The Method to the Madness of IoT Hacking

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What We'll Cover

- Let's define IoT hacking
- Phase 1: Reconnaissance
- Phase 2: Looking for vulnerabilities
- Phase 3: Attacks
- Phase 4: Achieve access
- Phase 5: Maintaining access

Let’s Define IoT Hacking

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Hacking refers to the practice of modifying or altering any device, software, or even life forms to make “it” do something outside of it’s original purpose or design

Let's Define IoT Hacking

How Can Attackers Benefit?

Phase 1: Reconnaissance

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Passive

No direct interaction with the target

Active

Direct interaction with the target

Which Type of Reconnaissance

- Port Scanning
- Ping
- Websites
- Doing a “Whois” Lookup
- Checking a Registrar for DNS

Phase 2: Looking for Vulnerabilities

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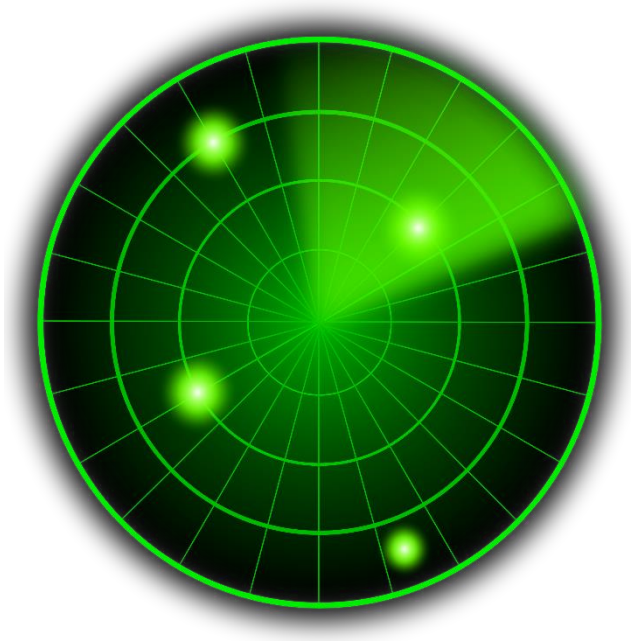


Gather Info

ID systems

Vulnerabilities

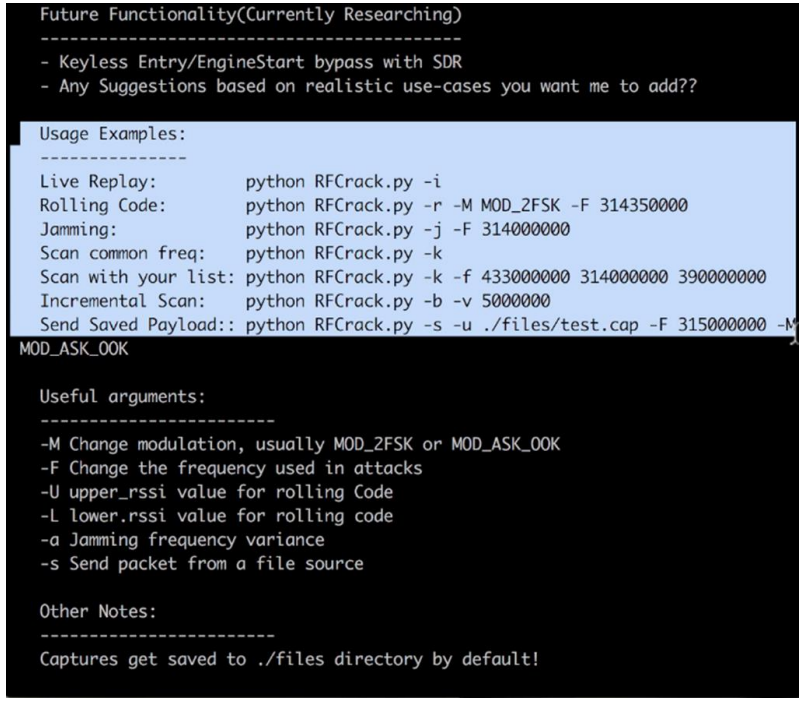
Tools Used

Port Scanners

Vulnerability Scanners

Phase 3: Attacks

Dealing with Rolling Codes



https://github.com/cclabsInc/RFCrack

Rolling code attacks

Jams

Scans

Replay attacks

Phase 4: Achieve Access

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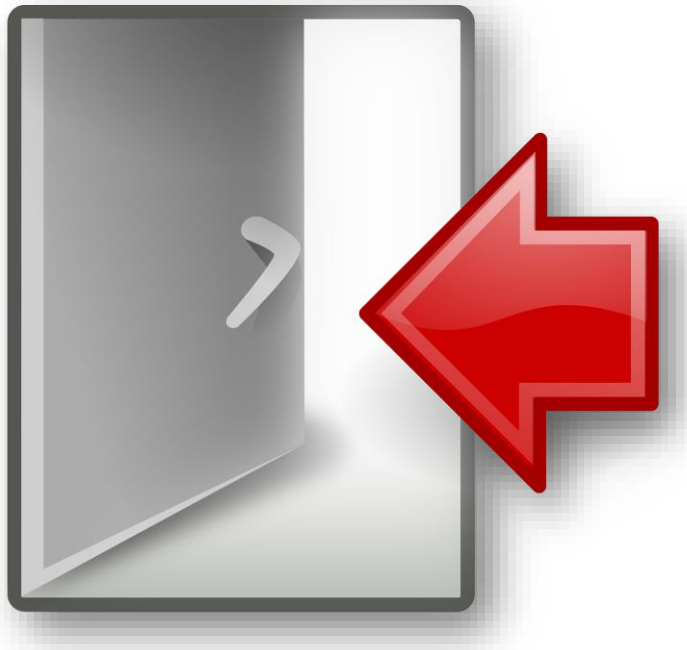

Path

- Via network
- Via OS
- Via application
- Our goal?
  - To escalate privileges

Phase 5: Maintaining Access

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- PWNing the system
- Use system as a pivot point
- Exploit the firmware
- Use resources
- Harden up

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