

Open

**INTEL**

Creating a "long-term memory" for the global DNS  
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## Getting the data

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OpenINTEL uses zone files provided by DNS registries to obtain the list of domains to measure.

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We actively perform daily DNS measurement for all the domains (232 million) obtained.

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We aggregate measurement data with other data sources (ex. Prefix2AS, Routing etc.)

# Dissemination

## We share open data publicly

- Open sources (e.g., .se, .nu, Alexa)
- As Avro files on [openintel.nl](http://openintel.nl), /w “light” docs

## We share closed data with other researchers

- Typically require them to have registry operator contracts
- We are implementing a stream-based architecture for facilitate data-sharing

## We share closed data with the respective registry operators

## Outcomes

### Research Side:

- 2 PhD Thesis and more incoming.
- Grant Proposals and Awards
- Many papers in high value venues.

Collaboration with  
many research institutions

# Economics

Project turned 5 years

3.7 billion data points collected daily, 3.5 Trillion since 2015

120 GB of data collected daily.

Founded initially through founding parties, nowadays through grant proposals and contribution in kind.

## What more data would be desirable?

The measured domains is limited to TLDs zones to which we have access.

We would extend our coverage to ccTLDs zone files.

We would integrate our dataset with other dataset like:

- WHOIS data from registries
- Certificate transparency logs
- BGP events
- Outages DoS attacks

Is the work  
need to be  
sustainable?

We are ensuring robust data archival

Be the "long-term memory" of the DNS

Sustain our work by having real-world impact,  
improving the performance, resilience and  
security of the DNS



Questions?