Panasonic

Device Provisioning Tool

Panasonic MirAIe

USER MANUAL

Version	1.3
Date	18-JAN-2021

Panasonic

Objective of Provisioning Tool

1. To program unique keys for each WIFI module
2. Additionally, it also stores some specific parameters for each wifi module.
3. Generates file to register each device details in Panasonic MirAIe cloud & uploads device provision data into Panasonic MirAIe Cloud
4. During the provisioning process, the wifi module does a connectivity test with a test wifi SSID passed as input to the provisioning tool

Pre-requisites for provisioning Tool

- Laptop with Windows 10 OS
- OpenSSL installed
  - Install OpenSSL for Windows 10 (Downloadable available at https://slproweb.com/products/Win32OpenSSL.html
  - Download below package and install in **C:\Program Files**
  - Set windows environment variable, path by adding C:\Program Files\OpenSSL-Win64
  - In command prompt, check PATH , whether C:\Program Files\OpenSSL-Win64 added to PATH or not

Win64 OpenSSL v1.1.1g EXE | MSI	63MB Installer	Installs Win64 OpenSSL v1.1.1g (Recommended for software developers by the creators of OpenSSL). Only installs on 64-bit versions of Windows. Note that this is a default build of OpenSSL and is subject to local and state laws. More information can be found in the legal agreement of the installation.

- Install latest version of Python & pyserial
  - PYTHON INSTALLATION
    - https://www.python.org/downloads/release/python-385/
    - Add python installed directory to WINDOWS PATH environment variable
    - You can run below command to set path of Python in WINDOWS (If python installed in C:\Python directory)
      - setx path "%path%;c:\Python"
      - setx path "%path%;c:\Python\Scripts"
  - PYSERIAL INSTALLATION to communicate with WIFI MODULE
      - Command: **pip install pyserial**

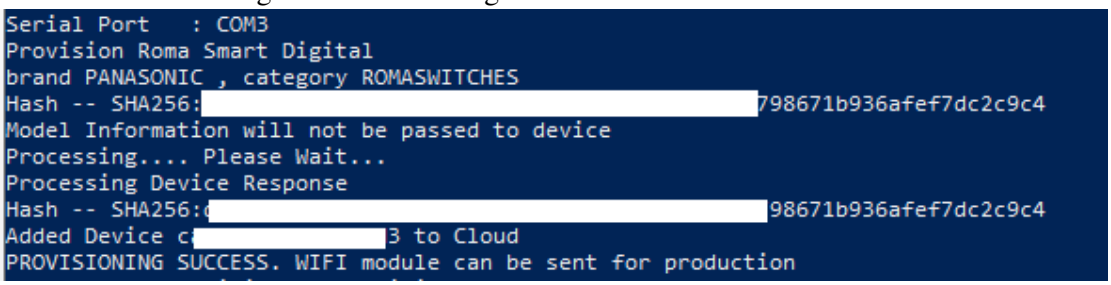
- The WIFI module MUST be flashed with the latest firmware binary
  - Extract the contents of the firmware.tar.gz file to a folder on laptop. Enter into the firmware folder.

- Flash the firmware as per flash command: Below is flashing command for ESP8266 for WIFI Switch Module:

  python esptool.py --chip esp8266 --port COM1 --baud 115200 --before default_reset --after hard_reset write_flash -z --flash_mode dio --flash_freq 40m --flash_size 2MB 0xd000 build/ota_data_initial.bin 0x0000 build/bootloader/bootloader.bin 0x10000 build/switches.bin 0x8000 build/partitions.bin

How to use the provisioning Tool

1. Extract the contents of the provision_prod.zip file to a folder on laptop
2. Connect the WIFI module to the laptop using the USB to serial adapter cable (Use the main UART port on WIFI module to connect to laptop)
3. Identify the COM port to which the wifi module is connected on laptop
4. Enter into folder extracted folder where provision tool available.
5. Syntax **{ devprovision_prod.exe provision –po <COMPORT> -un <test wifi SSID> -pw < test wifi password> -ca <Device Category> }**
   - **COMPORT (eg. COM1) –** This is the com port where the WIFI module is connected to laptop
   - **Test wifi SSID –** Open a test wifi with 2.4GHz frequency (WPA2-Personal or WPA2-PSK) and provide the SSID here. This test wifi does not need internet connectivity
   - **Test wifi password –** Provide the password to connect to test wifi
   - **Device Category**
     - WM – For Washing Machine
     - RS - For Roma Smart Digital
     - AFAN – For ANCHOR Fan
     - ASWITCH – For ANCHOR WIFI Switches
6. Wait till “Provisioning successful message is shown”



7. Tool generates one file per device with provision information. (if device macaddress is c82b96303567, tool generates one file with name “c82b96303567”). Tool also uploads this device data into Panasonic MirAIe cloud.

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