



**RIPE 74 DNS WG**  
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# DNS Replay Tool

Jerry Lundström  
Software Engineer

# DNS Replay Tool (drool)

- drool replays DNS traffic from packet capture files (PCAP) and sends it to a specified server
- Comcast sponsored project
- Released v1.0.0-beta.3 29<sup>th</sup> March
- Happily awaiting feedback, comments and/or thoughts...
  - How about a sample PCAP repository?



# DNS Replay Tool (drool)

- Features include:
  - Utilize all the cores
  - Manipulate timing between packets to replay faster, slower or ignore (flood)
  - Loop packets infinitely or N iterations
  - Replay over UDP, TCP or as it was captured
  - ... and more to come!



# DNS Replay Tool (drool)

```
$ src/drool -vv -c 'text:timing ignore; client_pool target  
"127.0.0.1" "53"; client_pool skip_reply; client_pool sendas  
udp; context client_pools 3;' -r ~/dns.pcap
```

...

```
core info: runtime 0.160850035 seconds
```

```
core info: saw 286868 packets, 1783450/pps
```

```
core info: sent 173686 packets, 1079801/pps 39/abpp
```

...

Tested on Intel i7-6700K Ubuntu 14.04



**DNS-OARC**

Domain Name System Operations Analysis and Research Center

# DNS Replay Tool (drool)

- Future improvements
  - Parse, match and add more statistics around the responses
  - Increase performance with configurable thread model and atomic queues
  - More statistics overall, control channel and GUI
  - Massive client IP simulation
    - Use the client IP from the capture, will require specific network setup



# Q's?



<https://github.com/DNS-OARC/drool>



<https://twitter.com/lundstromjerry>

[@lundstromjerry](https://twitter.com/lundstromjerry)



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