BLUEGIGA WF111 SOFTWARE DRIVERS

RELEASE NOTES

Thursday, 2 February 2017

Version 5.2.2-r3

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1 WF111 Sofware Driver Release Note

1.1 Changes: 5.2.2-r3 compared to 5.2.2-r2

Date: December 21, 2016

1.1.1 Changes

- Support added for Linux kernel up to 4.9

1.1.2 Limitations

- Same as in 5.2.2

1.1.3 Known issues

- Same as in 5.2.2

1.2 Changes: 5.2.2-r2 compared to 5.2.2

Date: August 9th, 2015

1.2.1 Changes

- Support added for Linux kernel up to 4.1
- Recommend to use latest wpa_supplicant v2.4
- Improve roaming documentation by adding instructions how to disable roaming from wpa_supplicant. WF111 driver has own roaming algorithm.

1.2.2 Fixes

- Fix error handling when wrong WPA2 passphrase is given.
- Disable RSSI averaging reset which caused unfiltered RSSI measurements and unintended roaming.
- Improve radio performance in AP mode, in the face of changing temperature.
- Fix corrupted mib111_drv_coex_led.dat configuration file.

1.2.3 Limitations

- Same as in 5.2.2

1.2.4 Known issues

- Same as in 5.2.2

1.3 Changes: 5.2.2 compared to 5.1.0

Date: June 27th, 2014

1.3.1 Changes

- Support added for Linux kernels up to 3.14
- Support for Cloaked/Hidden SSID.
- All files all delivered in one tar.gz package.
- Updated makefile based build system.
- Moved firmware files to */lib/firmware/unifi-sdio*, SDIO slot number is not anymore in the path.

- Added support for 3rd and 4th SDIO slots in Linux
- Disabled power save mode by default because of possible data loss. It can be re-enabled with "iwconfig wlan0 power on".
- Added wf111_supportinfo.sh script for collecting system information for support request.
- Added configuration samples (wpa_supplicant_sample.conf) for wpa_supplicant.
- Added SIOCGIWESSID functionality in access point mode. Now it is possible to read the ESSID of WF111 in access point using "iwconfig wlan0" command.
- Removed CCX support.
- Removed IBSS (ad hoc) mode.
- Removed PowerPC architecture support

1.3.2 Fixes

- A logical error could cause UniFi to reset when the user disconnected from an AP.
- Some memory leaked during turning the AP on/off. This could eventually cause the application to crash due to lack of memory.
- Cleaned the unnecessary data from output of wireless tools when in AP mode.
- Duplicate scan records with different SSIDs.
- WPA timeout too low for connections to some APs.
- Disassociation frames were not handled.
- Poor Rx throughput with WPA2 observed with some APs.
- Incorrect WEP key setting during a connection are now rejected and the keys are invalidated.
- Block Ack session not established with Cisco-AP 1252AG.

1.3.3 Limitations

Station mode:

- IBSS (ad hoc) support is removed completely.
- Tx Block Ack is not supported due to interoperability issues with some popular commercial phones and also due to a reduction in throughput for TCP Tx in IEEE 802.11n mode against some APs.
- Data may be lost and the latency may increase significantly in power save mode.

Access point mode:

- Group re-keying is not supported.
- Bandwidth may not be equally distributed among connected stations. In particular, IEEE 802.11n Block Ack (Rx) capability is only supported for one connection at a time.
- AP mode does not support Tx Block Ack capability.

1.3.4 Known issues

- In AP mode, stations which are in power save, may experience dropped packets. The Wi-Fi host driver for the AP can buffer a maximum of 512 packets shared across all connections. This system limitation can cause stations in power save to experience dropped packets when the application sends traffic at high speed and with large packet size, filling up the buffer.
- Linux stability: TCP Rx stopped with WMMPS STA. When Wi-Fi station is operating with WMM-PS TCP Rx data streams and a significant amount of data is transferred, stream might stop after several hours. Workaround: Restart the data stream.
- In AP mode, all formats of Virtual LAN packets are not supported. Some types of Virtual LAN packets are dropped, which may cause problems in some environments.

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