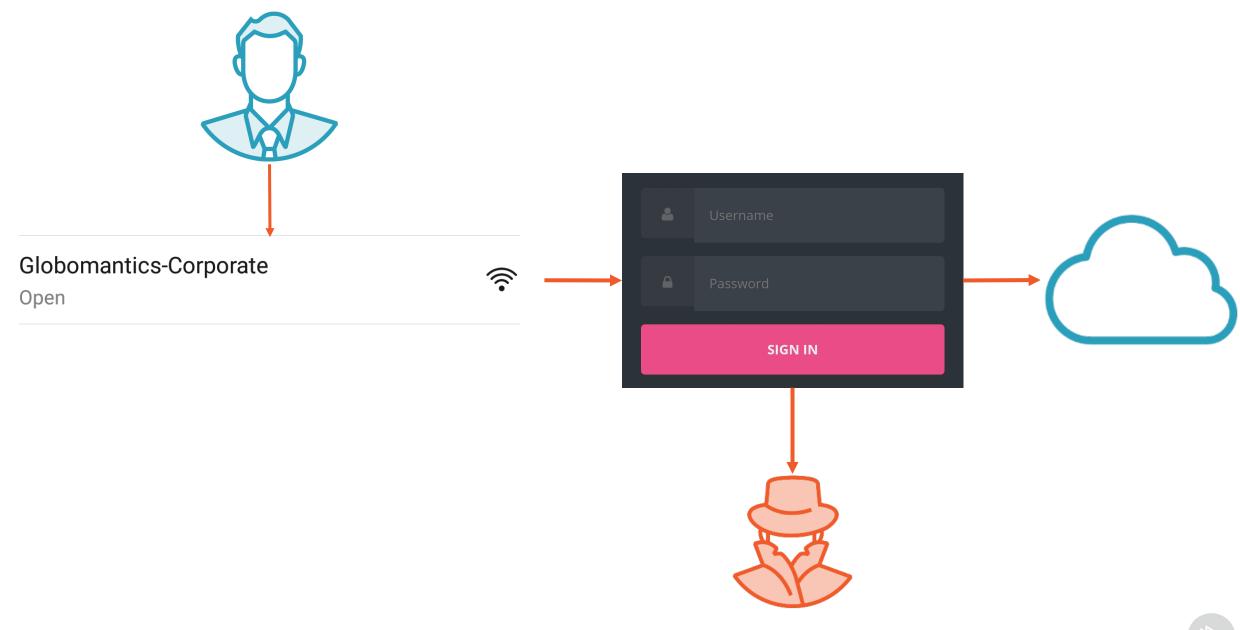
## Initial Access with WiFi-Pumpkin



Ricardo Reimao
CYBER SECURITY CONSULTANT









Founder: Marcos Bomfim (mh4x0f) - POcL4bs

A rogue access point framework to easily create fake WiFi networks. Includes several modules, such as transparent proxy, ARP poisoning, phishing manager, and much more.





## Open source tool (GNU v3.0)

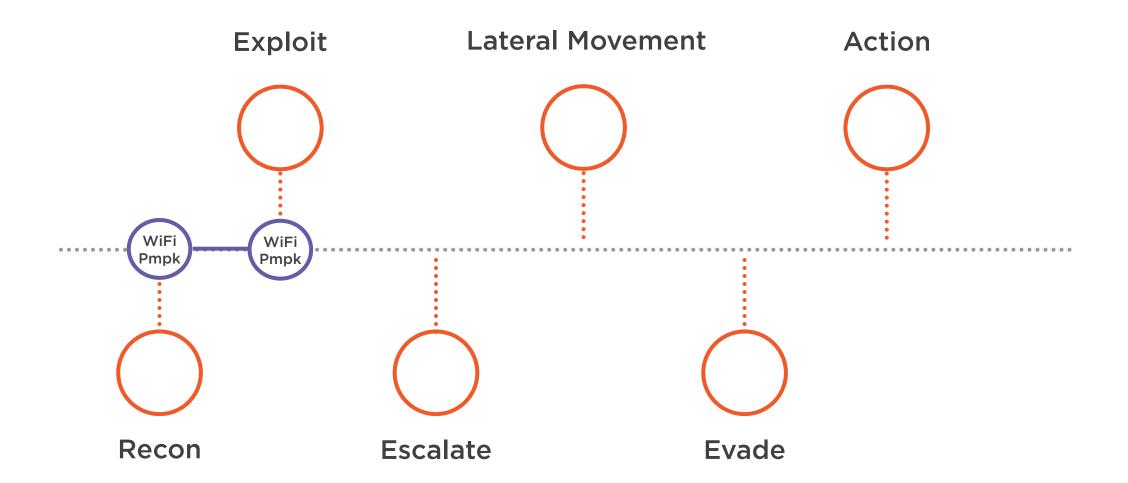
https://github.com/POcL4bs/WiFi-Pumpkin

## Easy to install and use

#### Includes several attacks out of the box

- Packet injection
- HTTP credential monitoring
- ARP poisoning and DNS spoofing
- Fake captive portals

## Kill Chain





## MITRE ATT&CK

**Tactics** 

**Initial Access** 

**Execution** 

Persistence

**Privilege Escalation** 

**Defense Evasion** 

**Credential Access** 

Discovery

**Lateral Movement** 

Collection

**Command & Control** 

**Exfiltration** 

**Impact** 



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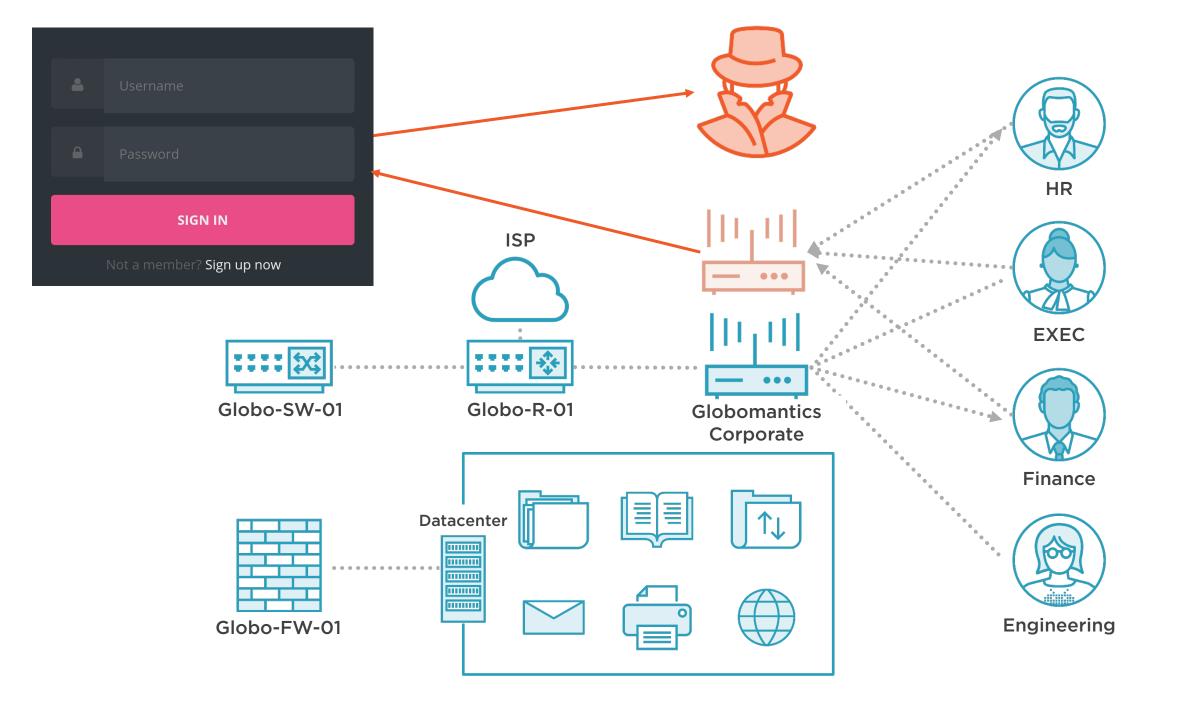
T1465:

Rogue WiFi Access Points

T1078:

**Valid Accounts** 

**Tactics** 





## Staying Legal

Stealing credentials without authorization is ILLEGAL in most countries



Letter of engagement, detailing dates and scope of what will be executed

Formal document, signed by the client, authorizing the types of attack you may perform

Always consult the client before any attack that may impact the network



## Prerequisites



### Kali Linux

Version: 2020.1 or superior

Up to date: \$ apt-get update \$ apt-get upgrade



#### WiFi Network Card

Must support "Monitor Mode"

### Suggested models:

- TP-LINK: TL-WN722N

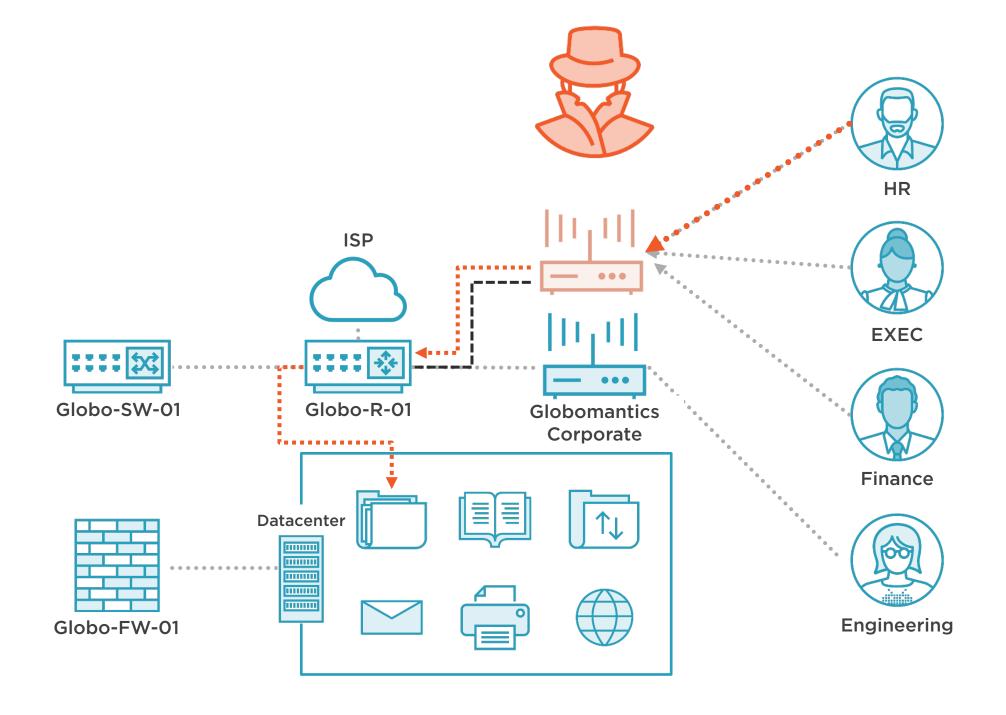
- Alfa: AWUS036NH



## Demo Place Holder

- 1. Installation Tips and Tricks
- 2. First use instructions and common usage syntax
- 3. Use of main features on live targets or in live environment





## How to Increase Your Success Rate

#### Use a convincing WiFi SSID

- "Globomantics Corporate Secure"
- "Globomantics Employees"

#### Create a convincing login page

- Use the target logo and colors

#### Generate a failed authentication

- Edit the template JavaScript

#### Cause DoS (if authorized)

- Use Aireplay-ng

# aireplay-ng --deauth 0 -a [real\_ap\_mac] -c [victm\_mac] wlan0mon





## More Information

#### Official Documentation

Several other capabilities, such as WiFi Proxy, SSL decryption, image capture, credential capture and much more. <a href="https://github.com/POcL4bs/WiFi-Pumpkin">https://github.com/POcL4bs/WiFi-Pumpkin</a>

## DoS tool: Aircrack-ng

https://www.aircrack-ng.org/

Initial Access with Aircrack-ng
<a href="https://app.pluralsight.com/library/courses/initial-access-aircrackng/">https://app.pluralsight.com/library/courses/initial-access-aircrackng/</a>

# More Courses in Pluralsight on Wireless Penetration Testing

Wireless Penetration Testing
<a href="https://app.pluralsight.com/library/courses/wireless-network-penetration-testing/">https://app.pluralsight.com/library/courses/wireless-network-penetration-testing/</a>

Wireless Network Penetration Testing Advanced Techniques

https://app.pluralsight.com/library/courses/wireless-network-penetration-testing-advanced-techniques/



# Thank you!



Ricardo Reimao Cyber security consultant

