**OARC
Annual General Meeting**

29 Sept 2020

OARC Software Report

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Full Software Report

https://indico.dns-oarc.net/event/34/attachments/756/1297/OARC-AGM-2020-SoftwareReport.pdf

- Development platform updates

- Funded projects

- OARC software highlights and updates

- OARC Portal updates

- Members' software updates

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Software Projects & Funding

https://www.dns-oarc.net/oarc/software

- Overview of software developed and maintained by OARC

  - ***tinyframe***, ***dnswire***, dnsmeter, dnsperf, dnsjit, drool, dsc, dsc-datatool, dnscap, packetq

- Information about funding development, licensing policy, links to GitHub project pages and mailing lists

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Development stats Nov - Sept

- 20 releases

- 341 opened "issues"

  – 314 closed

  – 121 pull requests alive longer then the same day

- 595 commits of which 78 are external contributions

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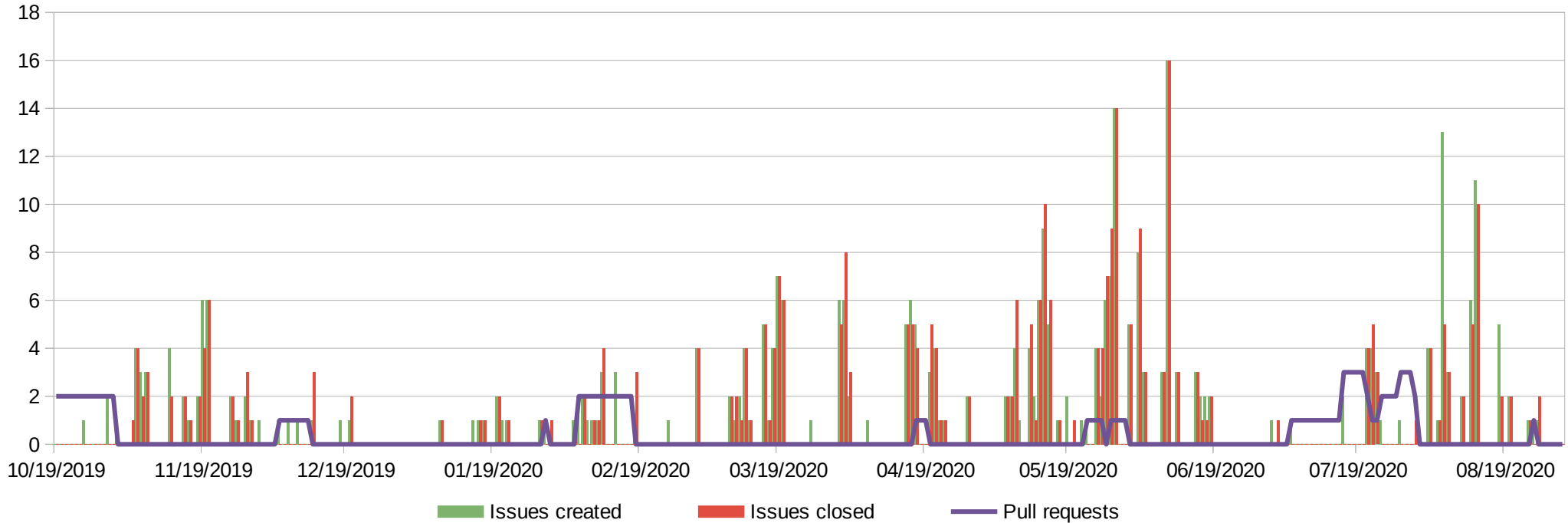Domain Name System Operations Analysis and Research Center

Releases

Issues and Pull Requests

Check My DNS + RPKI origin validation
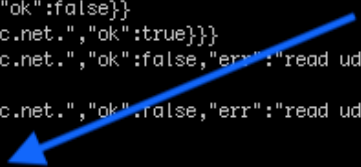
cmdns-cli -checks trans_rpkiv4 -res 127.0.0.1:53 -done

Thanks Job Snijders (NTT) for the ROA beacons!

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dsc-datatool rewrite

- Tool rewritten from Perl to Python

- Simplified packaging and dependency

- Same CLI syntax

  - except generators needs more, see release notes

- Wiki updated

- Funded by EURid

EURid

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DNSTAP input for DSC

- New libraries tinyframe and dnswire used
- DNSTAP input from file, UNIX socket, UDP or TCP connection
    - Can not be mixed with PCAPs or captured traffic
- Packages since v2.9.0 has DNSTAP enabled
- Tested with BIND 9 and Unbound (on Debian 10)

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Results

- 200h+ of work, Jan to Sept
- Using Clang's scan-build, LGTM and SonarCloud
- 139 fixed alerts/issues
- 255 false-positive, or external source, alerts/issues removed
- Overall coverage increased from 30% to 62%
  – Aimed for >80% but project time ran out
- Code, testing and CI in a MUCH better place!

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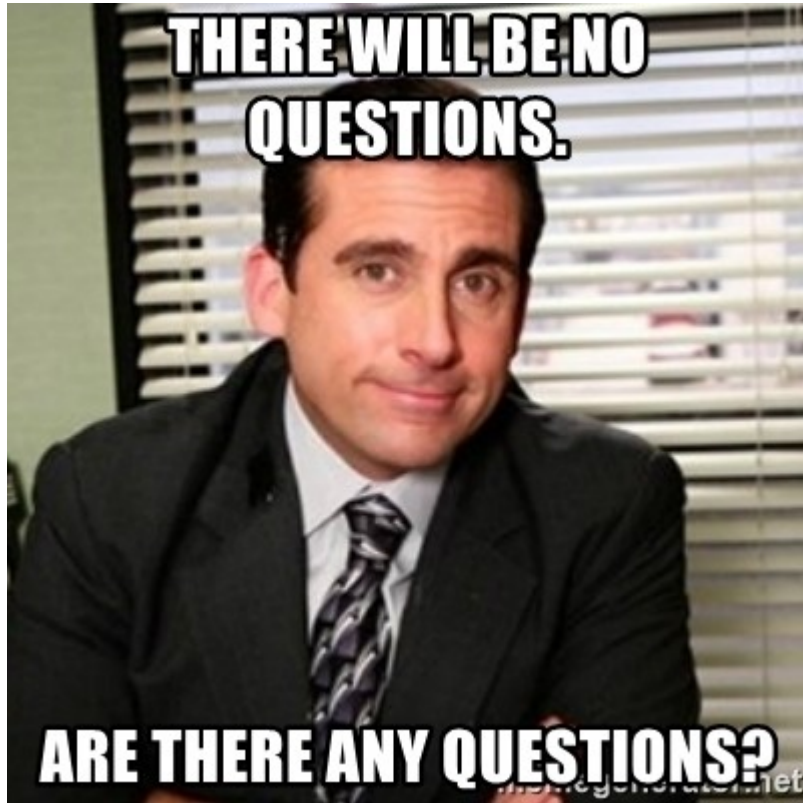Domain Name System Operations Analysis and Research Center

Future Work

- **dnsperf**: Remove BIND dependency, new engine for stateful connections, DNS-over-HTTPS support

- dnsjit: More work together with CZ.NIC's DNS shotgun

- Check My DNS: RPKI UI indicator

- dnscap: DNSTAP support

- ***insert your idea here!***

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Questions?

Drop me an email:
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