OSINT

Beware your data is out there

Open Identity Summit 2024 – 20/06/2024

$whoami

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- Degree at University of Minho

Disclaimer & Laws

Disclaimer
Boring but necessary

- Information in this presentation is intended for **educational and awareness purposes only**.
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- Ignorance about laws or rules is **no excuse** for illegal activities or wrongdoing.
- Illegal activities may get you in **trouble or arrested**.
- **Always check what is legal, and what laws apply.**

Laws
Portuguese Law and Organizations

- Laws
  - Diário República Eletrónico (link)
  - ANACOM (link)
- Organizations
  - CNCS – Centro Nacional de Cibersegurança (link)
    - Incident Notification (link)
    - CERT.PT (link)
  - Unidade Nacional de Combate ao Cibercrime e à Criminalidade Tecnológica (UNC3T) (link)
  - Ministério Público (link)

Awareness

Awareness
Internet knows and doesn't forget

- Posted information privately can get publicly and world available by someone else
- When information is posted
  - Shows when and where (habits & routines)

- Internet has memory
  - Arquivo.pt (link)
    - Example (link)
  - Internet Archive - Wayback Machine (link)
    - Example (link)

Awareness Profile

- Mobile number (Same number longevity)
  - Sync.Me (link)
- Username
  - WhatsMyName (link)
- Email (Username reuse)
  - Gmail (link)
- Social media (Username reuse)
  - Facebook (link)
  - LinkedIn (link)
  - Tinder (link) (link)

Awareness Maps

- Never been there. Know it like the back of my hand.
- Street view
  - Google Street View (link)
- Map/ Satellite view
  - Google Maps (link)
  - Overpass Turbo (link)
    - Wizard: plant:source=nuclear
  - World Imagery Wayback example (link)
- Tips, Tricks and Techniques (link)

Awareness Photos

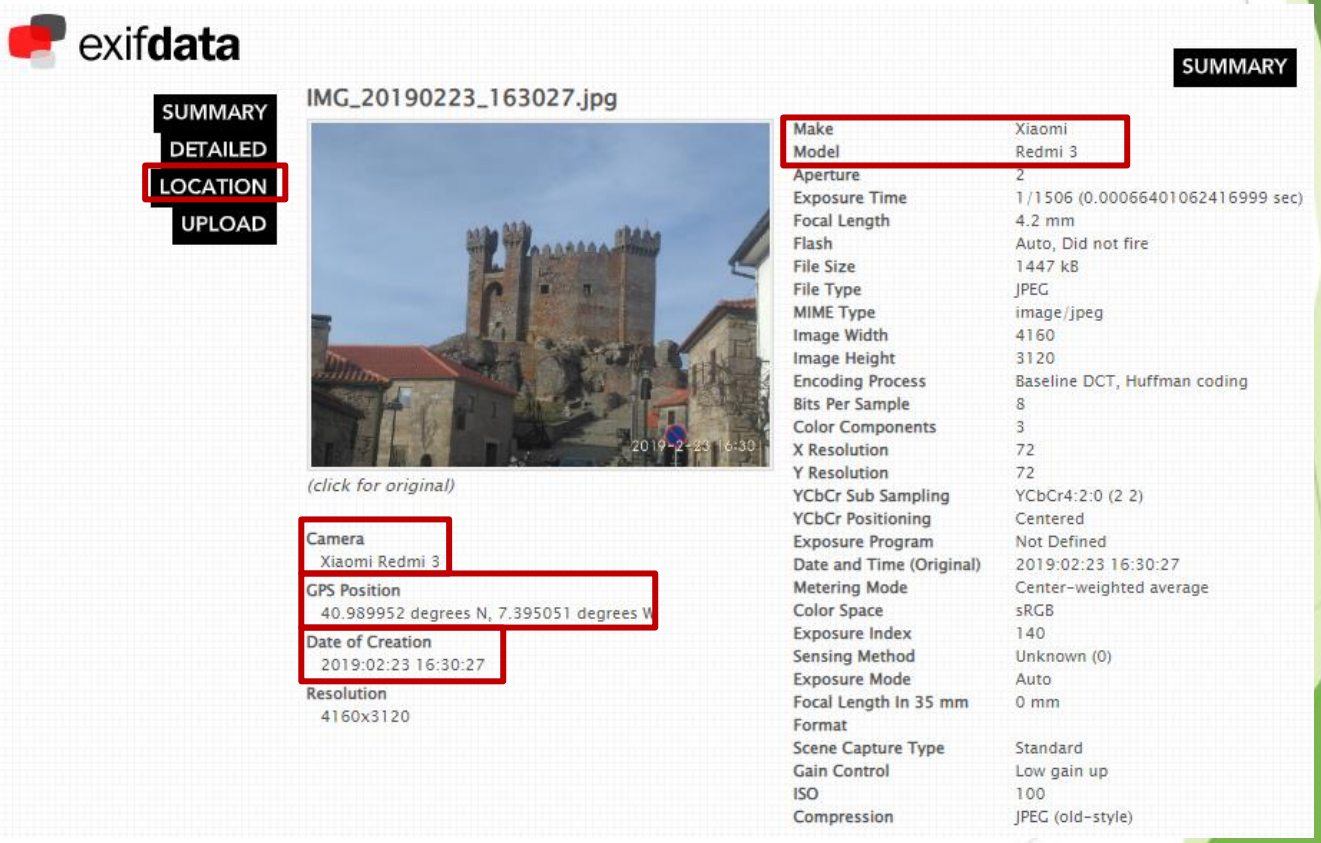
- Photo analysis
  - Location
  - Date it was taken
  - Identifying elements in the photo
- Image search
  - Identify the castle (link)

Awareness Photos

- A picture is worth a thousand words.

- File analysis
  - Metadata
  - GPS (link)
  - Google Maps (link)

- Tools
  - CleanUp (link)
  - AperiSolve (link)

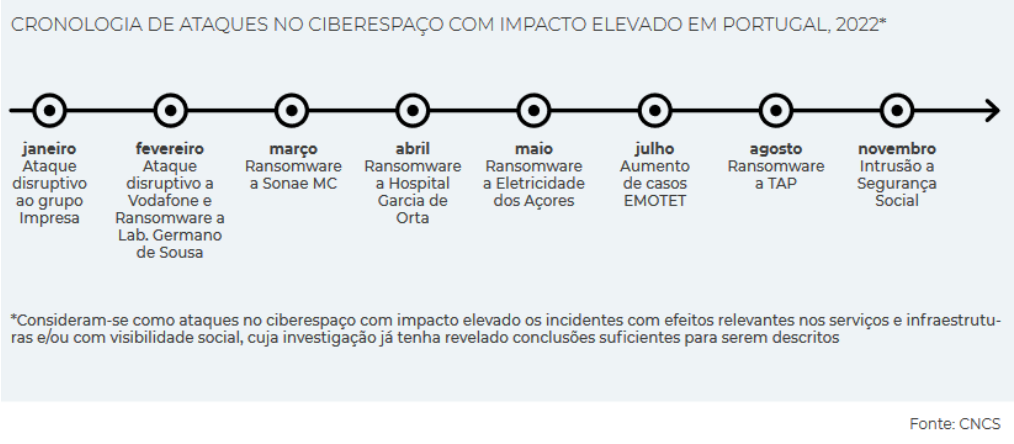


Awareness
When companies are hacked

- When companies are hacked, private data is exposed. Private data becomes “public”.

- Troy Hunt
  - HaveIBeenPwned (link)
  - Pwned websites (link)
  - Domain search (link)

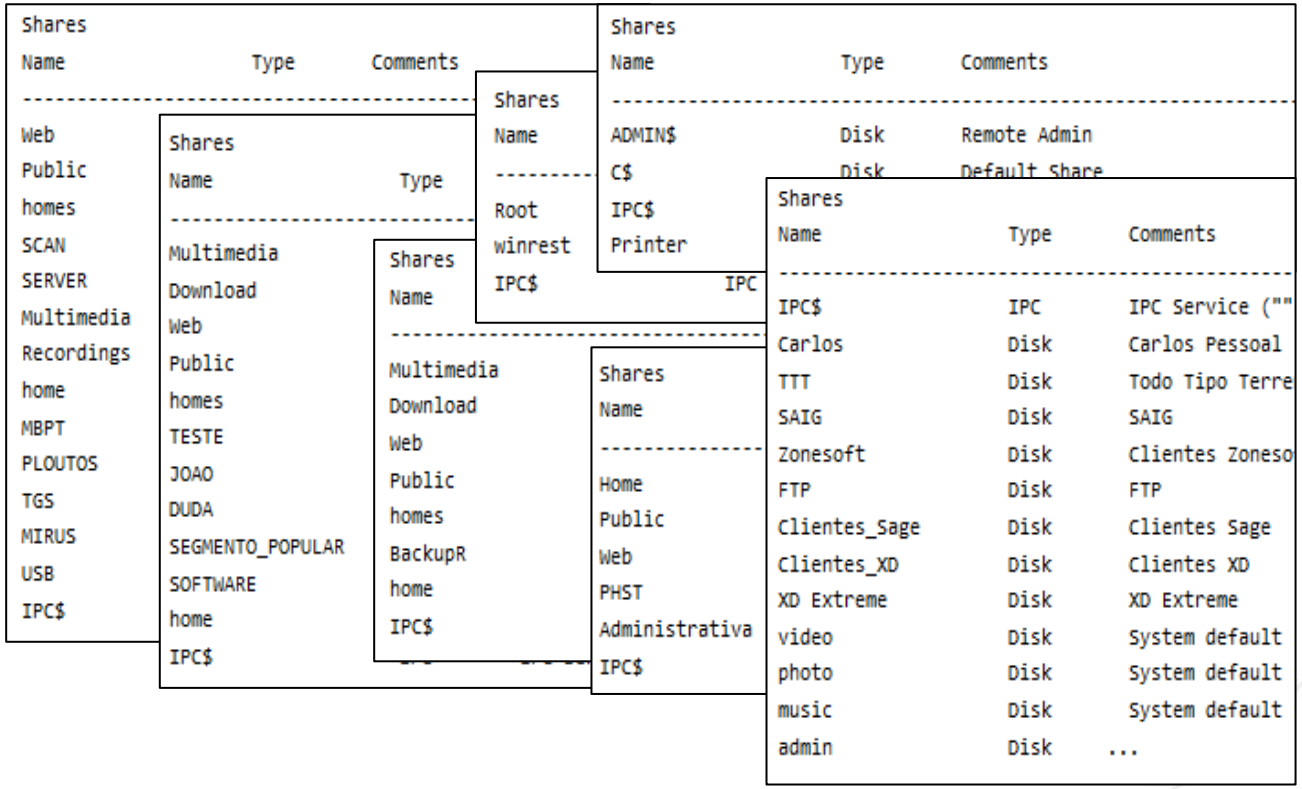
- CNCS Report
  - Cybersecurity in Portugal 2024 (link)
  - Cybersecurity in Portugal 2023 (link)



Awareness
IOT Search engines

- Shared folders accessible to 8 thousand million people (link)

  - Contabilidade – 6
  - Clientes – 3
  - Faturacao – 1
  - Faturacao – 2
  - Primavera – 6
  - SAGE – 13
  - Winrest – 148



OSINT Time

“Information is not knowledge”

Albert Einstein

OSINT – Open-source intelligence Digital Footprint

- Open-source intelligence (OSINT) is the collection and analysis of data gathered from open sources (overt and publicly available sources) to produce actionable intelligence. (Wikipedia)

- Gathering information from:
  - search engines (Google, …)
  - social media (Facebook, …)
  - government sites
  - maps
  - …

- And then extract/relate/infer new information with greater value/potential.

Who Am I?
Search, and then search again

- Starting with just a name
  - Pedro António Oliveira Vieira
- Google (link)
- Google “Improved Search” (link)
- Google “Improved Search” + Company (link)
- LinkedIn (link)
  - Public profile was showing way too much (audit is needed)
- Certified **Ethical** Hacker (link)
- My github notes (link)

Search Engines
Internet is more than Google

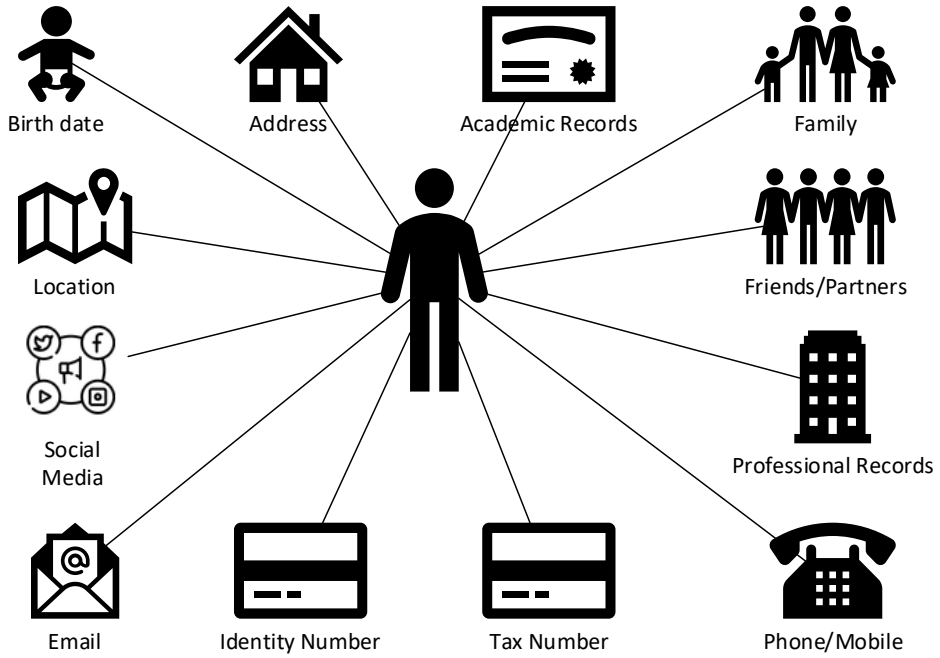
- Different search engine → different rules/crawlers → different results

- Google (link)
- Bing (link) ➡
- Yahoo (link)
- DuckDuckGo (link) ➡
- Baidu (China) (link)
- Yandex (Russia) (link)
- SAPO (Portugal) (link) ➡

- You may ask to be removed from one search engine, not all ☹ (link)

Who are YOU?
Search, and then search again

- Search your name and analyze the results
  - As you saw the search can be improved



- That is typically information to **verify your identity** over a phone call.

True stories

True stories

Portugal

Store credit

- Buying a book for almost no money
- Customer Card
- Right intel: mobile number and full name
- Credito on card

Customer data

- Invoice request with NIF
  - Name
  - Address
- Updating customer data at the counter without documents

True stories

Message from Ella | Without Consent

Deutsche Telekom
Message from Ella | Without Consent

THANK YOU

Q&A