Tackling disinformation with OSS

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FOSDEM 2023

About us

- Self-funded NGO created in 2019
- Federate the Francophone OSINT scene
- Assist newsroom and activists
- to train journalists!
- Promote young journalists
- Set up philanthropic projects (Syria, West Africa...)

<u>260 members</u> (and still counting...)



Some of our work

- <u>Green Blood</u> ForbiddenStories
- Game of drones BBC
- <u>Wagner</u> French TV
- War crimes in Ukraine Swiss TV
- Inforos $\underline{1} \& \underline{2}$ Self-published

About me

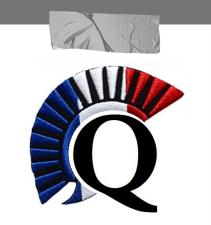
- Co-founder
- Former Judicial Investigator
- OSS enthusiast and evangelist
- Techy but not coder
- Swiss army knife, lazy and curious

You said **Disinformation**?

- Disinformation is false information deliberately spread to deceive people
- <u>Ben Nimmo's 4 Ds</u> : Dismiss, Distract, Distort, and Dismay
- An art for several threat actors Example : <u>DoppelGanger</u>
- War, Health, politic, economy... Mostly covers everything!
- Internet and the web as the greatest echo chamber!

Qactus, A french Qanon ?

- QAnon, an american political conspiracy theory and political movement. Far-Right. 2017
- Antisemitic, Conspiracist, Antivaxx...
- Presence on several platforms
- translated content (automatic)
- 5/7 articles a day...



We first need a Methodology!

• The <u>ABCDE Framework</u>, a good start!

- Actor: Who?
- Behavior : How
- Content: What
- Degree : the scale
- Effect : the effects (easy, one, uh?)

We first need a Methodology!

- What's Qactus?
- What's its audience?
- What's its environment/ecosystem?
- What's its influence?
- What's its motivation?

And last but not least :

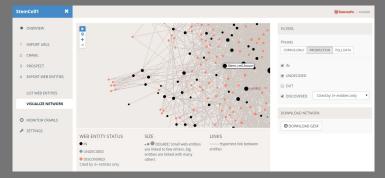
• Who is behind Qactus?

Environment? A sweet combol

• <u>Hyphe</u>: to build web corpus by crawling data from the web and generate networks!

It's a long process (few hours...), with some limitations (Clouflare...) but IT WORKS pretty well*!

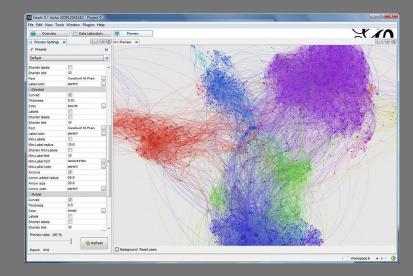
*Actually not on my computer though...



Environment? A sweet combol

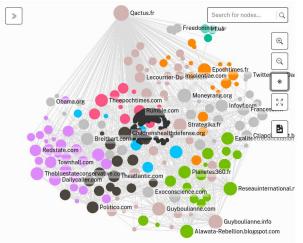
• <u>Gephi</u> (of course!) : to explore and analyze graphs!

Use the modularity algorithm to determine subcommunities...



Environment? A sweet combo!

• <u>Retina</u>: to dynamically display graphs on a webpage!



Hyphe + Gephi + Retina
A mix of different sources (good for SEO...)

Influence? A good scraper!

<u>Snscrape</u>: to scrape twitter with plenty of data!
<u>Caveat: dunno if it will still work next week...</u>
snscrape --jsonl twitter-search 'qactus.fr' > qactus.json

Influence? Datacleansing !

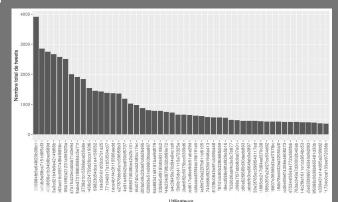
<u>OpenRefine</u>: DataCleansing with no code!
Powerful tool, especially for clustering.



Influence? Visualisation !

- R & <u>Tidyverse</u>: An easy language for statistics!
- Easy syntax, quick overview, very convenient for prototyping and reproducibility.
- (But you can use Python...)

snscrape+refine+Tidyverse



Motivation? A web browser

Firefox: @openfacto we strongly encourage the use of a privacy-oriented browser...
Finding the motivation was easy : adsbygoogle!

Firefox

<pre><!--auto ad code generated with Simple Google Adsense plugin v1.0.6--> <script <<script="" async="" src="//pagead2.googlesyndication.com/pagead/js/adsbygoogle.js"></pre></th><th>></script></pre>	
<pre>(adsbygoogle = window.adsbygoogle []).push({ google_ad_client: "ca-pub-7914 enable_page_level_ads: true });</pre>	4257954465446",
 / Simple Google Adsense plugin <script type="text/javascript">···</script>	

Identity? another combo !

- <u>Holehe</u>+<u>GHunt</u>+<u>Sherlock</u> = <u>Epieos</u>
- Searching for nicknames and mail combinations on websites.
- (We also used some leaks...)

• Firefox

Let's wrap this up!

- The myth of a single tool in OSINT...
- A retired IT technician in a lost town in France
- Complotist in a bubble of influence
- Earns approx 4000\$/m writing crap.
- Outing him is important (we know who you are)

Why OpenSource Software?

- Powerful
- Adaptable
- Privacy
- Reproducibility
- Most of the time free. Journos & NGO are not wealthy...
- So THANK YOU Y'ALL! You Rock!

A last one? Collaboration !

<u>OpenCTI & Disarm</u>: Disinformation & CTI approach
Data capitalization and sharing
Collaboration is the key.



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Thank you

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