Summary of Wireless Workshop
netdev2.2

Johannes Berg

November 2017
- Realtek
- Marvell
• enforcement of radio parameters in firmware
• (ETSI) limited EDCA parameters
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new regulatory database

- loaded into kernel (3.5KiB)
- extensible format
• pending patches
• monitor mode / radiotap
• blocking wifimon eBPF filter
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• blocking wifimon eBPF filter
• sometimes people want to introspect wifi frames
  • socket filters exist
  • BUT: skb_copy() before sending packets to monitor interface is expensive
  • solution: add eBPF filter before skb_copy()
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• Toke will explain in his talk @ 1pm
• next upcoming PHY standard
• takes tricks from LTE
• many things to do:
  • radiotap
  • new management elements/frames
  • requires Multi-BSSID support
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• Multi-BSSID changes that
• but requires client updates – needed in Linux
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  • elliptic curve crypto in auth handshake
  • which is offloaded with CONNECT cmd
  • multiple potential solutions
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What is NAN?

- device-to-device discovery
- energy-efficient
- intended to work well in crowded environments
- extensions under work for data transfer

Intel working on

- protocol implementation in wpa_supplicant
- scheduling support etc. needed in device
- will likely add some level of hwsim support for testing
EAPOL over nl80211 (instead of datapath)
netlink extended ACK
simplify hostapd "fully-featured" configuration
802.11 mesh
FTM
VHT extended NSS support
Questions/Comments?