

Replicant - Issue #1791

[RepWifiApp] Instable interface wlan0 on i9100

04/12/2017 07:54 PM - Fil Bergamo

Status:	New	Start date:	04/12/2017
Priority:	Normal	Due date:	
Assignee:		% Done:	0%
Category:	Wi-Fi	Estimated time:	0.00 hour
Target version:	Replicant 6.0	Spent time:	0.00 hour
Resolution:		Grant:	
Device:	Galaxy S 2 (I9100)	Type of work:	C programming, Unknown

Description

Conditions:

- device: I9100
- battery level below 80%
- using RepWifi App to connect to a WiFi access point, via an external dongle (ath9k_htc)

Behaviour:

The "wlan0" interface assigned to the external dongle gets removed while interacting with the WiFi access point, causing the connection process to abort. The user needs to physically unplug and re-plug the dongle to get the interface appear again in the list returned by

```
ip link
```

The issue is almost totally absent at full battery level, raising the suspect that it could somehow have something to do with the dongle not receiving enough current. Issues with current drawing were present even on Replicant 4.2 on the i9100.

When using the scripts from the "Terminal Emulator" app or from the built-in terminal, the issue is much less frequent.

This could be related to the app being graphically more demanding than the bare terminal, and as such, being more CPU-intensive, such that it draws more current, preventing the dongle to get enough power, especially when charge is low.

A possible solution could come from looking at the source code of the built-in terminal app, to see how it manages to call shell commands, and see if using the same method in RepWifi App solves the issue (currently RepWifi launches "su" as a process and fills its standard input with commands via pipes).

History

#1 - 06/14/2017 08:10 PM - Wolfgang Wiedmeyer

This issue more or less also happens with the Galaxy Note and Galaxy Nexus. It's also worth to look at the kernel driver code and possibly the firmware code to identify possible ways to save power. Others who are a lot more involved with ath9k could be helpful, like OpenWRT devs.

#2 - 08/30/2018 06:35 PM - Kurtis Hanna

Has this issue been resolved with the new RepWifi beta?

#3 - 08/30/2018 07:32 PM - Fil Bergamo

Kurtis Hanna wrote:

Has this issue been resolved with the new RepWifi beta?

I'm sorry to say it's not.

I did some testing, and (at least on my device) it seems to have nothing to do with RepWifi or any software setting.

There's nothing I can do to fix this issue in RepWifi or at the application framework level, sorry.

#4 - 09/03/2018 10:26 PM - Kurtis Hanna

Thanks for the feedback on this, Fil!

Since this does seem to be a power related issue, I should mention a hardware based hack that I've done. I bought an OTG cable which multiple prongs that allows me to plug my phone in and power it while also using the USB WiFi dongle at the same time. If someone wants me to provide more details on the OTG cable that works for me, let me know.

#5 - 09/30/2018 09:53 AM - Fil Bergamo

- *Category changed from Wi-Fi to RepWifi*

#6 - 01/16/2019 12:33 AM - Fil Bergamo

- *Assignee deleted (Fil Bergamo)*

#7 - 03/07/2019 04:50 PM - Denis 'GNUtoo' Carikli

- *Category changed from RepWifi to Wi-Fi*

#8 - 03/23/2021 05:13 PM - _I3^ RELATIVISM

- *Type of work C programming, Unknown added*