## Sample Json Entry

```
"WS1698": {
    "details": "Huasifei WS1698AX",
    "type": "1",
    "build": "main",
    "config": ".config_ws1698",
    "image": "openwrt-mediatek-filogic-huasifei_ws1698-
squashfs-sysupgrade.bin",
    "imagepath": "/mediatek/filogic/",
    "mod": "Huasifei-WS1698AX",
    "ext": "-upgrade.bin",
    "custom": {
        "name": {
             "model": "WS1698AX",
             "hostname": "Huasifei"
         },
         "wifi": {
             "SSID2G": "wifi6-2.4g",
             "SSID5G": "wifi6-5.8g"
             "Password": "12345678"
         },
         "image": {
             "Material": "hua.png",
             "Argon": "hua.png",
             "Tomato": "hua.png"
         },
        "files": "/huasifei/files1698/"
    }
}
```

This is a fully customized firmware using the json entry in *custom.json*. You can set the following here.

- Model name at top of GUI
- Hostname hostname of router
- Wifi SSID for both 2.4Ghz and 5Ghz
- Password password for both 2.4Ghz and 5Ghz Wifi
- Logo image image shown on GUI for each theme

The logo images are in /www/luci-static/resources/img

You can leave out any of the custom entries that you don't need and they will revert to ROOter default.

```
"custom": {
    "name": {
        "model": "WS1698AX"
    },
    "wifi": {
        "SSID2G": "wifi6-2.4g",
        "SSID5G": "wifi6-5.8g",
        "Password": "12345678"
    },
    "files": "/huasifei/files1698/"
}
```

You can have many folders for each different router inside the parent folder. Examples are

- /huasifei/files1698/
- /huasifei/files1208v2/
- /huasifei/files7915/

with custom files for multiple routers.

## Setting Wifi

The SSID and password can be set from the json file but the channel, htmode and country have to be set from a script in */etc/uci-defaults*.

It is easier if you examine the Wifi config file before making any changes and then after the changes to see what gets modified. The settings are in */etc/config/wireless*. Each radio has 2 sections in the config file.

```
config wifi-device 'radio0'
    option type 'mac80211'
    option path 'platform/soc/18000000.wifi'
    option channel '1'
    option band '2g'
    option htmode 'HE20'
    option disabled '0'
    option noscan '0'
    option country 'US'
config wifi-iface 'default_radio0'
    option device 'radio0'
    option network 'lan'
    option mode 'ap'
    option ssid 'ROOter 2G'
    option encryption 'psk2'
    option key 'rooter2017'
```

This is for Radio 0 and the **band** says it is the 2.4Ghz. To change the Wifi you can alter both entries. Since the SSID and key are changeable from the json file only the Encryption should be changed in **default\_radio0**.

```
uci set wireless.radio0.txpower='23'
uci set wireless.radio0.channel='7'
uci set wireless.radio0.noscan='0'
uci set wireless.radio0.htmode='HT40'
uci set wireless.radio0.country='US'
uci set wireless.default_radio0.encryption='psk2'
uci set wireless.radio1.txpower='23'
uci set wireless.radio1.channel='44'
uci set wireless.radio1.noscan='0'
uci set wireless.radio1.htmode='VHT40'
uci set wireless.radio1.country='US'
uci set wireless.radio1.country='US'
uci set wireless.default_radio1.encryption='psk2'
uci commit wireless
wifi up
```

Make the changes first using the GUI then look at the config file to see what the values are. This is important for *htmode* and *encryption*.

Encryption is as follows

WPA-PSK	psk
WPA2-PSK	psk2
WPA3-SAE	sae
WPA2-PSK/WPA3-SAE	sae-mixed
WPA-PSK/WPA2-PSK	psk-mixed

The *wifi up* command is important as that restarts the Wifi with the new settings.

Any setting that you can change from the GUI can be made default by altering the correct config file from a script in *uci-defaults*.