

WiFi Issues with RDK-B on Raspberry Pi3 (morty)

Hi, I build an rdk-b image according to the tutorial and everything went fine so far until I checked with the WiFi information. My goal is to fetch data about connected wifi clients, such as their current RSSI value, via the CcspWifiAgent component.

I flashed the image, booted up for the first time, connected to the standard AP Wifi and configured it via the xfinity webui accordingly.

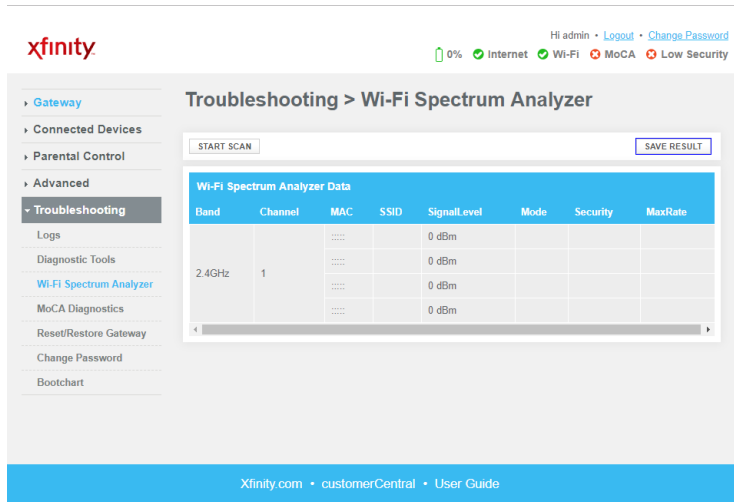
Afterwards, I connected to the new user defined WiFi sshed onto the RPI. I noticed there is no data available about connected clients under "Device.WiFi." as shown below.

```
root@RaspberryPi-Gateway:~# dmcli eRT getv Device.WiFi.
CR component name is: eRT.com.cisco.spvtg.ccsp.CR
subsystem_prefix eRT
getv_from/to component(eRT.com.cisco.spvtg.ccsp.wifi): Device.WiFi.
Execution succeed.
Parameter 1 name: Device.WiFi.RadioNumberOfEntries
           type: uint, value: 2
Parameter 2 name: Device.WiFi.SSIDNumberOfEntries
           type: uint, value: 16
Parameter 3 name: Device.WiFi.AccessPointNumberOfEntries
           type: uint, value: 16
Parameter 4 name: Device.WiFi.X_CISCO_COM_FactoryReset
           type: bool, value: false
Parameter 5 name: Device.WiFi.X_CISCO_COM_RadioPower
           type: string, value: PowerUp
Parameter 6 name: Device.WiFi.X_CISCO_COM_ConfigFileBase64
           type: string, value:
Parameter 7 name: Device.WiFi.X_CISCO_COM_EnableTelnet
           type: bool, value: false
Parameter 8 name: Device.WiFi.X_CISCO_COM_ResetRadios
           type: bool, value: false
Parameter 9 name: Device.WiFi.X_CISCO_COM_FactoryResetRadioAndAp
           type: string, value:
Parameter 10 name: Device.WiFi.X_RDKCENTRAL-COM_WiFi_Notification
           type: string, value:
Parameter 11 name: Device.WiFi.X_RDKCENTRAL-COM_Connected-Client
           type: string, value:
Parameter 12 name: Device.WiFi.X_RDKCENTRAL-COM_WiFiHost_Sync
           type: bool, value: false
Parameter 13 name: Device.WiFi.X_RDKCENTRAL-COM_Br0_Sync
           type: string, value:
Parameter 14 name: Device.WiFi.X_RDKCENTRAL-COM_PreferPrivate
           type: bool, value: false
Parameter 15 name: Device.WiFi.X_RDKCENTRAL-COM_GoodRssiThreshold
           type: int, value: 0
Parameter 16 name: Device.WiFi.X_RDKCENTRAL-COM_PasswordFailureIndicationEnable
           type: bool, value: false
Parameter 17 name: Device.WiFi.X_RDKCENTRAL-COM_NoiseFloorIndicationEnable
           type: bool, value: false
root@RaspberryPi-Gateway:~# |
```

Also, in the xfinity webui, the connected client (my machine) is shown as offline device.

The screenshot shows the Xfinity web interface. At the top, there's a status bar with 'Hi admin', 'Logout', and 'Change Password'. Below that, a row of indicators shows '0%' signal, 'Internet' status, 'Wi-Fi' status, 'MoCA' status, and 'Low Security' status. The main navigation menu on the left includes 'Gateway', 'Connected Devices', 'Parental Control', 'Advanced', and 'Troubleshooting'. The 'Connected Devices' section is active, showing a 'Devices' tab. The main content area is titled 'Connected Devices > Devices' and includes a 'more' link. It contains a 'Prefer Private Connection' checkbox (checked) and two tables: 'Online Devices' and 'Offline Devices'. The 'Offline Devices' table has columns for 'Host Name', 'DHCP/Reserved IP', 'RSSI Level', and 'Connection'. It lists one device, 'pihndesktop', with 'DHCP' as the IP, 'Unknown' as the RSSI level, and 'Unknown' as the connection status. There are buttons to 'ADD DEVICE WITH RESERVED IP' and 'ADD WIFI PROTECTED SETUP (WPS) CLIENT'. The footer shows 'Xfinity.com • customerCentral • User Guide'.

and in the Wifi Spectrum Analyzer Part, the Scan never shows any real data.



I looked into journal log of CcspWifiAgent component and found a lot of errors relating to the interface and seemingly missing binaries. I attached two logs, one of the scan process [wifi_scan_error_log.txt](#) and the other while trying to show the connected devices [connected_devices_error_log.txt](#). I suspect it's merely a configuration issue in yocto where certain dependencies haven't been set properly in the recipes, but that's just a wild guess.

Hopefully, someone can point me to the causes of this issue and how to solve it.

Thanks

UPDATE ON 03.04.2019 - Inserted "ifconfig" output

```
br0      Link encap:Ethernet  HWaddr 1A:D0:39:82:64:AC
        inet addr:192.168.101.3  Bcast:192.168.101.255  Mask:255.255.255.0
        inet6 addr: fe80::18d0:39ff:fe82:64ac/64 Scope:Link
        UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
        RX packets:0 errors:0 dropped:0 overruns:0 frame:0
        TX packets:44 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:1000
        RX bytes:0 (0.0 B)  TX bytes:3318 (3.2 KiB)

brlan0   Link encap:Ethernet  HWaddr B8:27:EB:5E:D0:BA
        inet addr:10.0.0.1  Bcast:10.0.0.255  Mask:255.255.255.0
        inet6 addr: fe80::6009:51ff:fe87:c646/64 Scope:Link
        UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
        RX packets:20053 errors:0 dropped:0 overruns:0 frame:0
        TX packets:10691 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:1000
        RX bytes:2284539 (2.1 MiB)  TX bytes:3446312 (3.2 MiB)

erouter0 Link encap:Ethernet  HWaddr B8:27:EB:0B:85:EF
        inet addr:192.168.20.180  Bcast:192.168.20.255  Mask:255.255.255.0
        UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
        RX packets:219956 errors:0 dropped:30933 overruns:0 frame:0
        TX packets:202103 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:1000
        RX bytes:23687153 (22.5 MiB)  TX bytes:20757039 (19.7 MiB)

lo       Link encap:Local Loopback
        inet addr:127.0.0.1  Mask:255.0.0.0
        inet6 addr: ::1/128 Scope:Host
        UP LOOPBACK RUNNING  MTU:65536  Metric:1
        RX packets:257576 errors:0 dropped:0 overruns:0 frame:0
        TX packets:257576 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:1000
        RX bytes:13261698 (12.6 MiB)  TX bytes:13261698 (12.6 MiB)

wlan0    Link encap:Ethernet  HWaddr B8:27:EB:5E:D0:BA
        inet6 addr: fe80::ba27:ebff:fe5e:d0ba/64 Scope:Link
        UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
        RX packets:20053 errors:0 dropped:0 overruns:0 frame:0
        TX packets:10889 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:1000
        RX bytes:2284539 (2.1 MiB)  TX bytes:3737669 (3.5 MiB)
```

