

**(PROJECT WITH A NAME THAT SOON WILL BE
REVEALED)**

TEAM: Oozing Awesomeness

WE NEEDED A NAME!

EM

can you give me a funny name for a domain specific language for DNS measurements



Sure! How about "DigiNoodle" as a funny name for a domain-specific language (DSL) for DNS measurements? It combines the technical aspect of digital measurements with a playful twist on "noodle," giving it a lighthearted and memorable touch.

EM

can you mix "dig" into that name?



Absolutely! How about "Dig-a-Doodle" as a funny name for your domain-specific language (DSL) for DNS measurements? It incorporates the term "dig," which is a command-line tool for querying DNS information, and adds a playful and catchy "doodle" to create a fun and memorable name.

WE NEEDED A NAME!



WHAT DID WE WANT TO ACHIEVE?

- Hack on a language/interpreter to better do DNS measurements
 - Moar flexible
 - Less data (same signal, no noise)
- Friendly and easy way to run complex measurements

WHAT DID WE FIND?

- <https://github.com/DNS-Hackathon-2023/diggin-in>
- Starlark: minimal python
- Documented the security
- Local node with “dig”
- Documented how to do this for scamper (CAIDA Ark)
- Hacked a real RIPE Atlas probe (software) (prb_id: 1005867) into submission

WHAT DID WE FIND?

DATA REDUCTION

- DNSThought as a data reduction exercise
- <https://dnsthought.nl/netlabs.nl/>
- Factor 17 data reduction
- 24TB → 1.4 TB
- (Willem: If we store only diffs it's only a couple of MBs)

28 atlas wsm
for DNSThought
404 MB/msm/day

↓
11-3 GB/day

↓ 6 yrs
DNS
Machathon
2017!!

24 TB

every result: 866B
→ 100B (4)

$$\frac{2 \times 866}{100} = 17 \text{ DATA REDUCTION}$$

~~store only changes
⇒ FEW MBs~~

BEFORE WE DO A DEMO

- <BLINK> THY SHALL NOT USE THIS IN PRODUCTION </BLINK>
- IT IS A PROTOTYPE
- SHOWS THE VIABILITY OF THE CONCEPT

100%

DEMO TIME