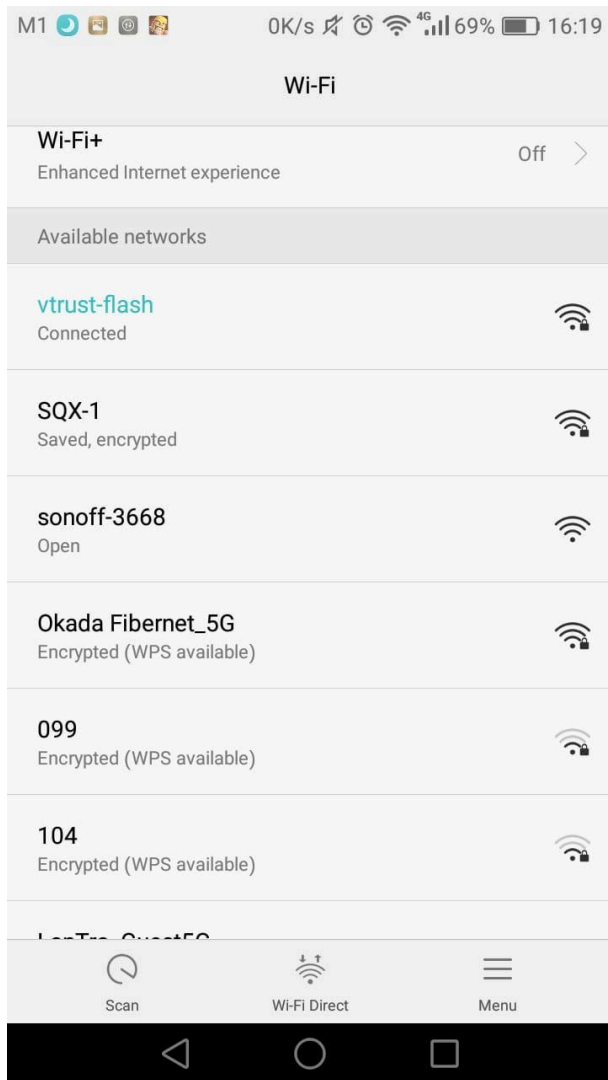
```
Active Userspace: user2 0x81000
=====
Please make sure to note the correct SPI flash mode!
Installing an alternative firmware with the wrong flash mode will leave the ESP
unable to boot!
support issues 6ba62fa 7 days
Next steps:
1. To go back to the original software
# curl http://10.42.42.42/undo
2. Be sure the conversion software runs in user2
# curl http://10.42.42.42/flash2
3. Flash a third party firmware to the device
BE SURE THE FIRMWARE FITS THE DEVICE AND USES THE CORRECT FLASH MODE!
MAXIMUM SIZE IS 512KB
put or link it to ./files/thirdparty.bin
A basic build of Sonoff-Tasmota v6.5.0 is already included in this repository.
# curl http://10.42.42.42/flash3
Alternatively let the device download and flash a file via HTTP:
# curl http://10.42.42.42/flash3?url=http://10.42.42.1/files/thirdparty.bin
HAVE FUN!
```

21. If it is user 1, use: curl http://ip\_add/flash2

22. Type curl http://ip\_add/flash3?url=http://ip\_add/files/thirdparty.bin

```
root@kali:~/Downloads/tuya-convert# curl http://10.42.42.42/flash3?url=http://10.42.42.1/files/thirdparty.bin
Device should flash http://10.42.42.1/files/thirdparty.bin and restart
```

23. The device will broadcast a sonoff-xxxx access point (AP) when the device boots.



24. Type in 192.168.4.1 in the url field to reach the area to enter details for wifi parameters.

M1 1K/s 69% 16:19

192.168.4.1

## Sonoff

Scan for wifi networks

**Wifi parameters**

**AP1 SSId ()**

**AP1 Password** ☐

....

**AP2 SSId ()**

**AP2 Password** ☐

....

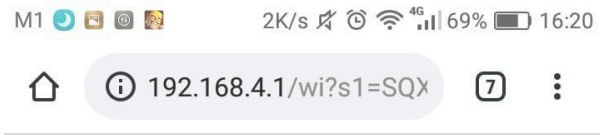
**Hostname (%s-%04d)**

%s-%04d

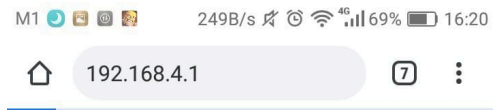
Save

25. Save the configurations and wait for the device to get restarted.





26. In the end, the site would no longer be reached, meaning it has succeeded.



## This site can't be reached

192.168.4.1 took too long to respond.

Try:

Checking the connection

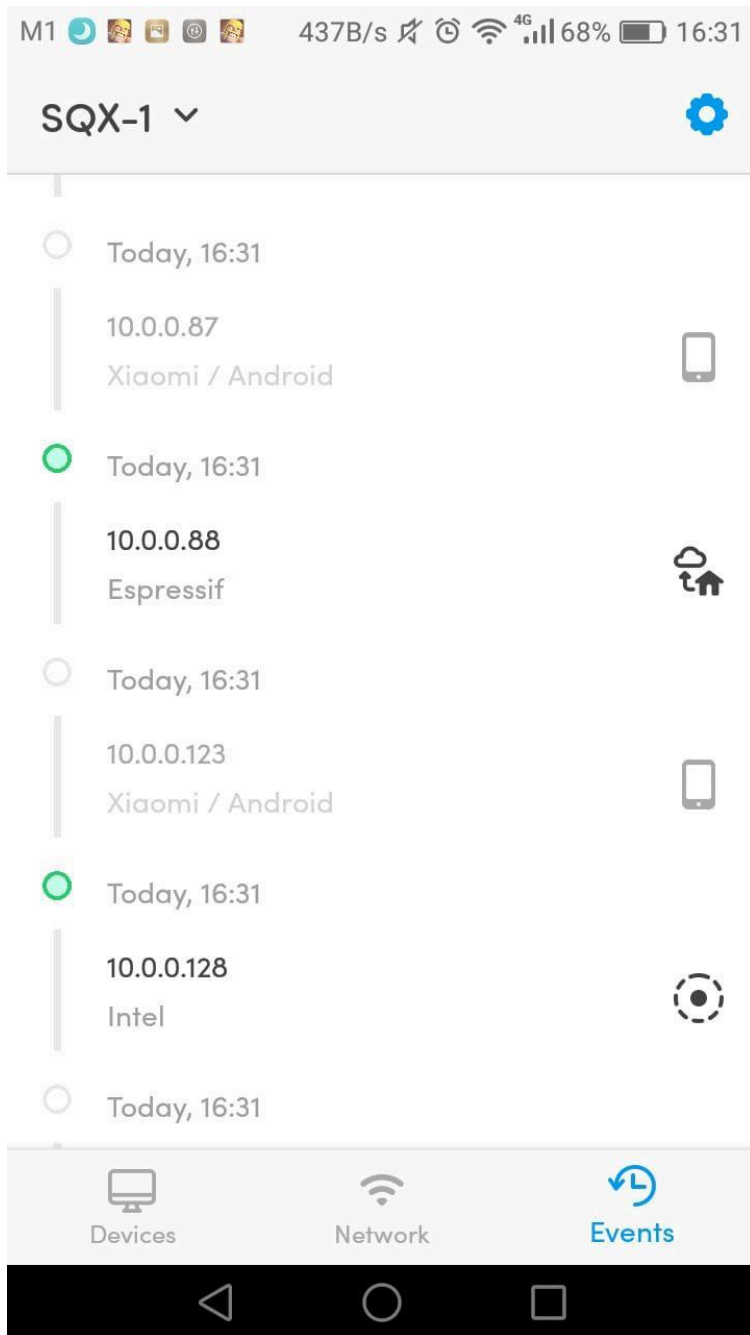
ERR\_CONNECTION\_TIMED\_OUT

Reload

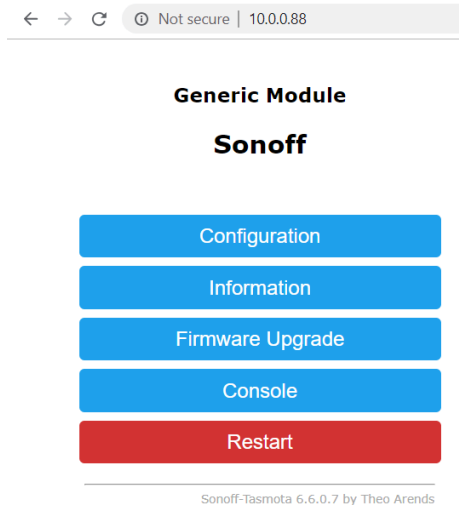
Details



27. Next search for the ip address of the device using Fling  
<https://play.google.com/store/apps/details?id=com.overlook.android.fling&hl=en>



28. Type the ip add in the browser url field



29. Go to configuration, configuration other

30. Copy and paste in the template and click activate and save

Note: If the device is not in the wifi range, the device will broadcast its Access Point(sonoff-xxxx) and phones/laptops can re-register for another wifi parameters.

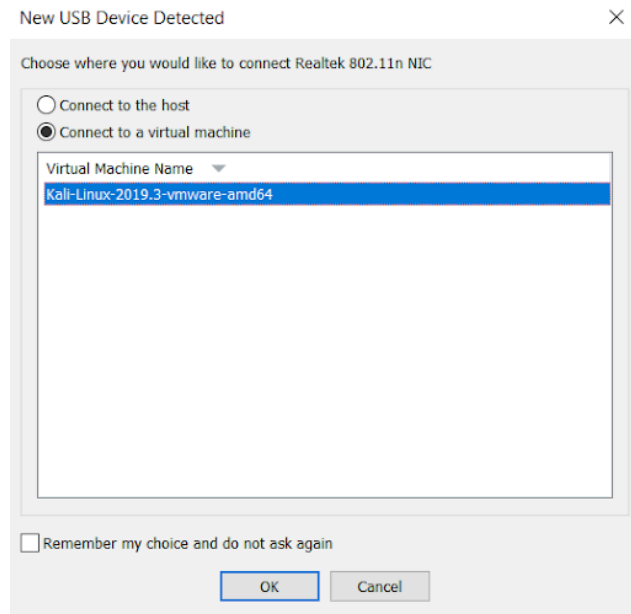
Vid reference : <https://youtu.be/dyUyewiKpRA>

<https://github.com/ct-Open-Source/tuya-convert>

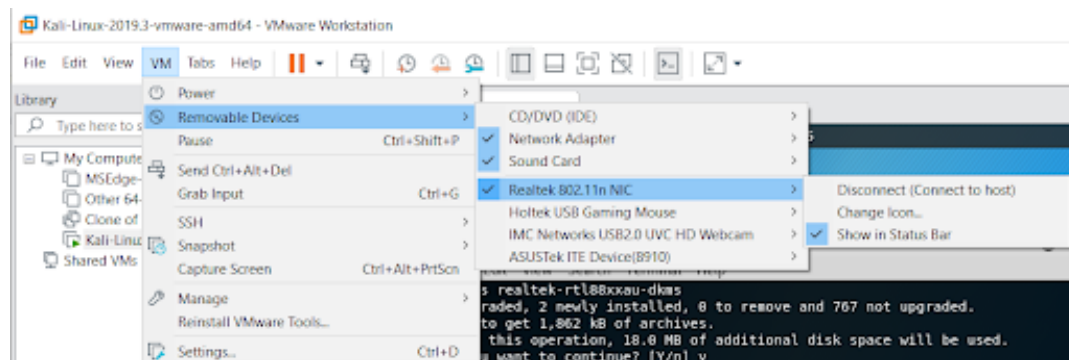
Errors Encountered:

8a: Default USB compatibility is 2.0, remember to change to 3.0 to be able to use the usb wifi adapter in kali linux vm

9a: It must be connected to the virtual machine and not the host machine, there will be a notification that pops up at the virtual machine to indicate where should the usb ported to



10a: if unable to install realtek-rtl88xxau-dkms, it means that realtek 802.11n NIC was not selected



18a: If vtrust-flash network connection failure, refer back to 10a'

19a : If flash half way and vtrust-flash disappears wifi disappeared, cancel the process (ctrl+c) and type `curl -u http://10.42.42.42/flash3` pushing the button four times in quick succession should put your device in wifi recovery mode. It'll open the original sonoff-xxxx wifi AP again. Connect to that, navigate to 192.168.4.1 and you can put in new information.