So you're interested in social engineering?

The very first steps 

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https://kirils.org for more

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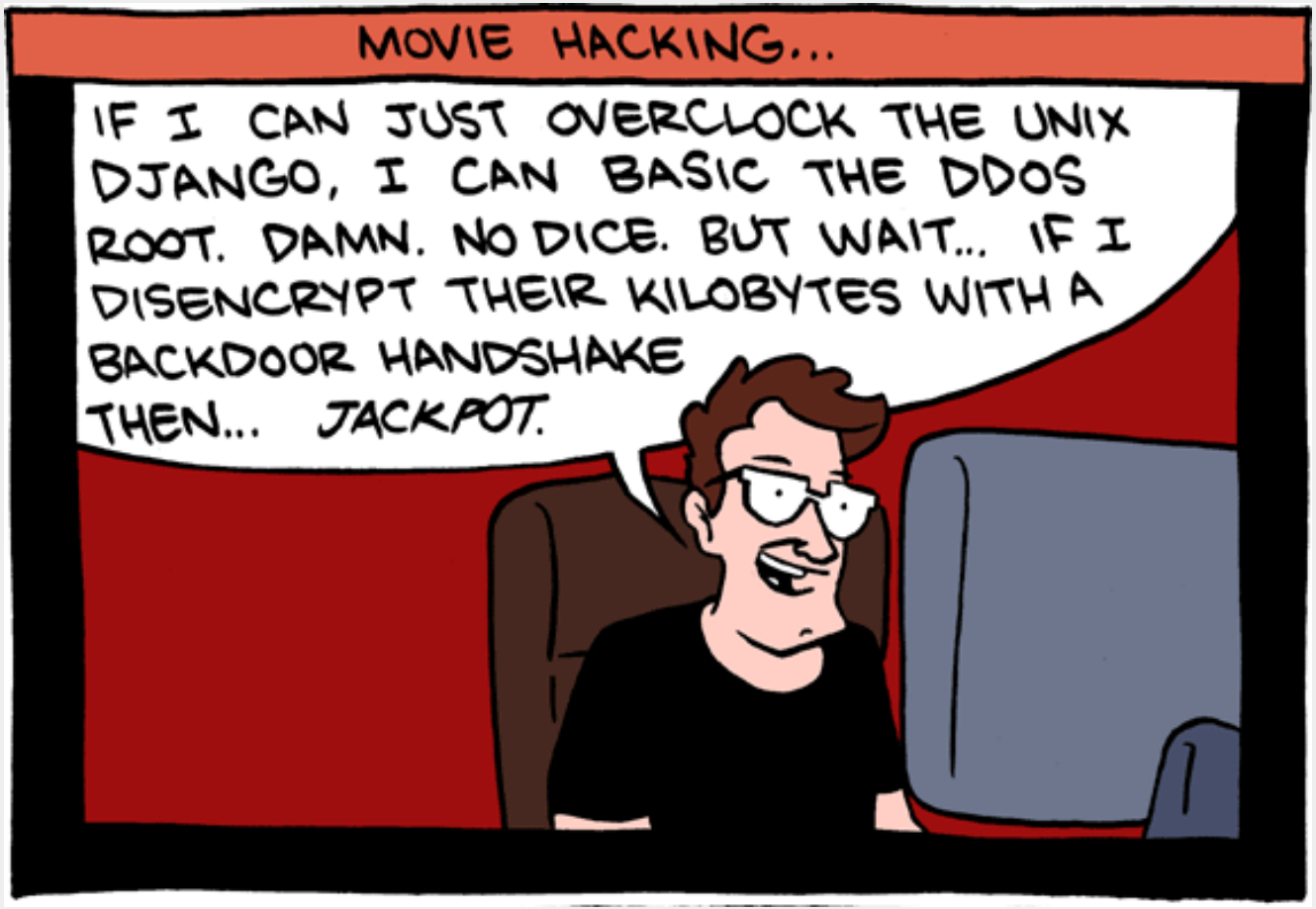
Possible Security



source: Zach Weinersmith of SMBC

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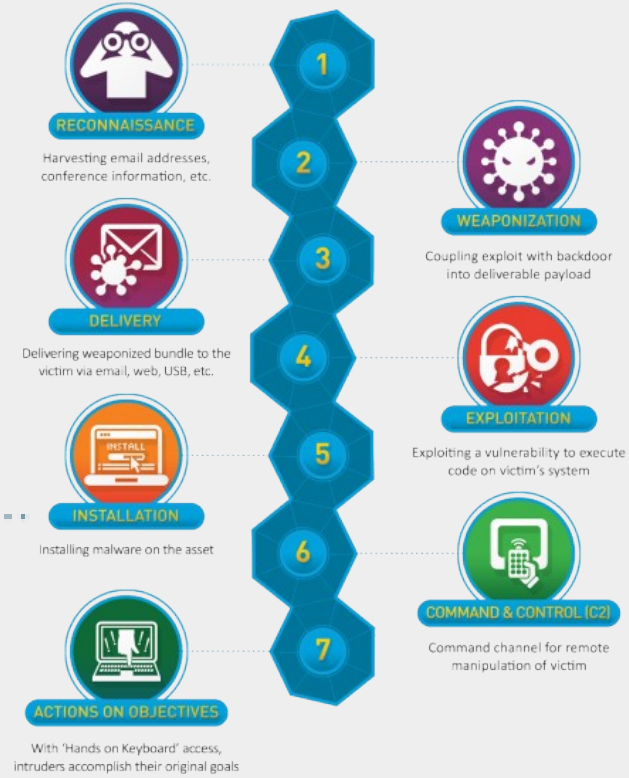
Contents

- Introduction to social engineering
- Using OSINT to collect initial information
- Creating pretext
- Fundamental principles of human behavior and decision-making
- Leveraging social normativity in persuasive interactions
- Building rapport and trust
- Exploiting trust
- Practical exercises in everyday life

Cyber Kill-Chain



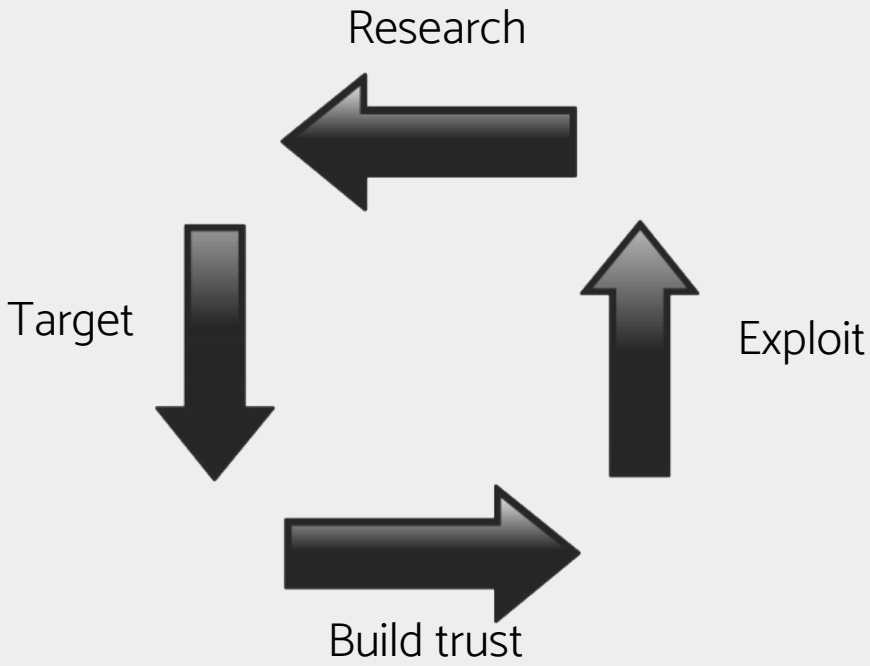
source: Lockheed Martin

Social Engineering (SE)

is the use of deception to manipulate individuals into divulging sensitive information that may be used for illegitimate or fraudulent purposes or to further attacks on a larger entity

SE attack cycle for organisations

- Research
- Target
- Build trust
- Exploit



SE attack types (in person)

- Impersonation
  - VIP, user, tech
  - appeal to authority
  - reverse social engineering
  - identity theft
- Access
  - tailgating; piggybacking
  - key duplication
- Acquisition
  - eavesdropping
  - shoulder-surfing
  - dumpster-diving

SE attack types (remote)

- Types
  - phishing, spearphishing
  - vishing
  - app impersonation
  - …
- Delivery vehicles
  - e-mails
  - phone calls
  - usb drops
  - instant messages, sms
  - social networks
  - traffic injection
  - malware, adware

Components of a Social Engineer

- Confident
  - „Conman” => Confidence man
- Quick-witted
  - can be partially substituted by A LOT of prep
- Determined
  - „All you have to do is ask” principle

Es pastiepos un dabūju
Visu kā pēc listes
Tas mani apbūra
Vecīt, kaut kas mistisks
Vienkārši izliekot akcentus uz to, kas svarīgs
Biku pacenties, skaties un dabū arī

— *There Is Something To It* by *Brainstorm*

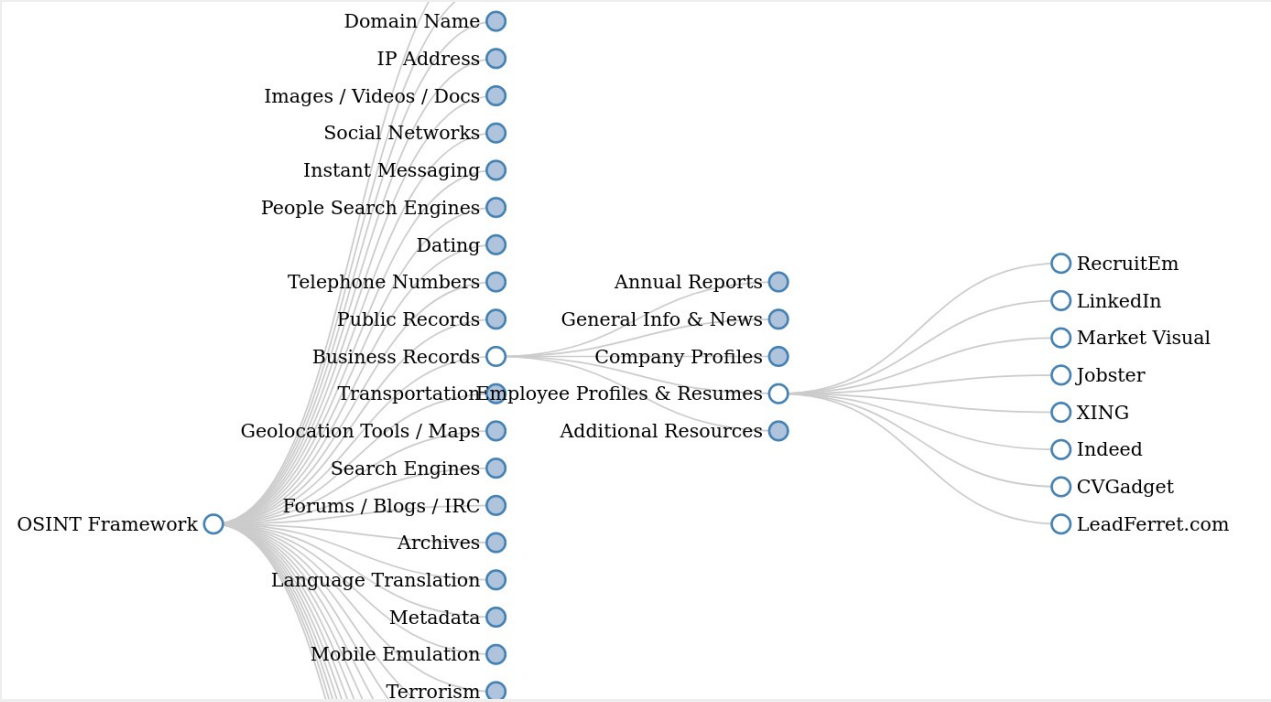
OSINT

- Open Source intelligence is
  intelligence collection from openly available sources

OSINT sources include

- Web & darkweb
- Social networks
- Metadata
- Network & service scans
- Fingerprinting

- OSINT “framework”
  - https://osintframework.com/



OSINT: Web

- Google “dorks”
  - filetype:pdf ”STRICTLY CONFIDENTIAL”
  - (google does OCR for you!)
- filetype:sql ”INSERT INTO”
  - SQL dumps
- site:lu ”index of /backup”
  - Public backups

OSINT: Web

- pastebin.com
- online comments on news sites
- Yandex maps, Google Streetview
- webcams
- web.archive.org
- tineye.com
- blockchain.info
- shodan.io
- leaks

OSINT: Web

- People search engines
  - Honorary mention: sync.me
  - Alternative: google dork
- Public registries
- Online news, etc.
- https://www.toddington.com/resources/

Social networks

- Facebook
- Twitter/X
- Instagram
- Mastodon

- Account recovery process may sometimes give info

OSINT: Social network tools

- https://inteltechniques.com/tools/index.html
  - Very valuable OSINT tools, especially for social networks

Pretext

- What's your role? Who do you wanna play today? :)
  - don't make it too crazy
    - Hello, this is Napoleon Bonaparte and I'm calling you because your password has expired
- Why are you doing this?
  - make sure your role matches your goal
- You have to convince yourself first!
  - challenge yourself
  - look for holes in your story

Human behavior and decision-making

- Everyone **loves to help**
  - except the hard targets
    - guards
    - people trained to work with external customers
- People generally try to **avoid conflict**
- Some people make consistently good decisions
- Most people make good decision on best-effort basis
- A rare person makes good decision when **rushed**

Leveraging social normativity in persuasive interactions

- Tailgaiting with hands full
- Waiting for a „good hair day” and then asking for a favour
- Hint at creating conflict and provide an easy way to avoid it
  - Can’t be above the pay grade of whomever you are targeting

Building rapport and trust

- See my 2017 presentation on lobbying from OpenFest

  https://kirils.org/sh841

Exploiting trust

- Always keep the goal for this interaction in your mind!
- Don't ask for too much at the same time!

Practical exercises in everyday life

Non-SE exercises

- talking to people
- improv
- alternative personas
- pretend to be someone else (with a story!) online
- do it with your friends first

Start with passive acquisition methods

- Dig for some trash
- Eavesdrop on nearby employees
- Shoulder-surf
- Bump into people
  - in a way that is conducive to tag copying & natural
  - at the same time!

Build some pre-text

Be uncooperative where you can

- hide your wristband
  - try to talk your way out of it
- smile, be friendly and agreeable
- be vague in your responses
- be dumb

Continue with simple everyday things

What NOT to do

- Do not try to „leave with stuff without paying”
- Do not provide a fake identity to government agencies
- Do not damage other’s property
- If you do SE that could result in you getting some financial benefit, make sure that you’ve paid for it as well

Q&A

Slides are available on https://kirils.org

Find me on @k@chaos.social