CENSUS
IT Security Works

EFFICIENT WI-FI PHISHING ATTACKS

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> WI-FI PHISHING PROCESS

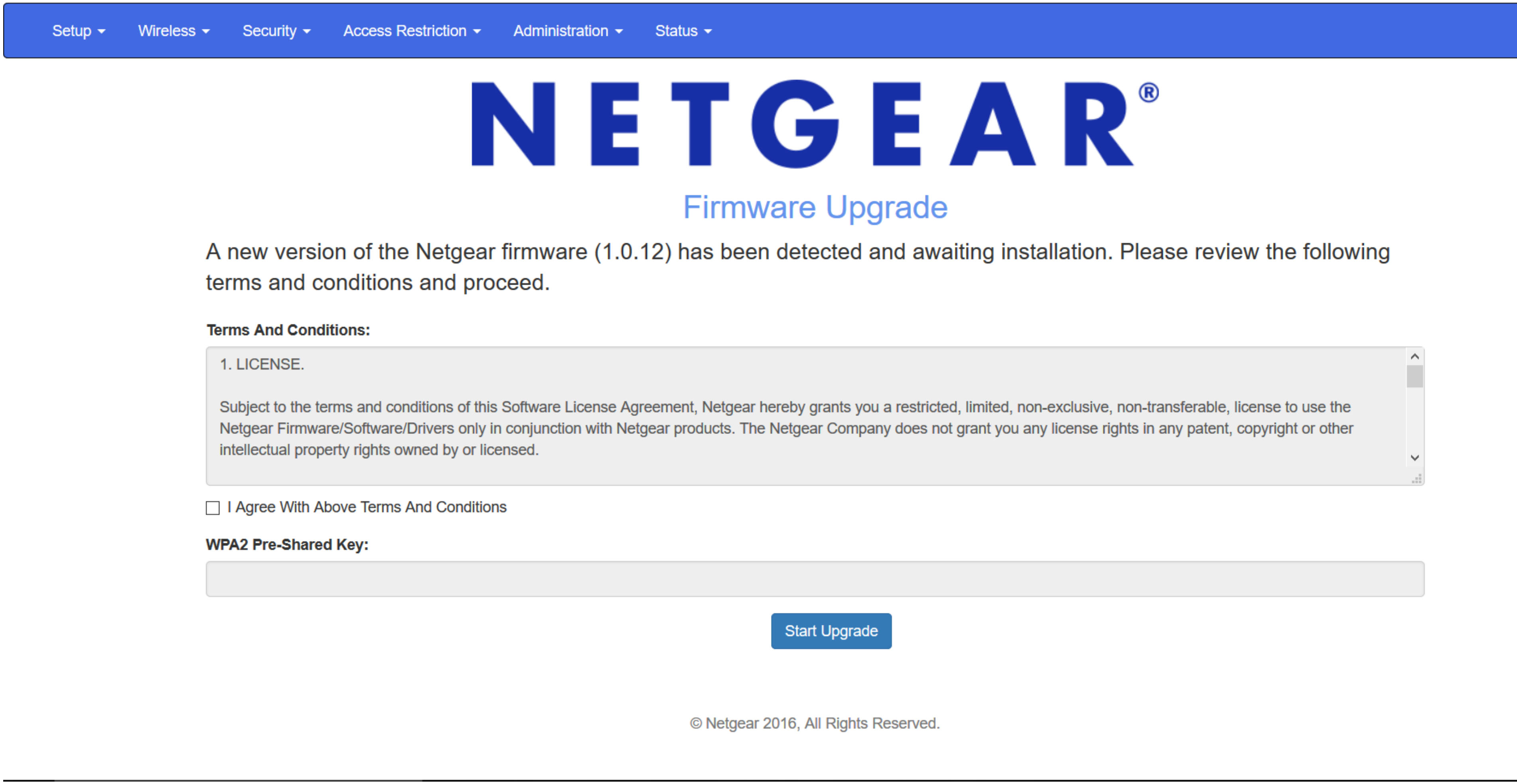
1. Evil Twin (or KARMA) to get MiTM
   - DEAUTH or (physical layer) jamming attacks to disrupt existing associations
2. Redirect to fake website
   - Credentials capture or malware infection

> WPA/WPA2 PSK PHISHING

- WPA2 PSK brute-forcing remains time-consuming
  - PBKDF2 with 4096 iterations & network’s ESSID as salt
  - 1 GPU (80000 pwds/s) needs 30 days to break an 8-char PSK
- WPA2 phishing to the rescue!

> VICTIM PROFILING

- 802.11 Beacon frames (Physical layer)
  - ESSID
  - BSSID (discloses the router’s vendor)
    - e.g. If BSSID starts with "00:12:17“, the frame was broadcasted by a Linksys router
  - Encryption type
- HTTP User-Agent header (Application layer)
  - OS
  - Browser



Firmware Upgrade

A new version of the Netgear firmware (1.0.12) has been detected and awaiting installation. Please review the following terms and conditions and proceed.

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WPA2 Pre-Shared Key:

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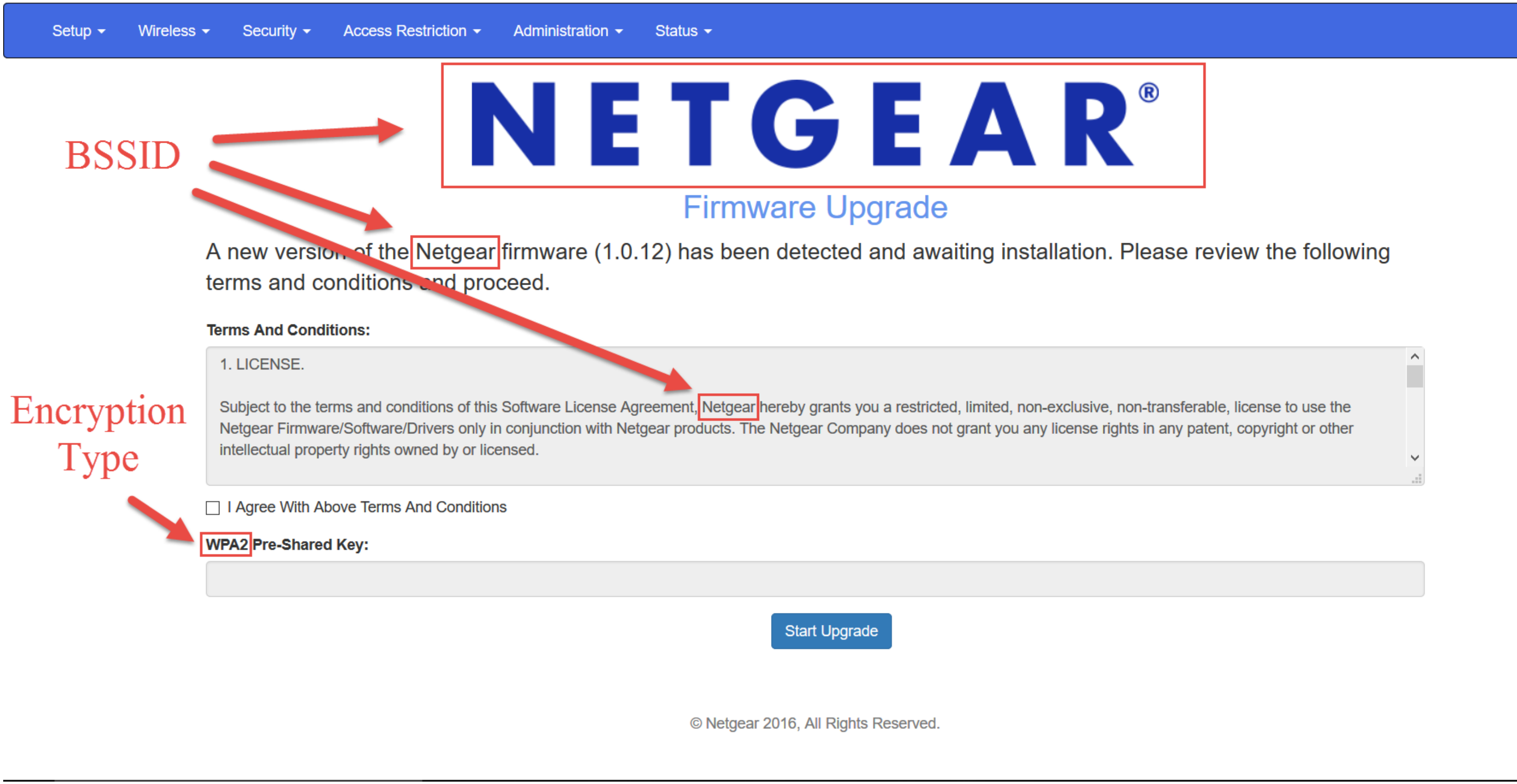

BSSID

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Encryption Type

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WPA2 Pre-Shared Key:

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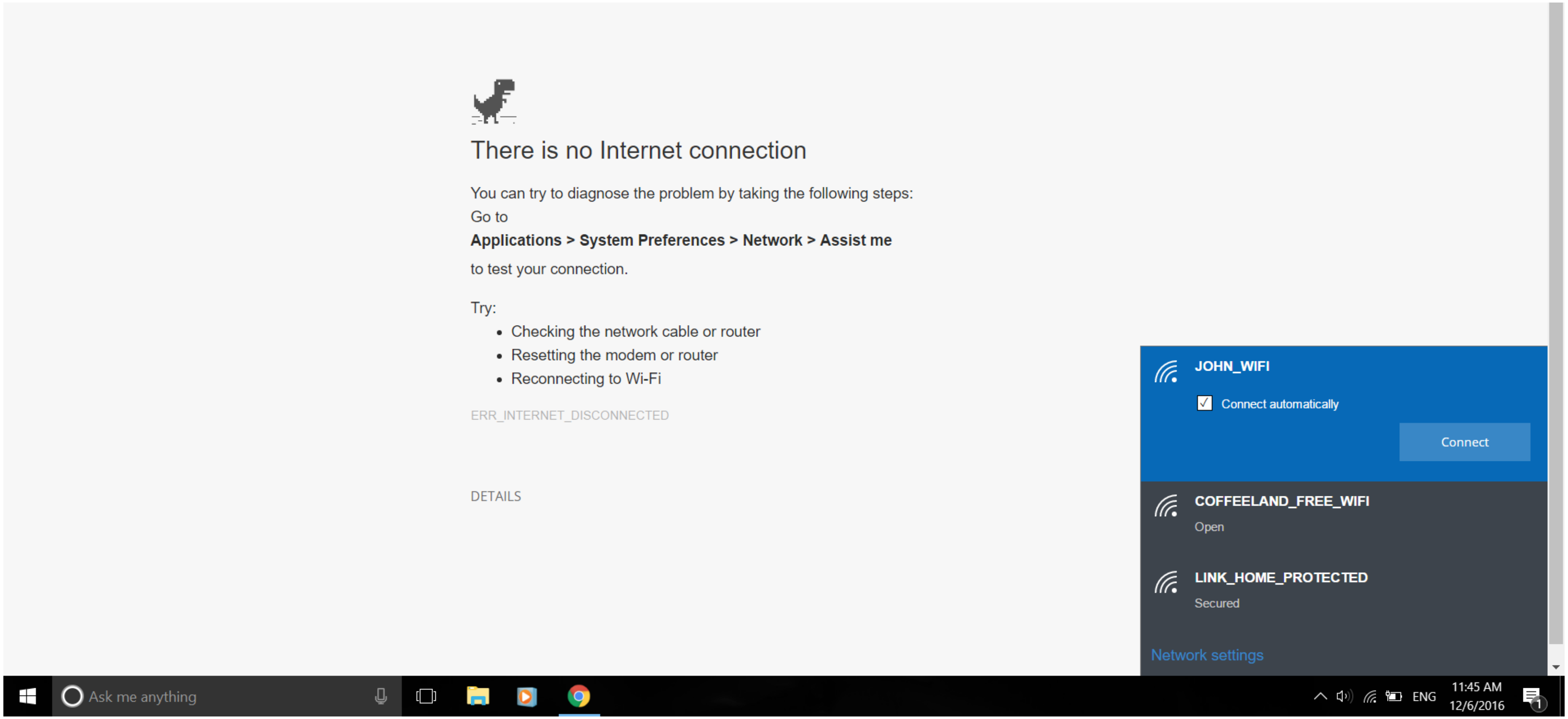


There is no Internet connection

You can try to diagnose the problem by taking the following steps:
Go to
Applications > System Preferences > Network > Assist me
to test your connection.

Try:

- Checking the network cable or router
- Resetting the modem or router
- Reconnecting to Wi-Fi

ERR_INTERNET_DISCONNECTED

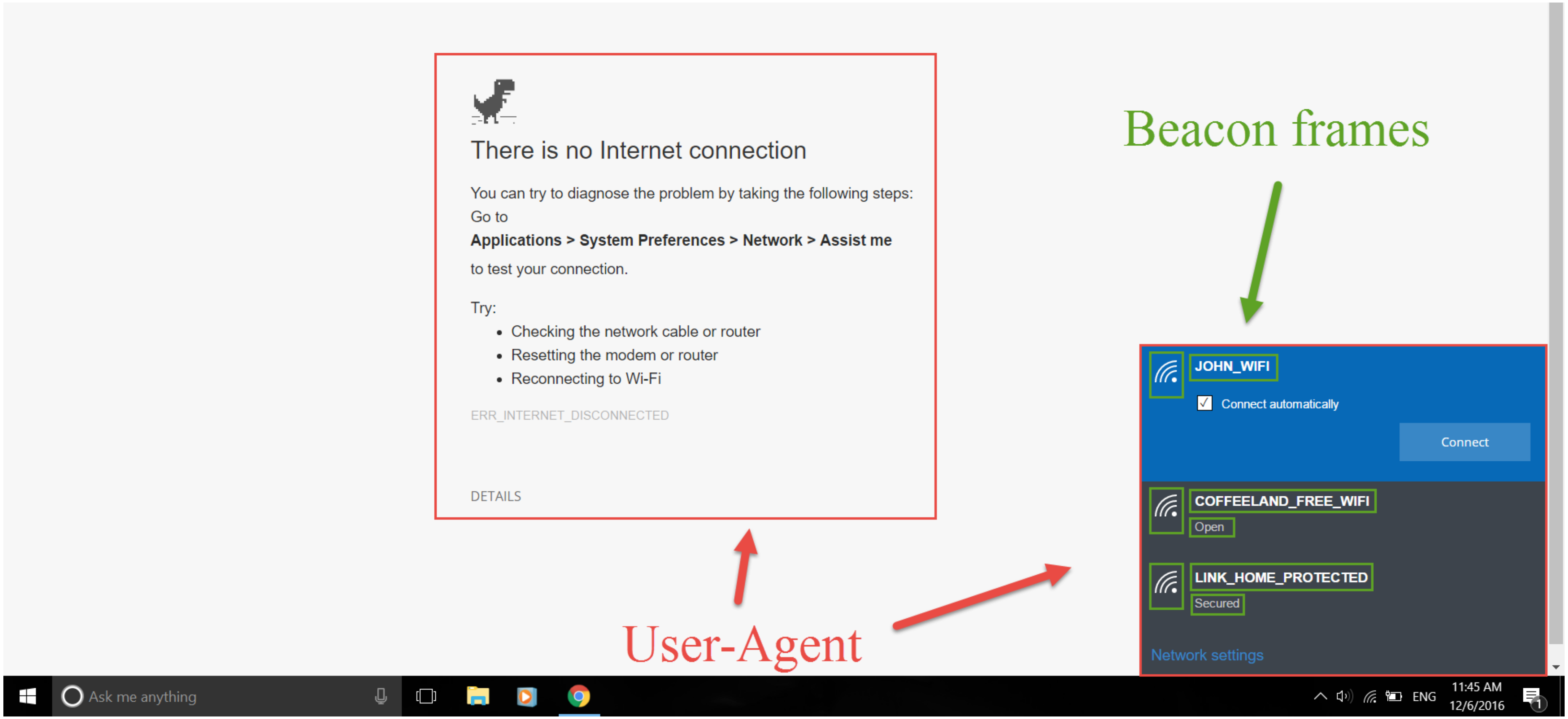
DETAILS

JOHN_WIFI
☑ Connect automatically
Connect

COFFEELAND_FREE_WIFI
Open

LINK_HOME_PROTECTED
Secured

Network settings



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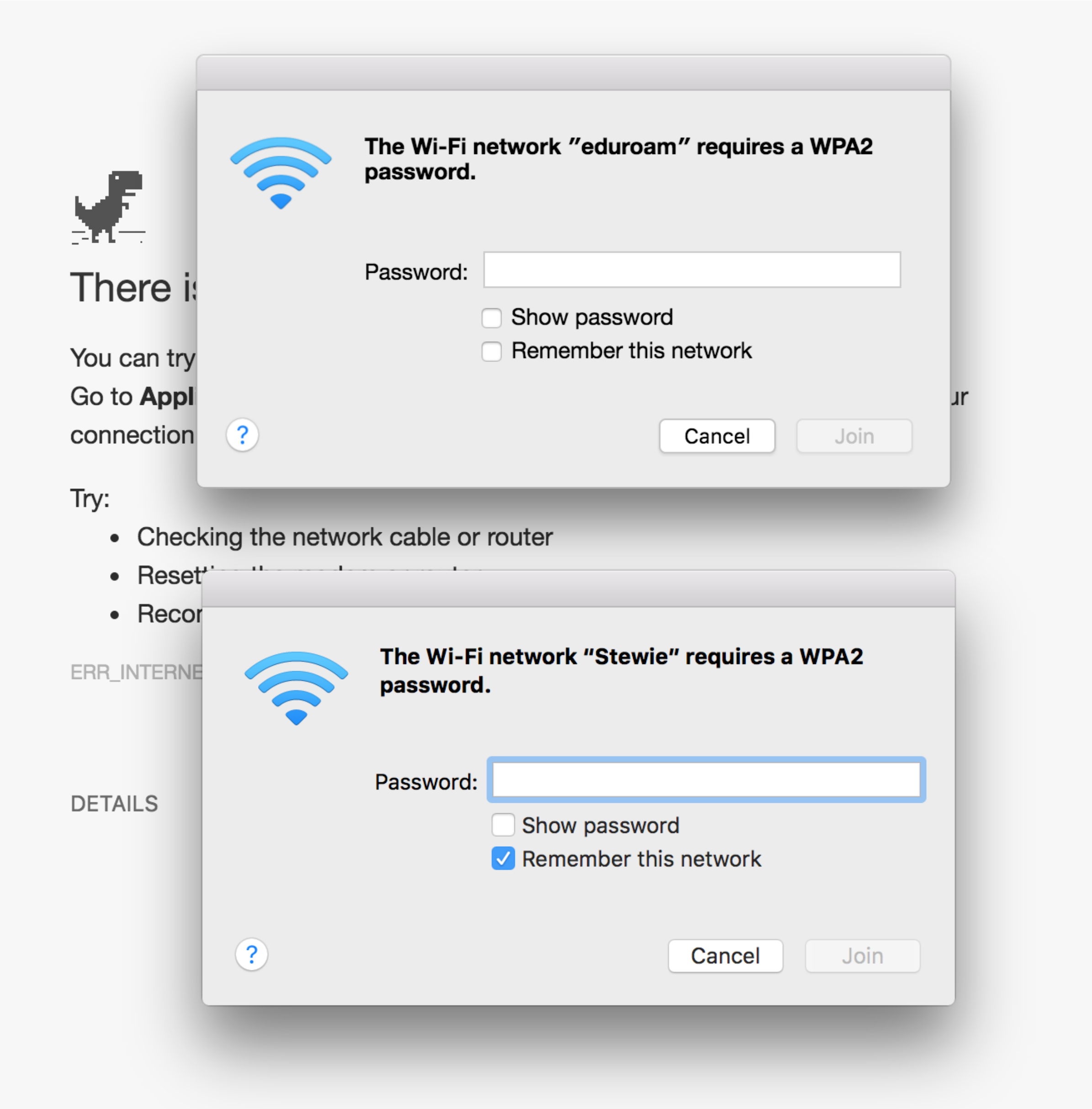
ERR_INTERNET_DISCONNECTED

Beacon frames

User-Agent



The Wi-Fi network "eduroam" requires a WPA2 password.

Password:

□ Show password

□ Remember this network

The Wi-Fi network "Stewie" requires a WPA2 password.

Password:

□ Show password

☑ Remember this network

> Wifiphisher v1.2

- Automates the process for effective Wi-Fi phishing attacks based on victim info
- Features a template engine for easy customization
- https://wifiphisher.org

Thank you!

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