

Wireless User Detection System



Git - <https://bitbucket.org/FlyingDan/wuds>

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Python Hamilton Meetup – April 2016

- System integration, IT security
- Using Python on/off - 8 years
- Contact info
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This information is for informational purposes only. Any education is purely accidental.

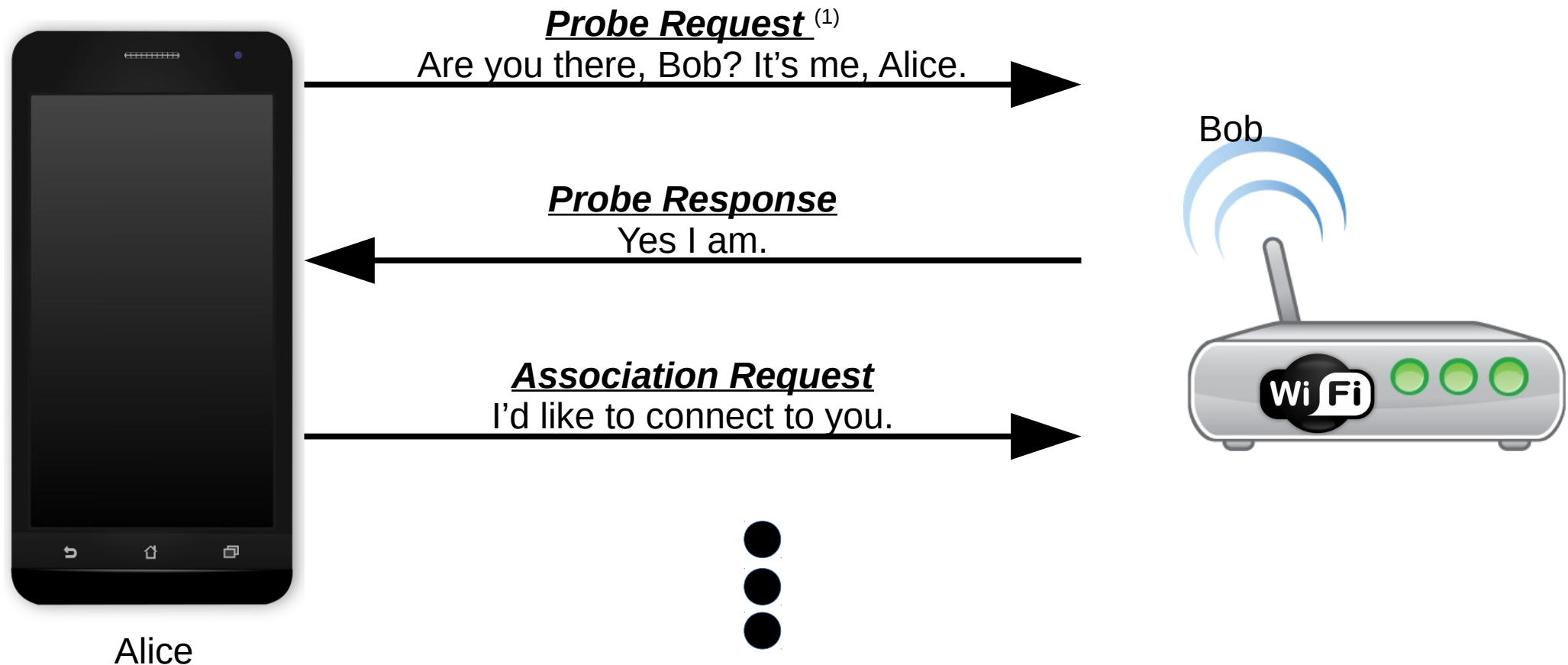
As with anything in life, it is your responsibility to decide how to use what you learn.

WUDS is the original creation of lanmaster53 -
<http://www.lanmaster53.com/2014/10/wifi-user-detection-system/>

Maslow's new hierarchy



How (part of) WiFi works



⁽¹⁾ http://www.wildpackets.com/resources/compendium/wireless_lan/wlan_packet_types

How (part of) WiFi works



Alice

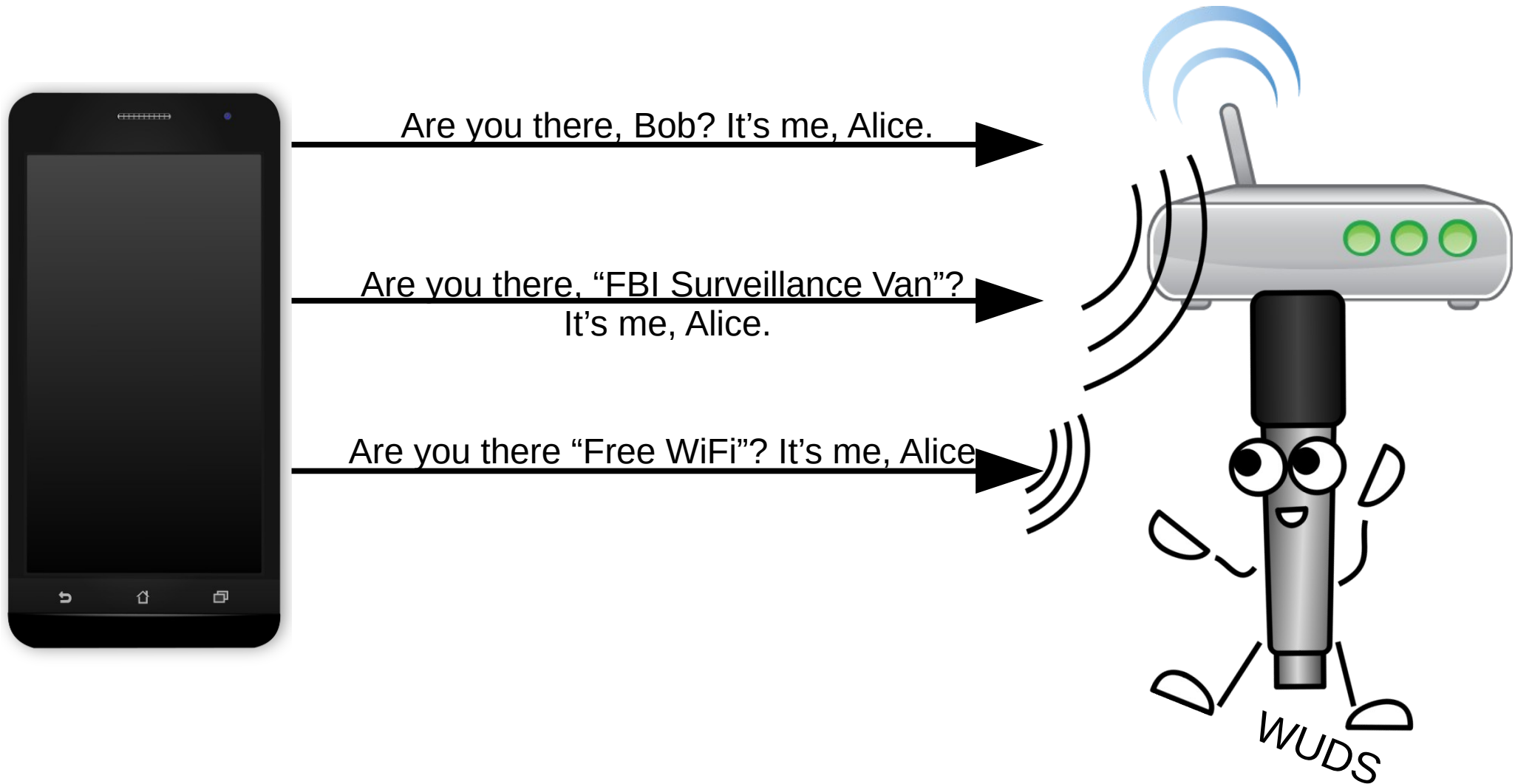
Are you there, Bob? It's me, Alice.

Are you there, "FBI Surveillance Van"?
It's me, Alice.

Are you there "Free WiFi"? It's me, Alice



How (part of) WiFi works



What is WUDS?

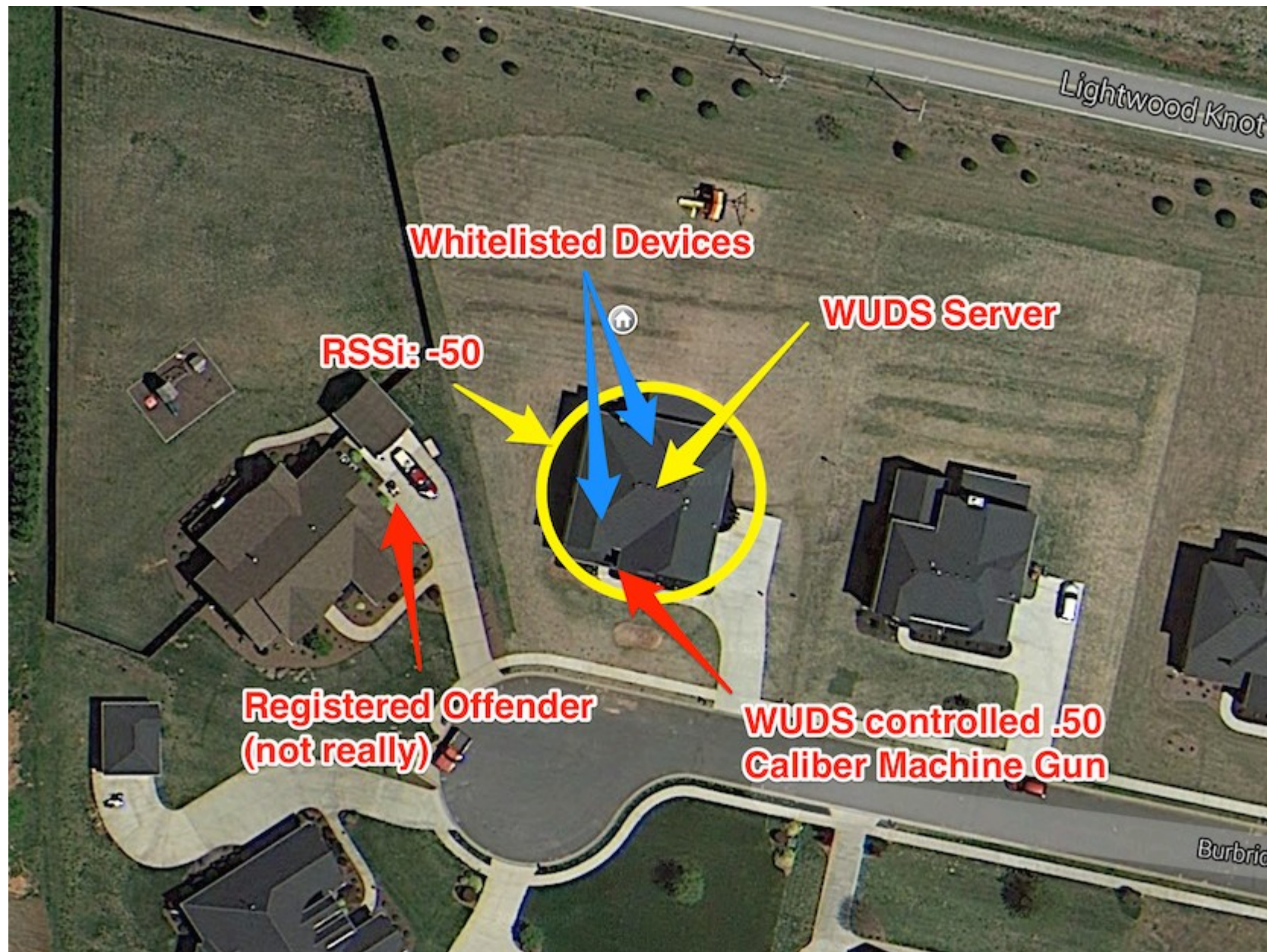
- Small application which listens for probe requests
- Output to sqlite3 database:

date/time	mac	rsssi	ssid	oui
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DEMO

Features

- Filter out known MAC addresses
- Output raw packet capture for deeper / offline analysis
- Trigger notifications (SMS, email) on signal strength threshold
- Resolve OUI to company name (type of device)



<http://www.lanmaster53.com/2014/10/wifi-user-detection-system/>

- WiFi auditing tool created/distributed by Hak5

<https://www.WiFiPineapple.com/>



Future Plans

- Web Interface (Flask + javascript)
 - Statistics, trends
- GUI?
- Bluetooth
- Use local OUI database

Thank You

Twitter: @FlyingDan

Git:

- <https://bitbucket.org/FlyingDan>
- <https://github.com/FlyingDan>



RCAF 2016 CF188 Demo