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Unlocking the secrets of RF-DNA fingerprints

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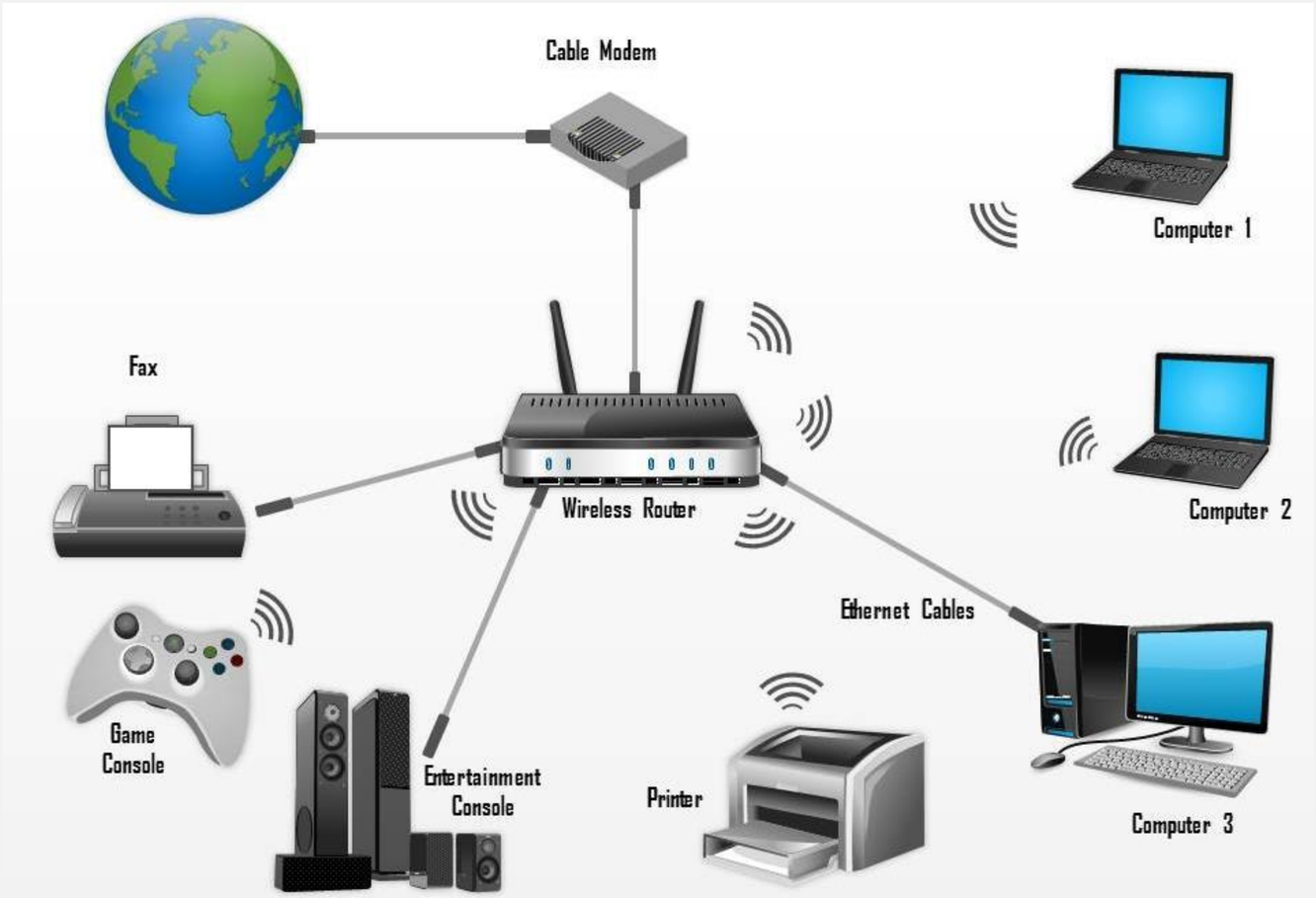
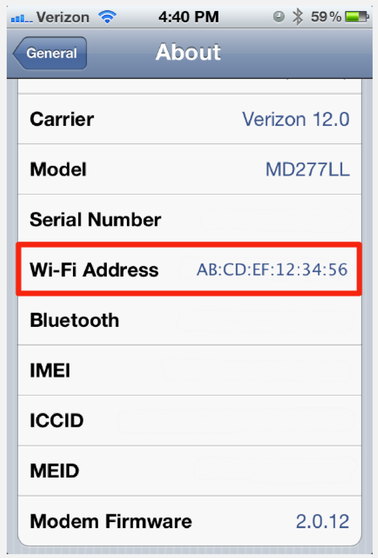
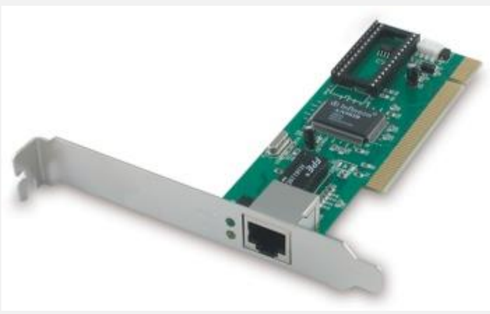
- Your daily internet activities as shown in this home wireless network diagram



- There is an unique ID built inside device network card used to secure your communication (like the driving license)





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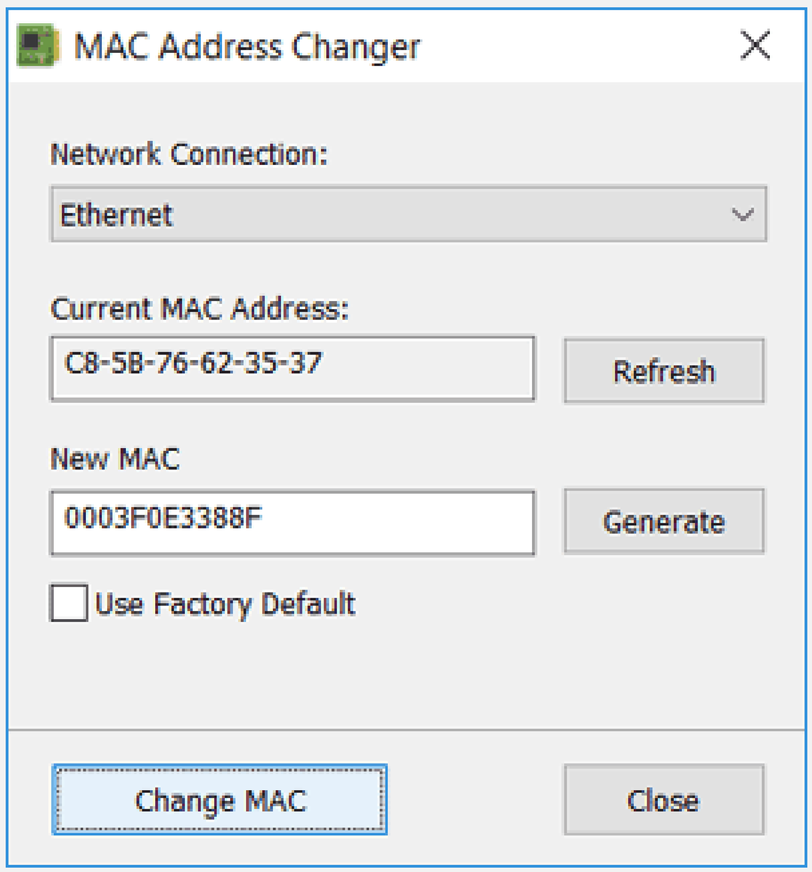
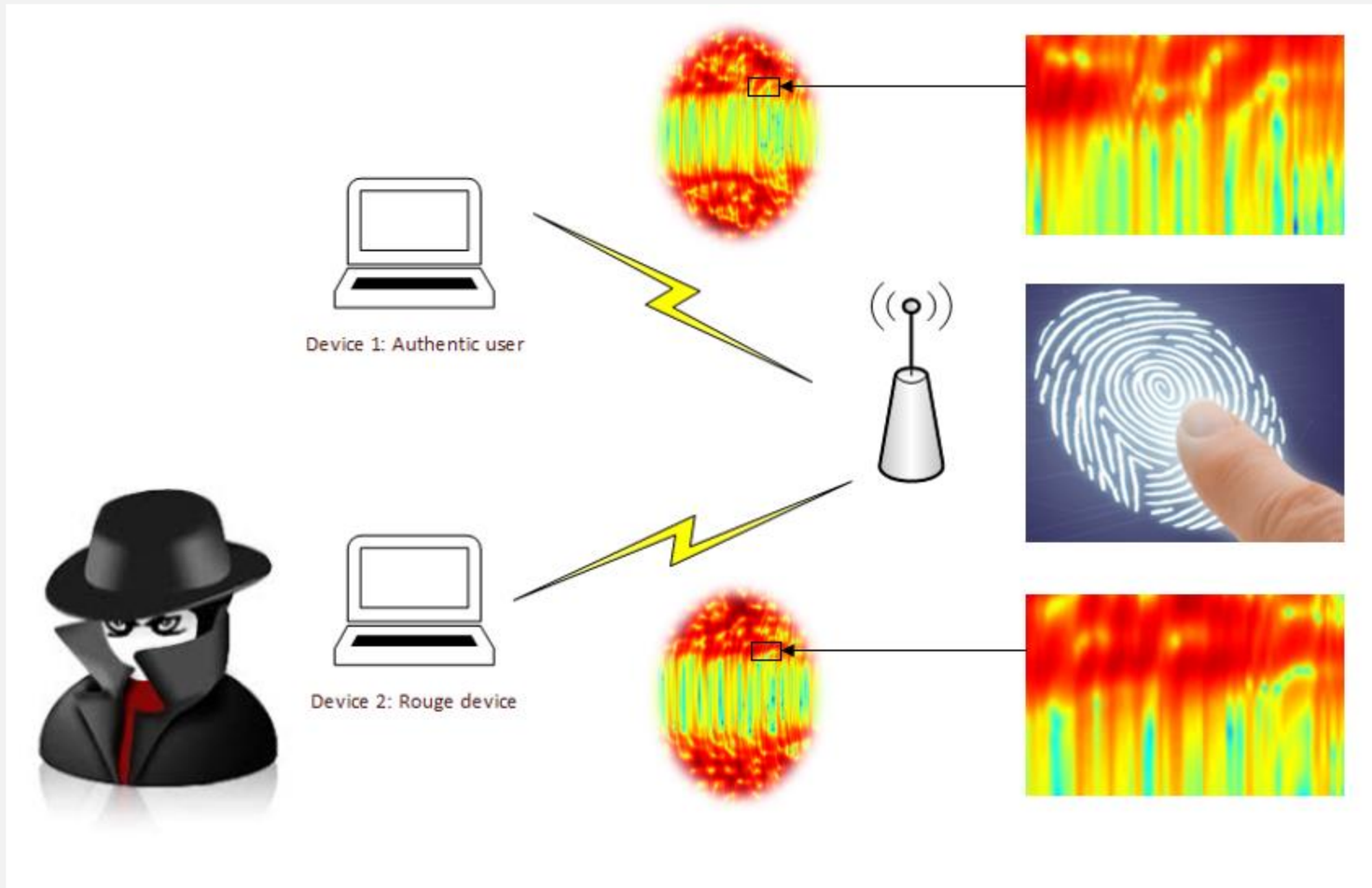
- Device 1 is transmitting its ID (MAC address): 0003F0E3388F





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- **The problem**

- There is an **urgent need** to augment existing bit-level network security mechanisms (the MAC ID shown previously) to leverage useful discriminating information that can be used to identify a possible rogue device.

- **Objectives**

(i) Exploit physical attributes to augment traditional Security mechanisms

(ii) Enhance authentication and rogue rejection