



OWASP

Open Web Application
Security Project

Going Dark

How to be pretty anonymous online

Prior art

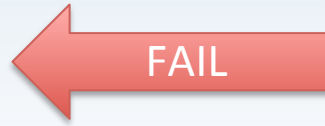
- @thegrugq
 - OPSEC for freedom fighters
 - this.lightVersion(“hands-on”)
 - Focus on Gothenburg, Sweden, today
 - on my way here
 - *TIL: never redecorate the house, arrange two OWASP meetups, be presenter on one of them and give another presentation for a customer and start a new assignment on the same week*

Why?

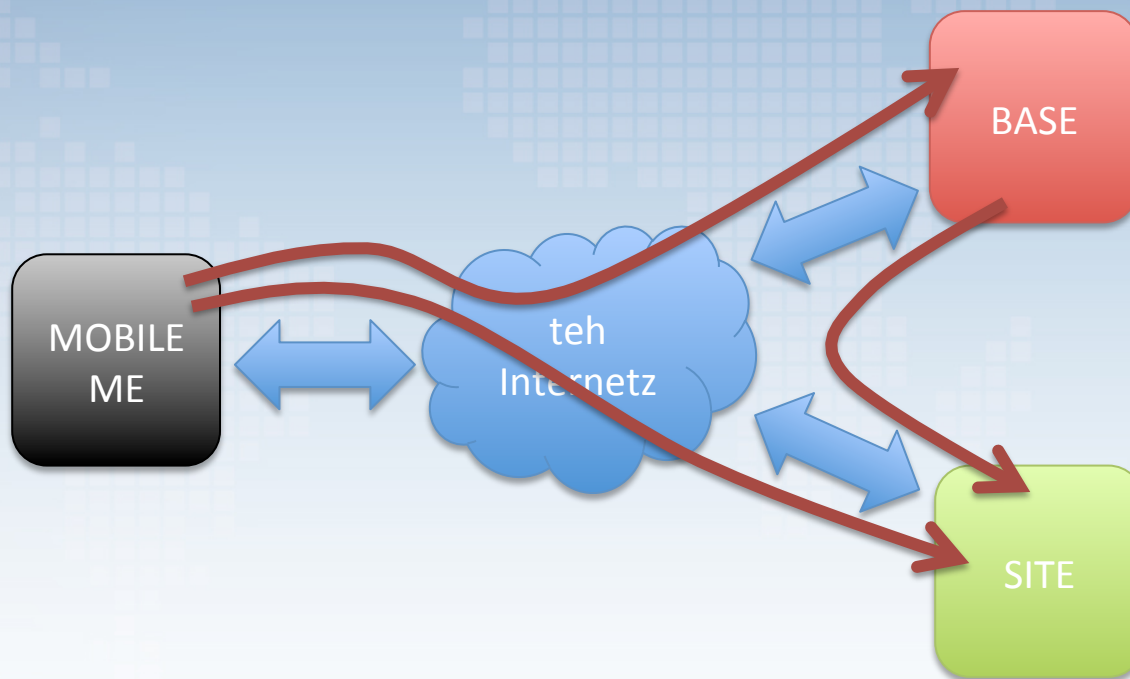
- The plumbing is boring and hard to get right
 - practice makes perfect
 - you never know when you are going to need it
- 45 yo, father of 2, living in the suburbs, driving a Volvo...
 - not much 1337
- Responsible disclosure
 - currently seems to be responsible only one way

Some of the commandments

- Never operate from your house
- Keep personal life and freedom fighting separated
 - don't contaminate
- STFU



Architecture



Challenges

- TOR and/or VPN?
- Hardware?
- How to buy stuff?

Tor

- Provides anonymity
- Anonymity protects you
 - Data leaving Tor through exit node is not protected.
 - Correlation of entry and exit?
 - Not foolproof, but pretty ok unless you have nation states as adversaries

VPN

- Provides privacy
- Privacy protects your data
 - Tunnel endpoint IP can be detected
 - VPN provider can have logs
 - Traffic correlation?

Tor and/or VPN

- “TOR -> VPN – OK”
 - Anonymous person within the Tor cloud connects to a VPN-exit on the internet.
 - Or directly to your persistence-platform
 - Looks like HTTPS locally?
- “VPN -> TOR – GOTO JAIL”
 - An IP connected to a person and/or geolocation connects to the Tor cloud. Communications from Tor to Internet/target platform are monitored.
 - Can you VPN to Tor? Through your own server?
 - Running Tor through a VPN tunnel?

Tor and/or VPN

- Prepaid mobile broadband
 - Not from home, not connected to me
 - Can of course be tracked to a location
- VPN
 - An extra step to keep ISP eyes away

Hardware

- Mobile broadband
 - Prepaid starter kit
- Amazon platform
 - Probably monitored, but will not leave trace on your..
- Mobile unit
 - Buy a laptop or use your old one
- Personal Onion Router To Avoid Leo
 - Fail close and a fun project – Raspberry 2?

Money

- Purchase VPN over TOR with bitcoins
 - Anonymous but, can be traced
 - don't mix wallets
 - use mixers
- Light
 - Prepaid credit cards
 - Tied to physical location
 - CCTV
 - Purchases are monitored

Case study for lazy and moderately evil ha><><0rz

- Walk into 7Eleven or Pressbyrån
 - Buy a prepaid credit card
 - Buy a mobile broadband modem
 - ISP starter pack, from 199:-
 - Kjell&Co 399:-
 - Use cash and your favorite hoodie
- Use credit card to order a VPN
 - and create an amazon account
 - Email, cell phone no
- Done





Oh, and you need at least one persona and a couple of hacker nicks as well