

DNS-OARC

Wayne MacLaurin
Executive Director



DNS-OARC

Domain Name System Operations Analysis and Research Center

DNS-OARC Members



DNS-OARC's Mandate

- Operations
- Analysis
- Research



DNS-OARC

Domain Name System Operations Analysis and Research Center

Operations (Data Collection)

- 6+ years of continuous DSC summary statistics gathering from root and major TLD servers
- 5+ years of annual 48-hour snapshots of all traffic to key servers (DITL)
- Accumulated >50Tb dataset over 6+ years



DNS-OARC

Domain Name System Operations Analysis and Research Center

Operations

- Do-Not-Probe-List
 - IP address ranges not to be probed by researchers
- Open Recursive Resolvers list
- TLD zonefile repository
- 10+ years of root zone archive



DNS-OARC

Domain Name System Operations Analysis and Research Center

Operations (Tools)

- UDP source port randomization test (Kaminsky)
- DNS reply size tester (DNSSEC)
- DNSSEC Lookaside-Validation (DLV) test zones
- DNS data traffic capturing and decoding tools
- Quality and conformance testing tools
- DNS server fingerprinting tool



DNS-OARC

Domain Name System Operations Analysis and Research Center

Operations (Communication)

- dns-operations mailing list (open) – 1300+ subscribers
- dns-operations jabber room (open to members) – 182 active accounts
- secure-ops mailing list and jabber room (trusted, vetted) – realtime, operational matters

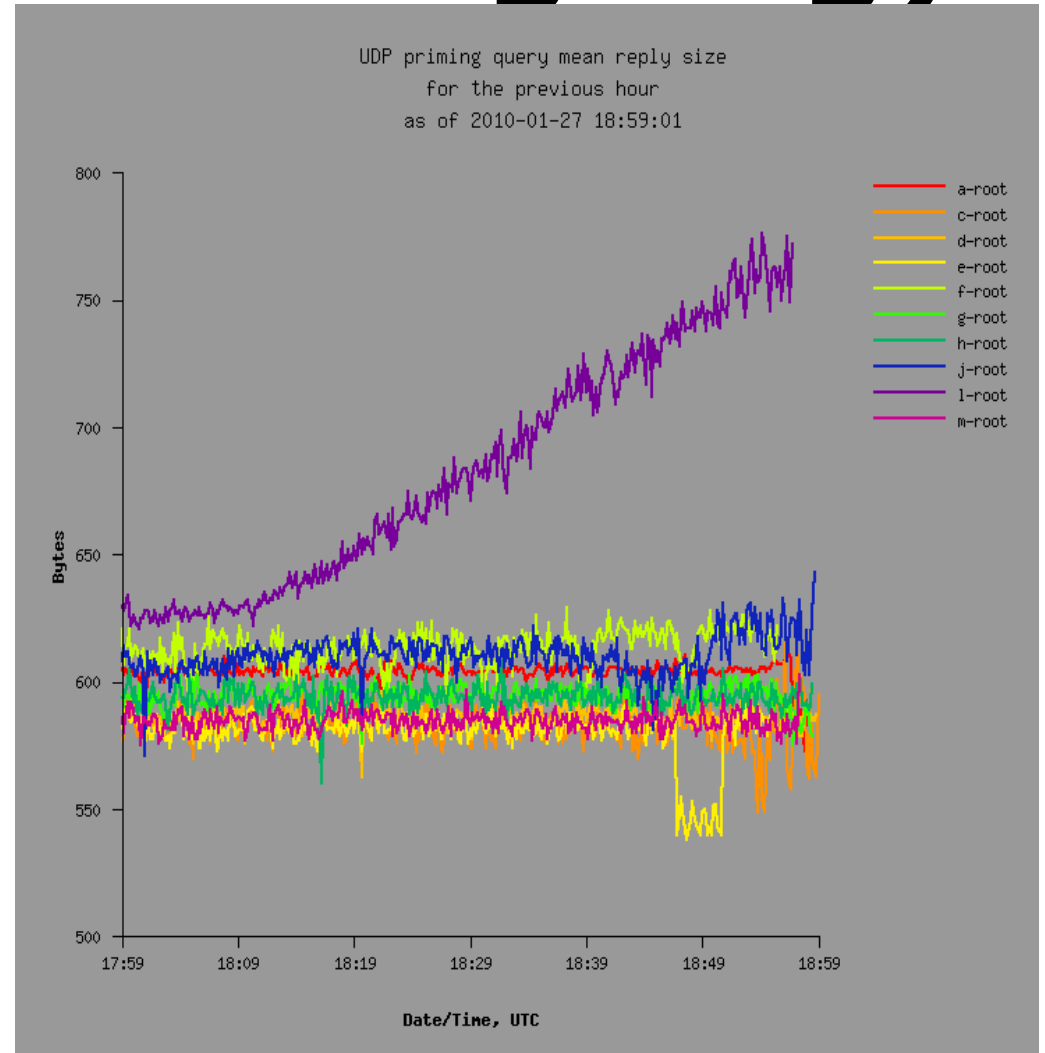


DNS-OARC

Domain Name System Operations Analysis and Research Center

Research and Analysis (DNSSEC – Root Signing)

- <https://www.dns-oarc.net/oarc/durzreport>



DNS-OARC

Domain Name System Operations Analysis and Research Center

Research and Analysis (DITL)

- 1.7TB of compressed pcap data collected in 2010 DITL (May 25th, 2010)
- 2011 DITL currently scheduled for April 12-14th



DNS-OARC

Domain Name System Operations Analysis and Research Center

2011 and beyond

- Data Collection
 - DITL 2011
 - IPv6 Day data collection and analysis
- Analysis
 - Real-time
- Tools
 - DSC – changes identified, development beginning



DNS-OARC

Domain Name System Operations Analysis and Research Center

Contact Us

<https://www.dns-oarc.net>

wayne@dns-oarc.net

+1 650-423-1344



DNS-OARC

Domain Name System Operations Analysis and Research Center