

## OSINT Dark Arts and Privacy in CyberSpace

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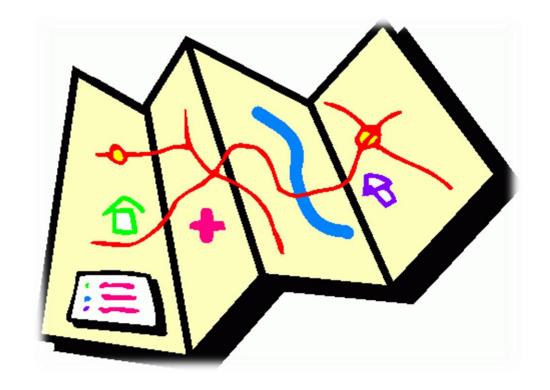
10-05-2018 DC0471 MEET-UP 0X01

"Using public sources openly and without resorting to illegal means, it is possible to gather at least 80 percent of all information required about the enemy"

- Al Qaeda training manual

## #Roadmap

- Food for thought
- OSINT
- Techniques & Tools
- Protecting yourself
- TODO

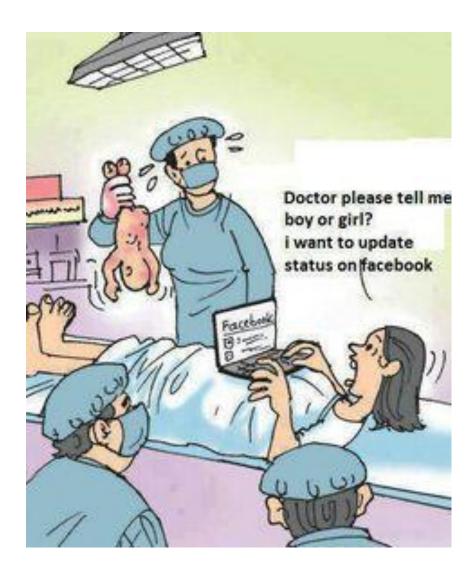


## Food for Thought

- Social Media
- •Shopping
- Banking
- •Learning
- Dating
- Business

**ONLINE WEDDING!!!!** 





## Data we intentionally give

- Text
- Picture
- Audio
- •Video
- •Geospatial Data
- •Juicy PII



## Data collected without our knowledge

#### Smart Phone

- Contacts
- •SMS
- Personal Information

•IOT

- Medical Data
- Usage Trends
- •What not?



#### The Joy of Tech™

by Nitrozac & Snaggy





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joyoftech.com

#### **OSINT**

OSINT is defined by both the U.S. Director of National Intelligence and the U.S. Department of Defense (DoD), as "produced from publicly available information that is collected, exploited, and disseminated in a timely manner to an appropriate audience for the purpose of addressing a specific intelligence requirement."

In simple words deriving actionable intelligence from public information sources.



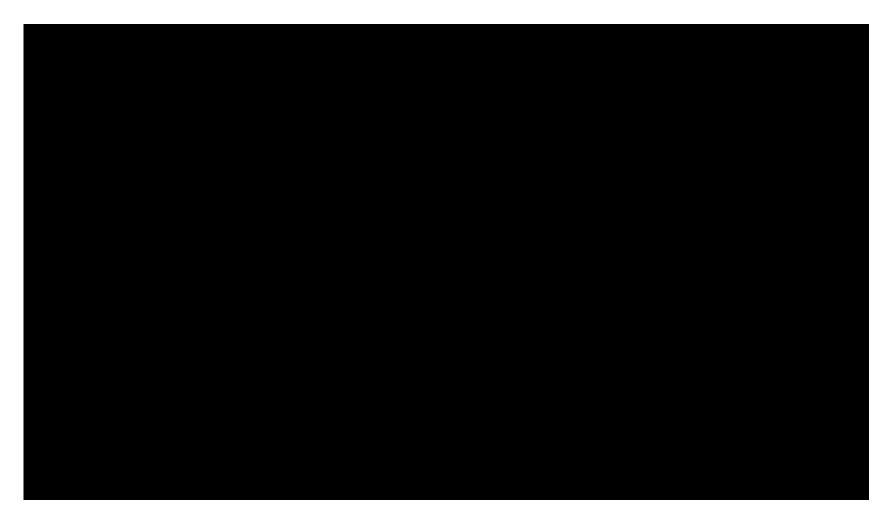
#### Beneficiaries

- Governments, Militaries and Intelligence Agencies
- Big Corporations
- Market study and Analysis
- Political parties
- Information Security Consultants
- Black hats and Hacktivists
- Fraudsters



## How OSINT can be used against you

- Identity Theft
- Financial Loss
- Cyber Bullying
- Fraud



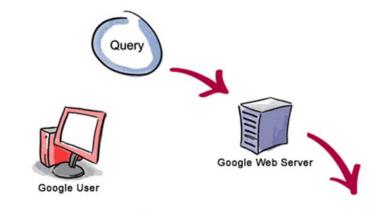
# Tools & Techniques

#### Search Engines

- Google
- Yahoo
- Bing
- Baidu
- Yandex
- DuckDuckGo



## How google works?



- 3. The search results are returned to the user in a fraction of a second.
- 1. The web server sends the query to the index servers. The content inside the index servers is similar to the index in the back of a book--it tells which pages contain the words that match any particular query term.



2. The query travels to the doc servers, which actually retrieve the stored documents. Snippets are generated to describe each search result.

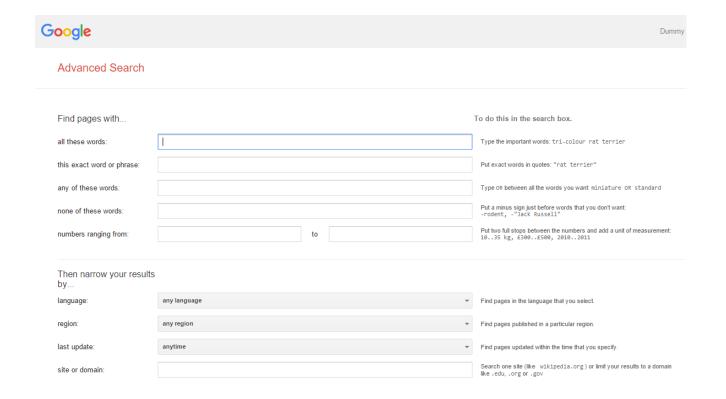


Index Servers



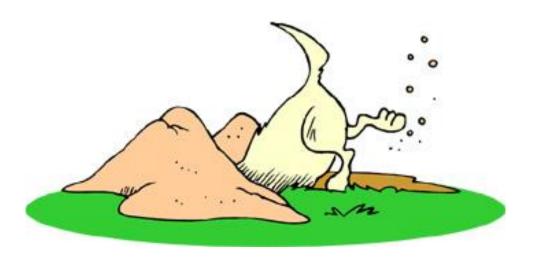
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### Google advanced search



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## Dorking



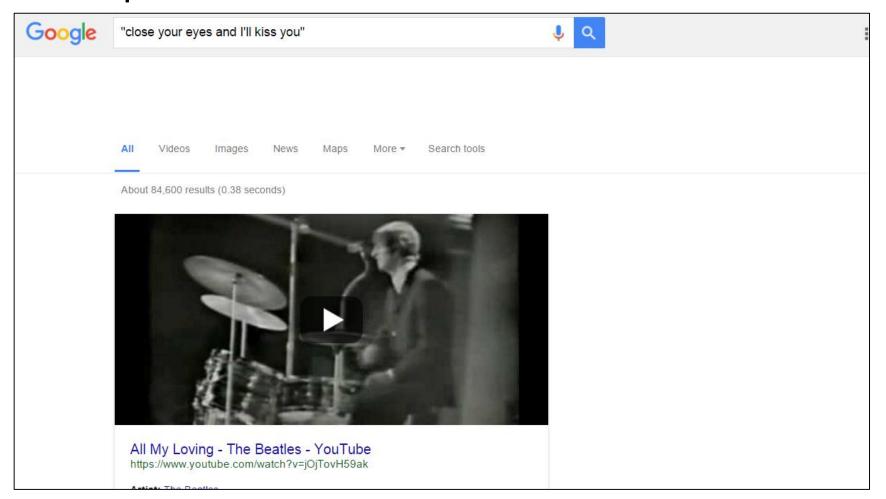
Dork is a special search string that uses advanced search operators to find information that is not readily available.

-Johnny Long Wrote Google Hacking for Penetration Testers; ISBN 1931836361

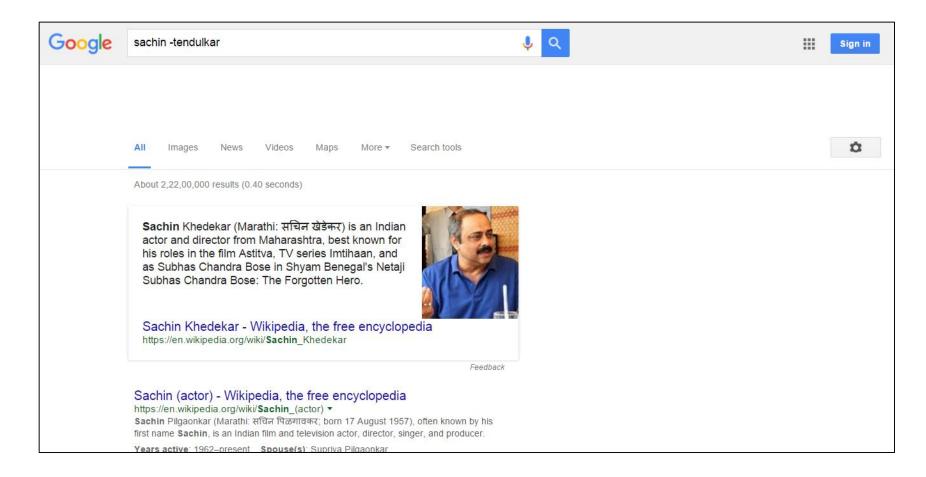
# Special Characters

Operator	Description
u n	Must include
-	Don't include
~	Synonym
	Pizza or burger
	Range
*	Multi character wildcard

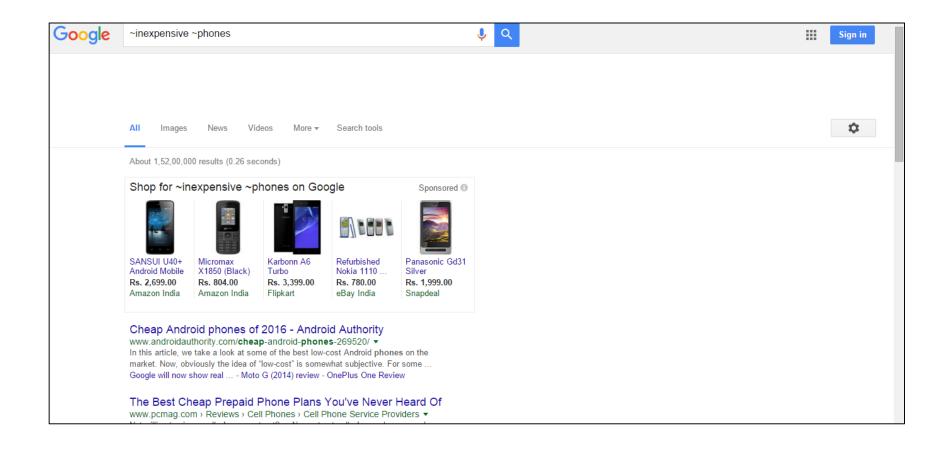
# "" operator



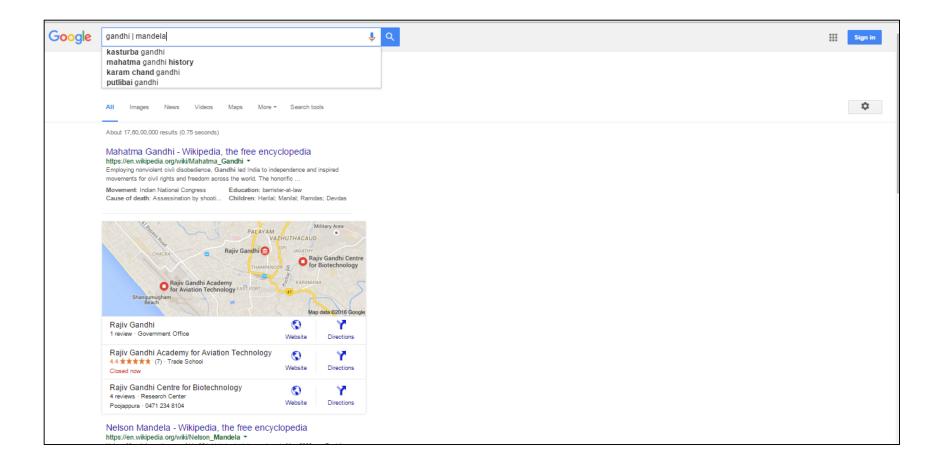
#### - operator



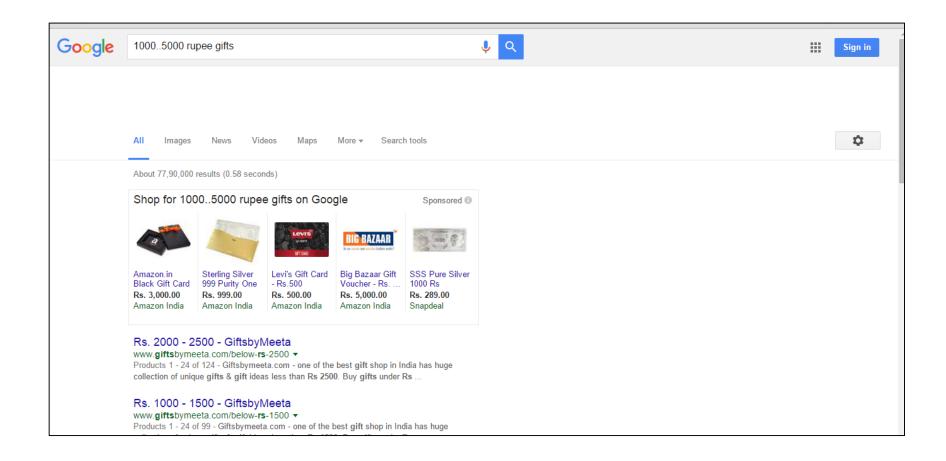
### ~ operator



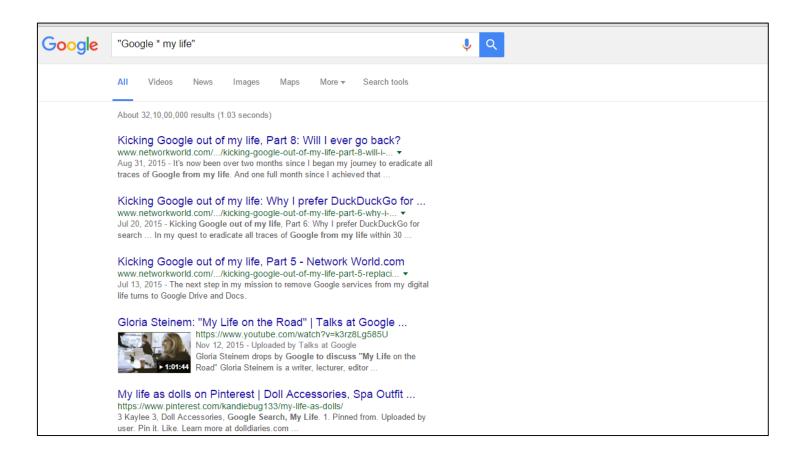
### operator



#### .. operator



# \* operator



# More Special Characters

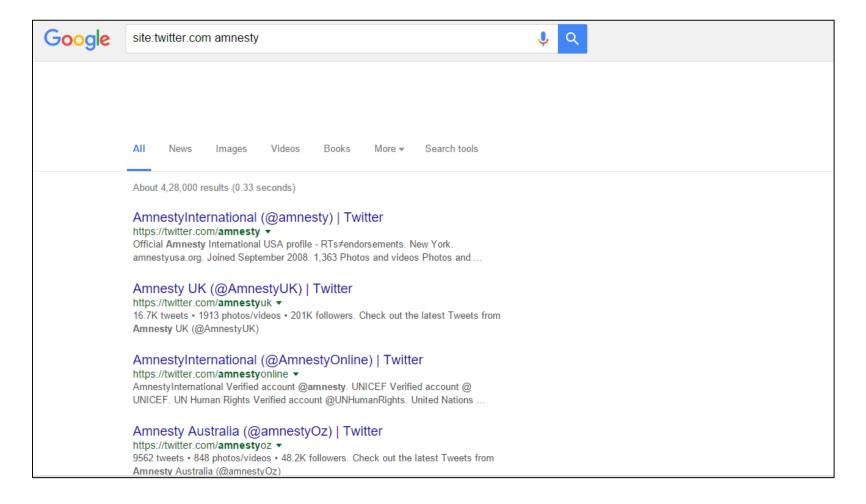
Operator	Description
@	Twitter accounts
\$	price
#	Hash tags

# Special Operators

Operator
Inurl:
Intext:
Intitle:
Filetype:
Site:
Related:
Link:
Movie:
Cache:

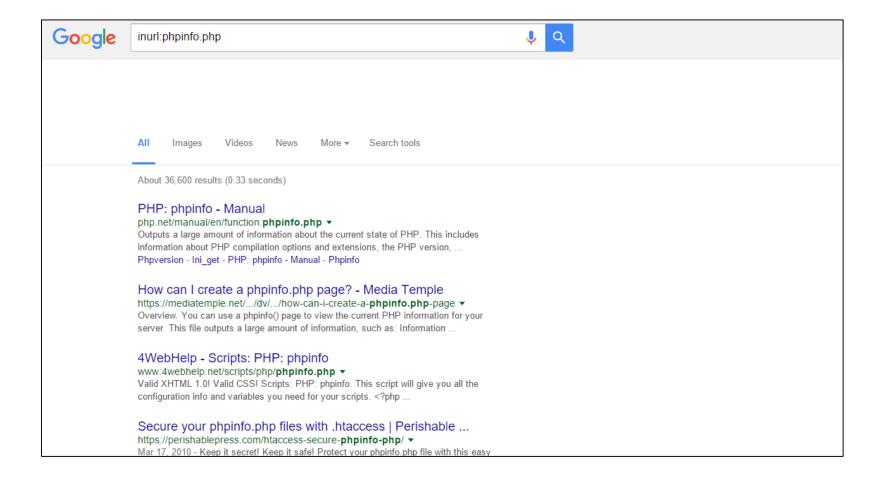
#### Site: Operator

For filtering result to a particular domain.



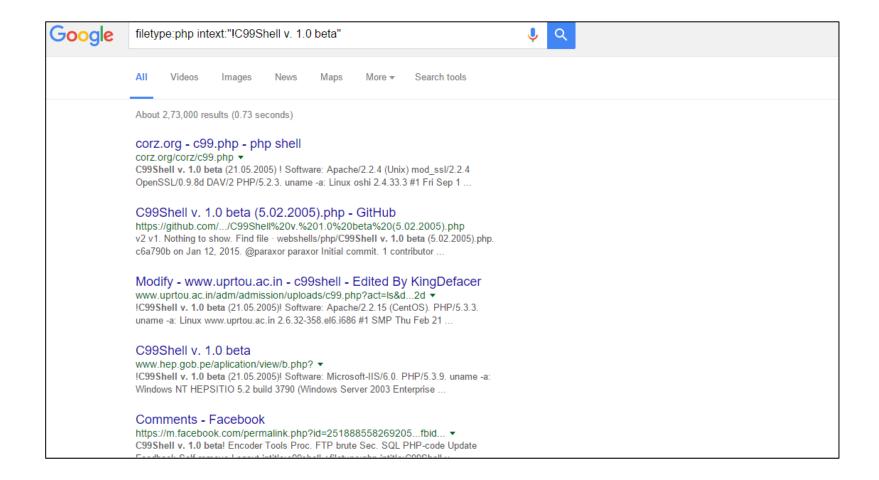
#### inurl: Operator

For filtering result to matching URL.



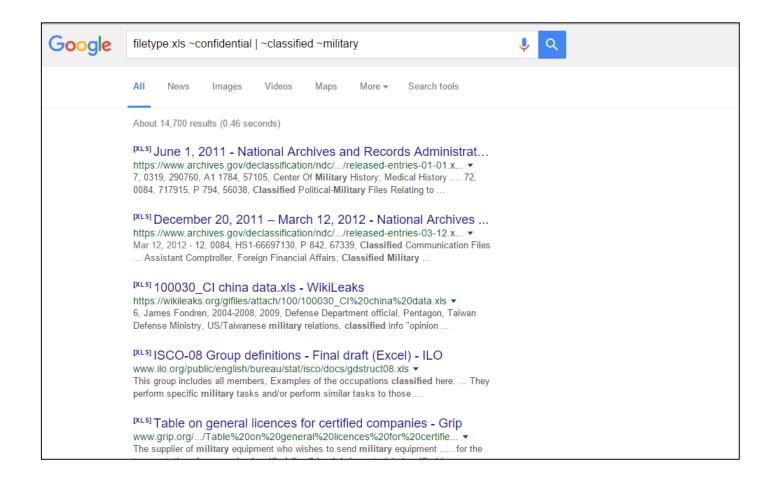
#### intext: Operator

For filtering result to matching content.



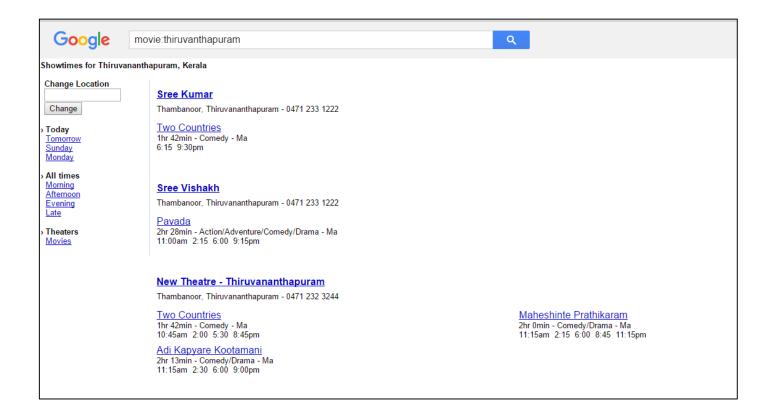
#### Filetype: Operator

For filtering result to matching filetype.



#### Movie: Operator

#### Search for movies in a location

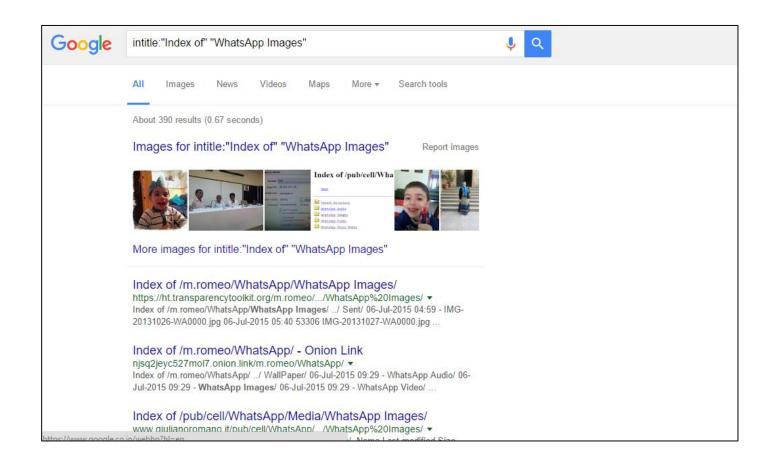


# Are you serious??



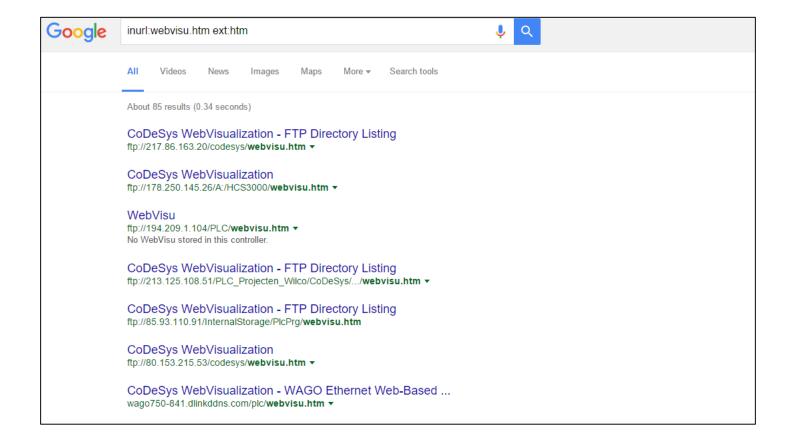
#### Whatsapp Images

intitle: "Index of" "WhatsApp Images"



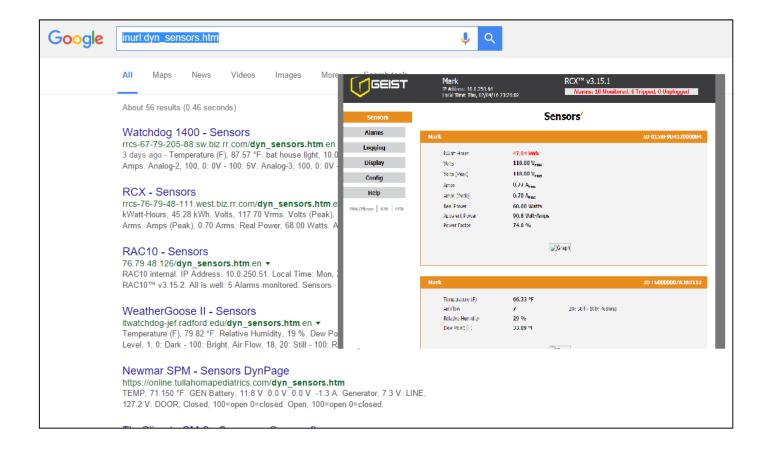
#### SCADA!!

#### inurl:webvisu.htm ext:htm



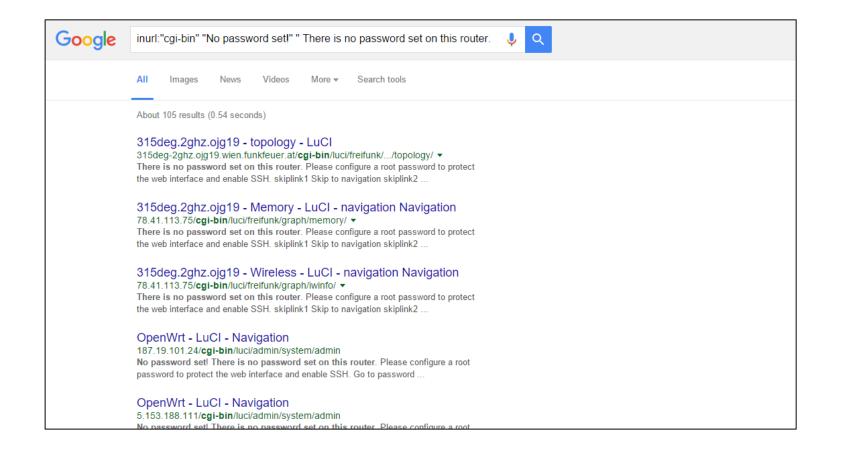
#### SCADA!!

#### inurl:dyn\_sensors.htm



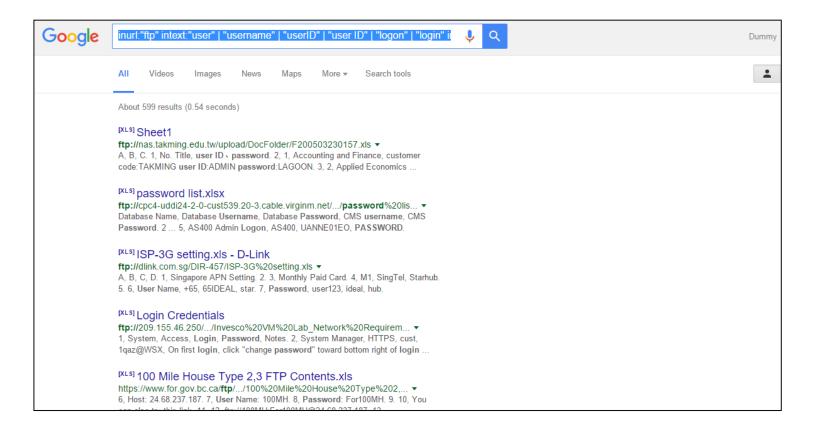
#### Password Less Router!!

inurl: "cgi-bin" "No password set!" " There is no password set on this router."



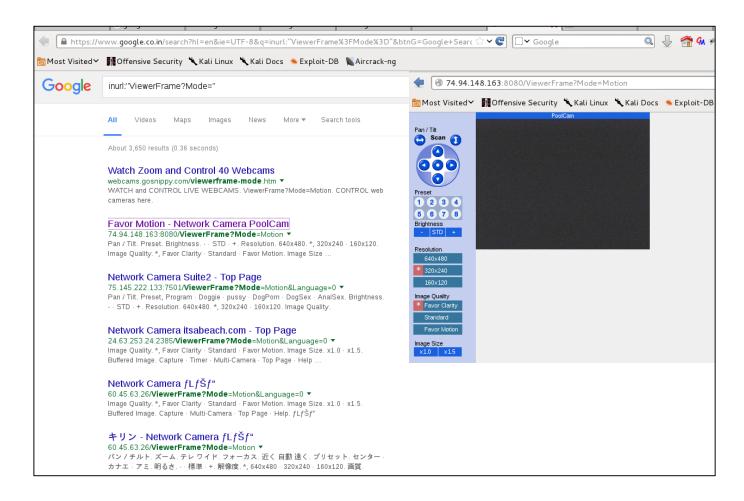
#### Passwords

inurl:"ftp" intext:"user" | "username" | "userID" | "user ID" | "logon" | "login" intext:"password" | "passcode" filetype:xls | filetype:xlsx



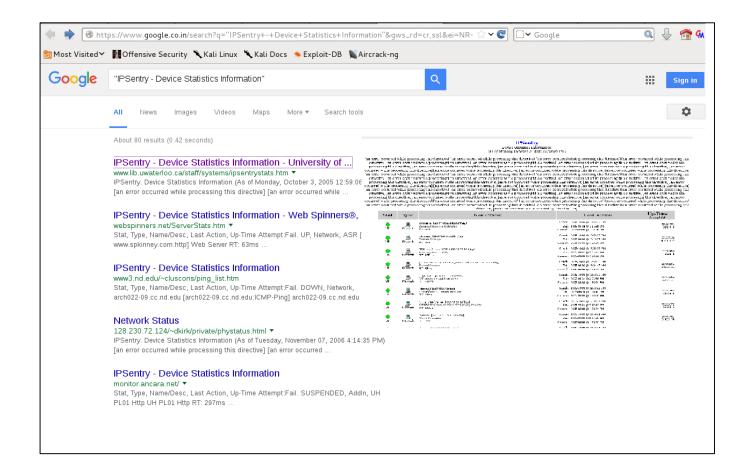
#### **IP** Cameras

Inurl:"ViewerFrame?Mode="



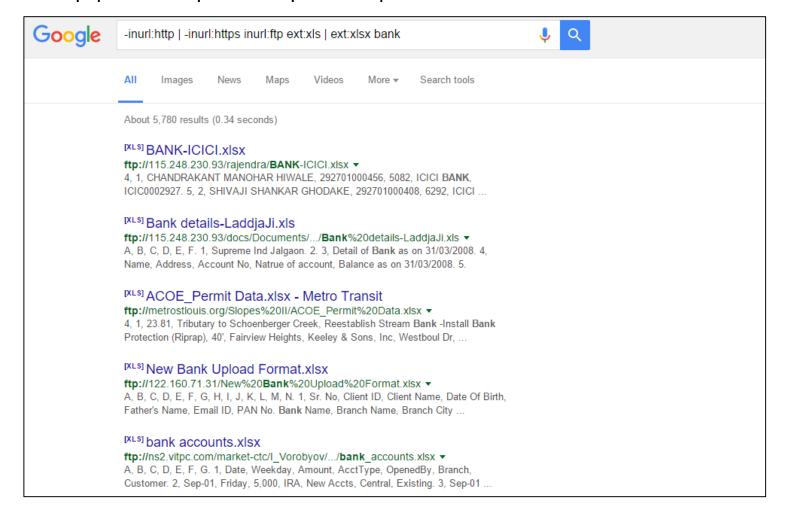
## Network monitoring

"IPSentry - Device Statistics Information"



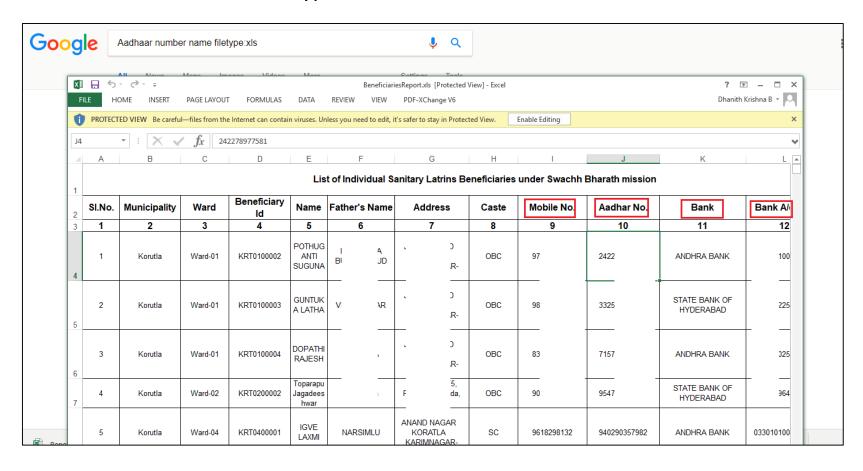
## Banking details

-inurl:http | -inurl:https inurl:ftp ext:xls | ext:xlsx bank



## Aaadhar:/

#### Aadhaar number name filetype:xls



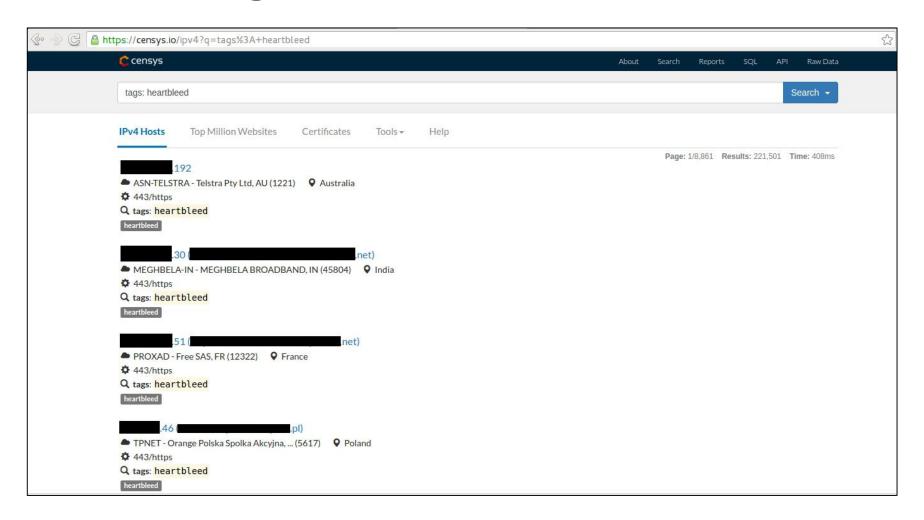
### Where to find dorks?

- <a href="https://www.exploit-db.com/google-hacking-database/">https://www.exploit-db.com/google-hacking-database/</a>
- Athena
- Gooscan
- SiteDigger

## IOT Search Engine

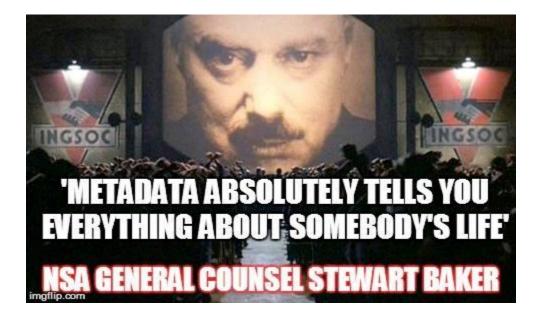


## **IOT Search Engine**

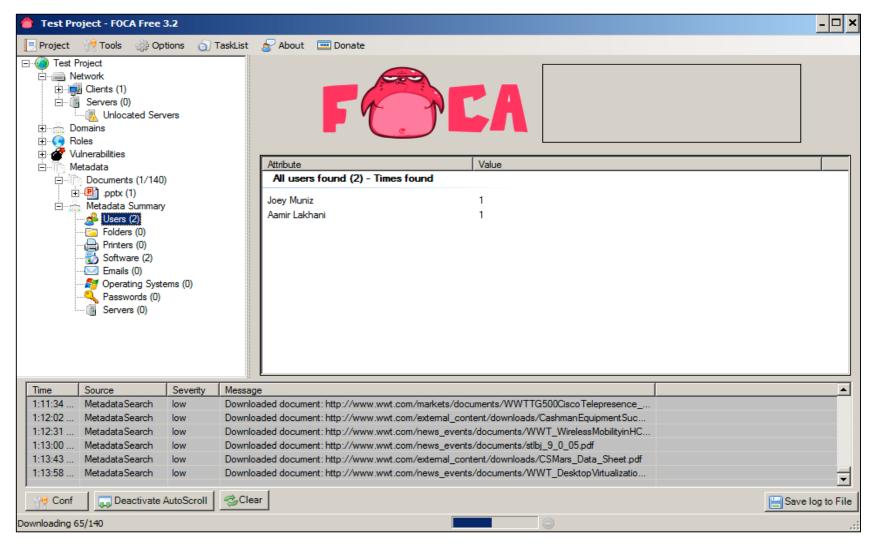


## Metadata

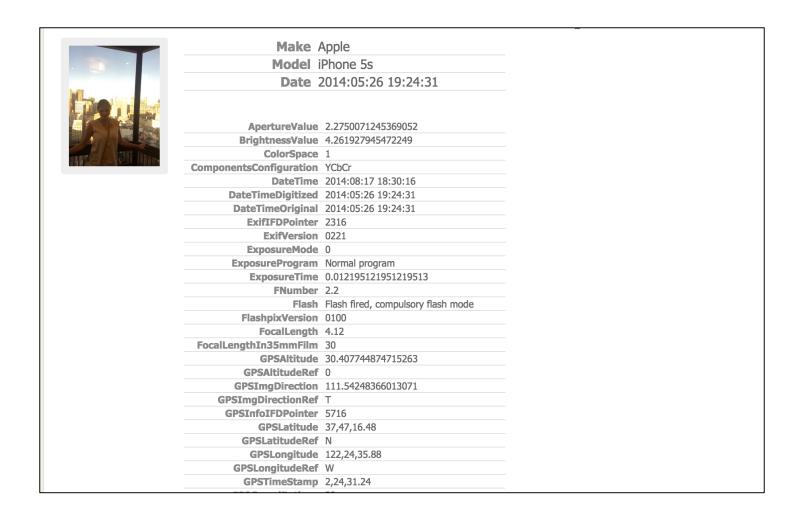
- Metadata is data describing data inside files
- Metadata information reveals lots of juicy info



#### Metadata



#### Metadata

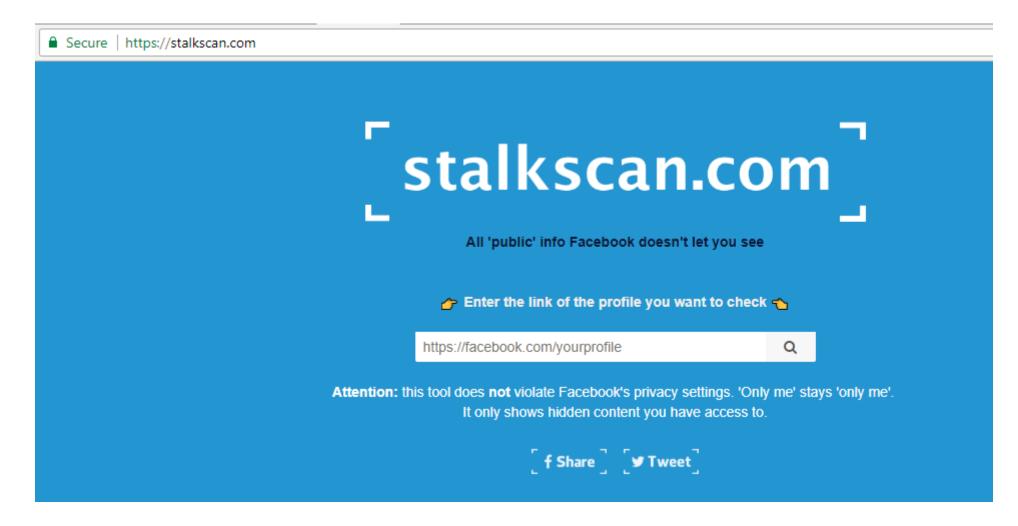


#### **SOCINT**

- Social media is an inevitable part of modern life.
- Most social media websites has insecure default privacy settings.
- Real data exposure is not known to end users.
- Facebook Graph Search.

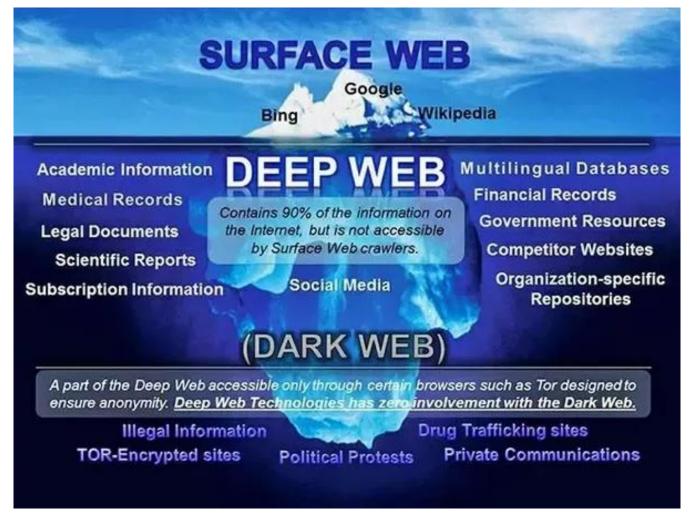


#### **SOCINT**

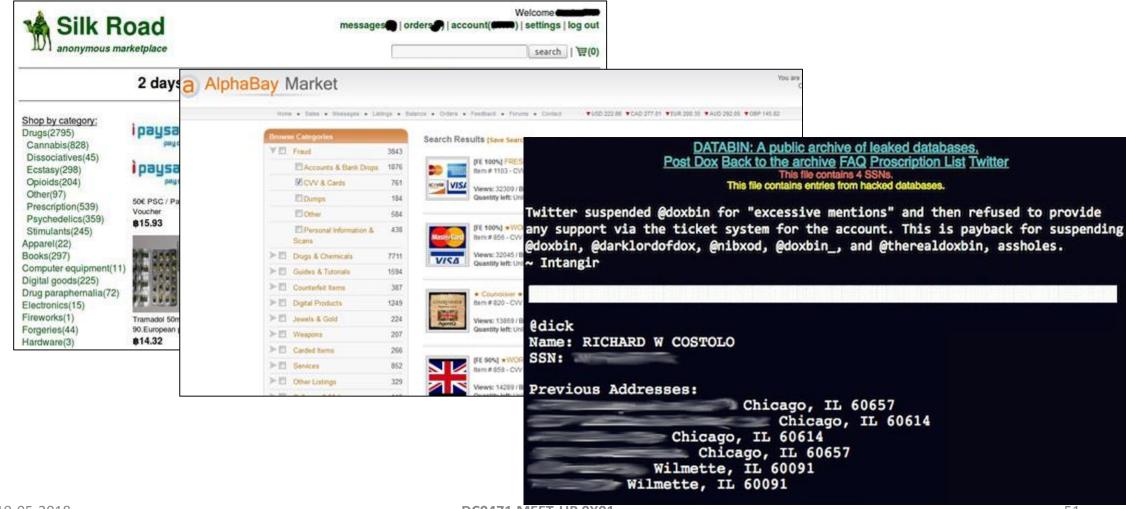


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## Dark and Deep Web INTEL



## Dark and Deep Web INTEL



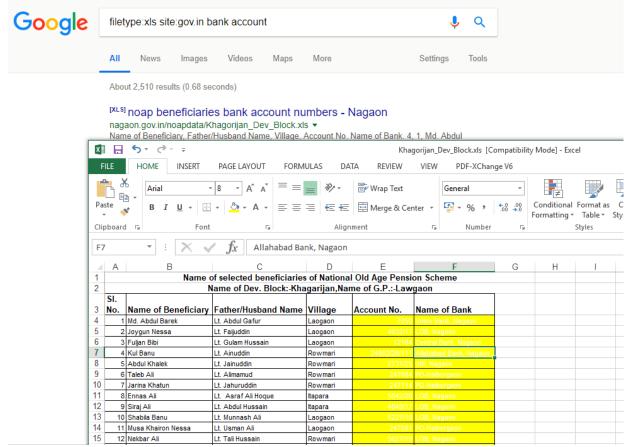
#### Breach Data

- When online businesses or websites are hacked, hackers sometime makes the breached data public
- Available in paste sites, torrent sites, hacker forums and dark web
- Breach data contains clear text passwords
- People tend to reuse passwords



#### GOVINT

#### Government Portals leak a lot of data on us



# Protecting Yourself

- Keep your sensitive data off the web!
- Audit yourself.
- Request for removal of the content online



### Audit Yourself

- Use OSINT tools to perform recon on yourselves
  - http://osintframework.com/
  - <a href="https://inteltechniques.com/">https://inteltechniques.com/</a>
- Check your social media privacy settings



## Thank You

# Happy Hacking