

The background of the slide is an aerial photograph of the EPFL campus in Lausanne, Switzerland, taken during sunset. The sun is low on the horizon, casting a warm orange glow over the city and the surrounding Lake Léman. The campus buildings, including the iconic circular building, are visible in the foreground and middle ground. The lake and distant mountains are in the background.

Datashare

A privacy-preserving
search engine for
journalists

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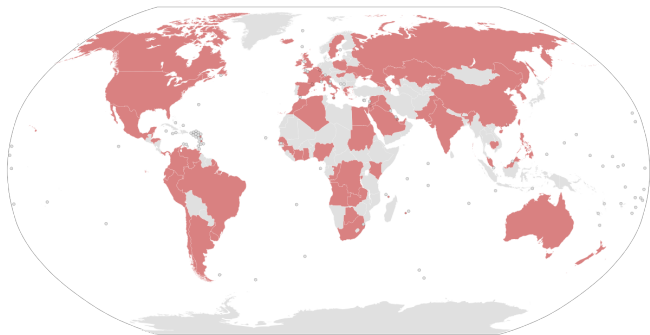
Journalists

The International Consortium of Investigative Journalists is a global network of 267 investigative journalists in 100 countries who collaborate on in-depth investigative stories.





11.5 Million documents
(Centralized)



Journalists from over
80 countries



An ICIJ Investigation

The Panama Papers: Exposing the Rogue Offshore Finance Industry

A giant leak of more than 11.5 million financial and legal records exposes a system that enables crime, corruption and wrongdoing, hidden by secretive offshore companies.



Better analyze information, in all its forms

→ 1

Sort ▾ 1 - 100 on 1,086 documents ▾

/vault/luxleaks/

Clear all filters

id if you could provide us with your approval an
transactions described below.

H4201030M.pdf

id if you could provide us with your approval an
transactions described below.

H4201032M.pdf

Private Equity Fund II

our client Sages Gestion SA, the investment advi
ity Fund II (the "Fund"), and further to our
bruary 7, 2002, we are pleased to submit for yo
treatment of the following structure agreed
ould be pleased to receive your written comments e

mercantil_fsrst_page.pdf

Communications (Vietnam) Skel

bring the following developments to your attentio
comments on the below structure.

H4204006M.pdf

to submit our analysis of the Luxembourg draw
g of Centennial Partners S.A.R.L. We would be i
and provide us with your agreement and / or
are.

centennial_20012005.pdf

Skel - Tax number: 2006 24 18398
a number: 2006 24 15399

ring dated 12 July 2006, we would like to submit
overmentioned companies, the following situat
our comments on the tax treatment described herei

H4201030M.pdf

EXTRACTED TEXT

PREVIEW

TAGS & DETAILS

NAMED ENTITIES

People (36)

KOHL HUTCHISON LUXCO HUTCHISON KOHL PEETERS LUXCO LUXCO LUXCO LUXCO LUXCO WIM PIOT WIM PIOT
MARIUS KOHL LUXEMBOURG HUTCHISON CONFIDENTIAL HUTCHISON ROBERT ECBRT ECKERT LUXELLBOURG ILCJB DINE AUMIAN SCHILLING
ROBIO SNG DIRECTOR HUTCHISON HUTCHISON ROBERT ECKERT ECKERT HUTCHISON ROBINDIRECTOR HUTCHISON HUTCHISON ROBERT
HUTCHISON HUTCHISA DILLION ROBIN ROBERT ECKERT ECKERT HUTCHISON

Organizations (52)

MR PEETERS ADMINISTRATION DES CONTR...tria, the fiscal value of LuxCo's
LUXEMBOURG TELEPHONE HUTCHISON
HUTCHISON WHAMPOA LIMITED AUSTRIA
R.C. LUXEMBOURG BUREAU D'IMPOSITIO
RMS/VLN/H4201030M-WPIHUTCHISON WH
HUTCHISON WHAMPOA LIMITED HUTCH
H3G HOLDINGS R.C. LUXEMBOURG B LUXCO LUXCO H3G HOLDINGS H3G HOLDINGS LUXCO H3G HOLDINGS LUX CO LUXCO LUXCO
H3G HOLDINGS H3G HOLDINGS LUXCO H3G HOLDINGS HUTCHISON 3G AUSTRIA INVESTMENTS S.A.R.L. HUTCHISON 3G AUSTRIAGMBH
AUSTRIA INVESTMENTS S.A.R.L. HDTCHISON 3G AUSTRIA GMBH HUTCHISON AUSTRIA INVESTMENTS YHUTCHISON 3G AUSTRIA INVESTMENTS
HUTCHISON 3G AUSTRIA GMBH HUTCHISON 3G AUSTRIA HOLDINGS HUTCHISON 3G AUSTRIA GMBH HUTCHISON 3G AUSTRIA GMBH FCBRUAR
AUSTRIA GMBH AUSLRIA INVESTMENTS S.A.R.L. HUTCHISON 3G AUSTRIA HOLDINGSGMBH HUTCHISON 3G AUSTRIA GMBH

Extracted using CORENLP in ENGLISH

Locations (61)

EUROPE AUSTRIA AUSTRIA AUSTRIA LUXEMBOURG EUROPE AUSTRIA AUSTRIA AUSTRIA AUSTRIA AUSTRIA AUSTRIA AUSTRIA
AUSTRIA AUSTRIA AUSTRIA AUSTRIA AUSTRIA ILL AUSTRIA LUXEMBOURG AUSTRIA AUSTRIA AUSTRIA AUSTRIA AUSTRIA
LUXEMBOURG AUSTRIA AUSTRIA LUXEMBOURG AUSTRIA AUSTRIA AUSTRIA AUSTRIA AUSTRIA LUXEMBOURG LUXEMBOURG
AUSTRIA AUSTRIA EUROPE AUSTRIA VIENNA AUSTRIA HATCBISOO AUSTRIA AUSTRIA EUROPE JC LUXEMBOURG VIENNA

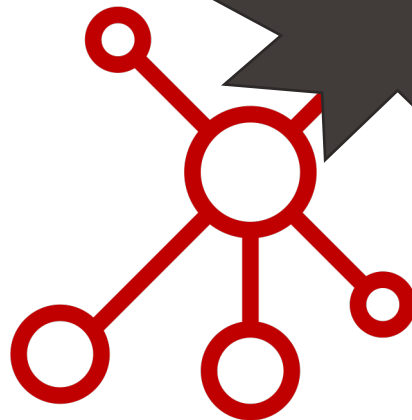
Show more locations

Collaborations

Collections of journalists



Central



Journalist ↔ Journalist



Local



1.5 years
weekly meetings

Requirements

What should the system **do** and under **what constraints**?

Security and Privacy Risks

What can go **wrong**? How could the system be abused? And by **whom**?

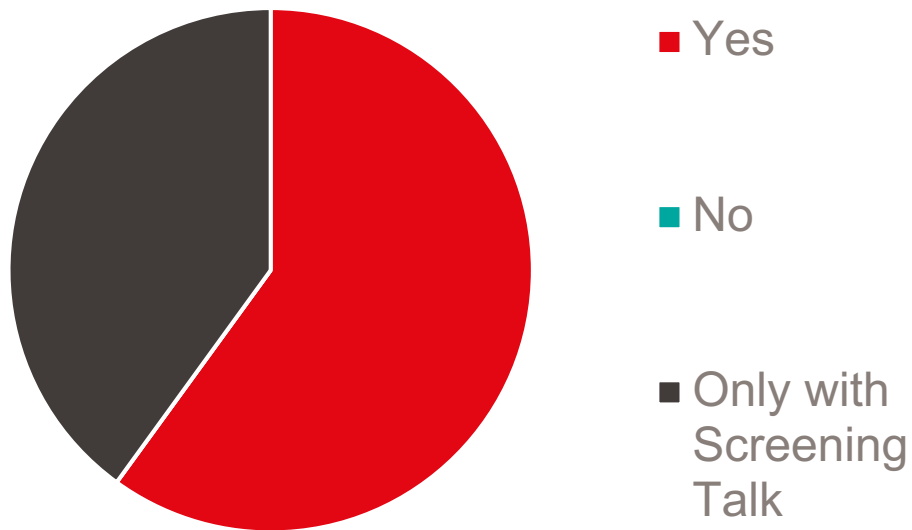
Design the System

Use **cryptography** and **clever engineering** to protect against security and privacy risks

Collaboration with ICIJ / users is essential for this process

One: Requirements Screening

Are you willing to share your documents?



One: Requirements

Two Functionalities



Searching

Is there anybody with relevant documents?



Screening/Chatting

Does the document owner want to share with me?



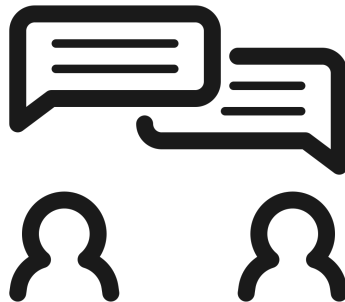
Queries

Reveal ongoing investigations



Documents

Reveal data about sources and investigations



Conversations

Who talks with whom, and about what?

Risks

Protect from whom?



Journalists



ICIJ



Third party



Risks

Potential Attacks



Hacking



Violence



Subpoena

Risks

Protect from whom?



Journalists



ICIJ

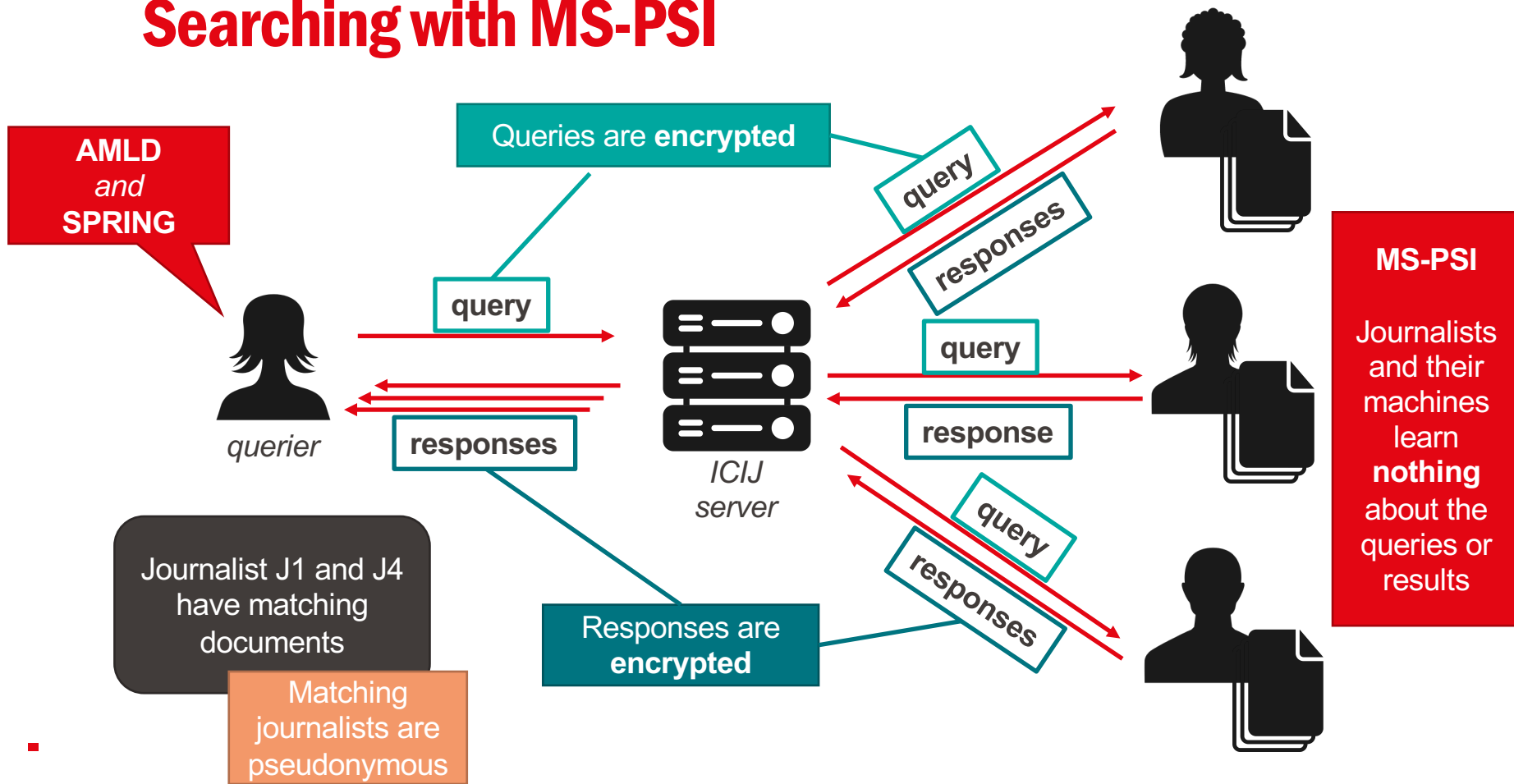


Third party



DatashareNetwork

Searching with MS-PSI



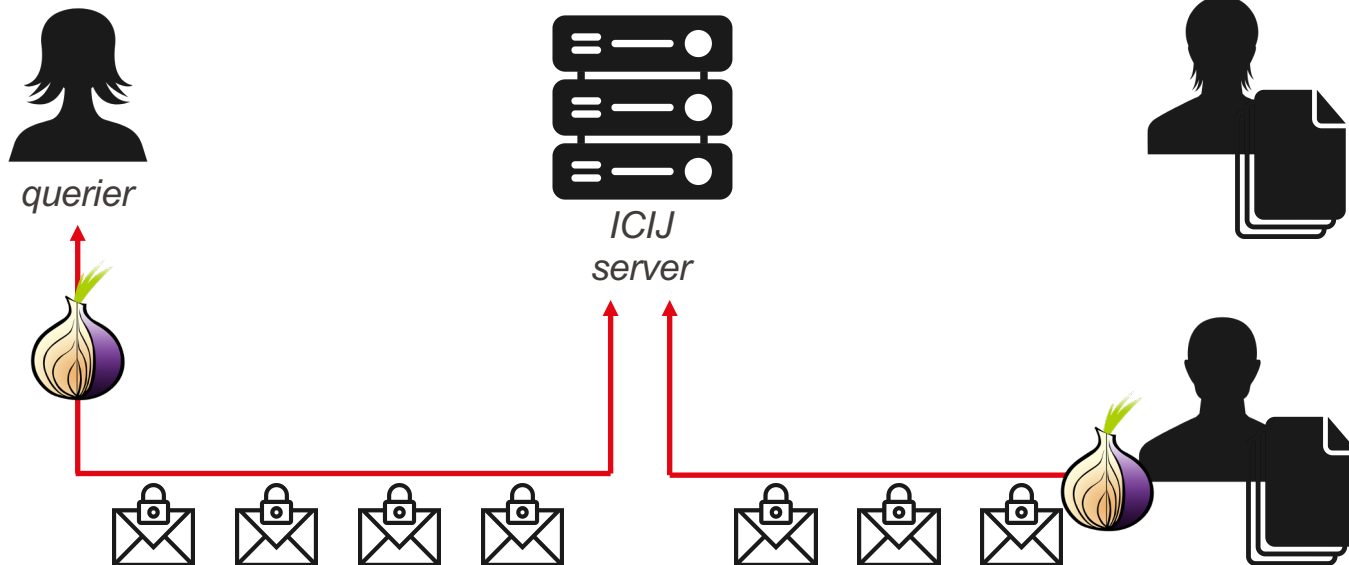
DatashareNetwork

Screening Talks

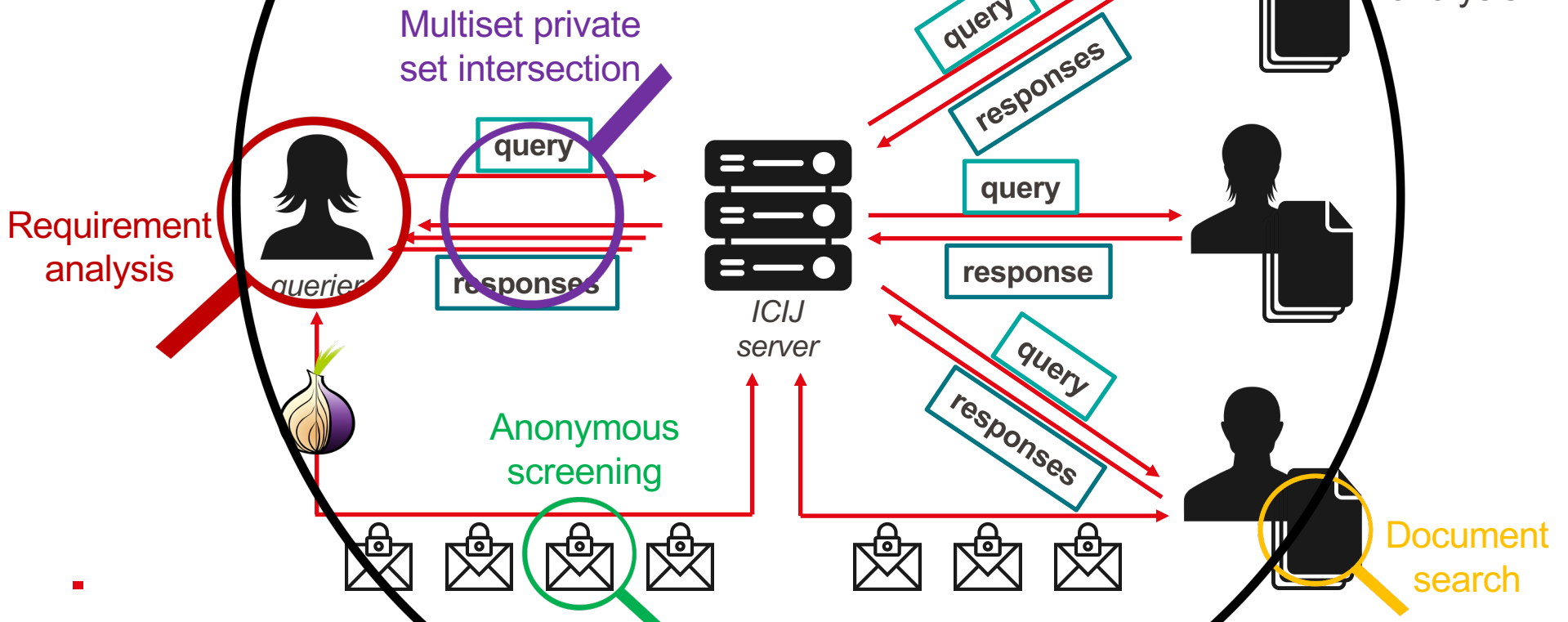
Want to hide:

- What people talk about
- Who talks with whom
- Whether people talk

Cannot use existing systems



DatashareNetwork Overview



DatashareNetwork

Summary

- **Fully-fledged decentralized search engine** inspired by stakeholders needs
- Key lessons
 - Requirement gathering & design is an iterative process
 - Collaboration is key
 - Requires full control over the software / system
- Evaluation / userstudy: journalists prefer the privacy-friendly system
- Next steps: deployment by ICIJ

We'd love to work with you!

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