

OARC 36

Nov 2021

Welcome & Information

Keith Mitchell

DNS-OARC

Online Event

- DNS-OARC Conduct Policy
 - Applies online as well as at physical events
 - <https://www.dns-oarc.net/oarc/policies/conduct>
- **Workshop is being recorded**
 - talks will be available on OARC YouTube channel a few weeks after event
- Non-speakers are default muted during event
- All event times are in UTC !
- Social media hashtags: **#LoveDNS** **#OARC36**



DNS-OARC

Domain Name System Operations Analysis and Research Center

Mattermost Chat

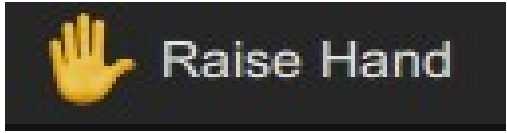
- General workshop discussion in:
 - <https://chat.dns-oarc.net/community/channels/workshop>
 - *not* monitored for questions or comments
- Public signup at:
 - <https://chat.dns-oarc.net/>
- Clients at:
 - <https://mattermost.com/download>



DNS-OARC

Domain Name System Operations Analysis and Research Center

Questions

- Speakers slots each include 5-10 mins Q&A
- If you want to speak your question:  **Raise Hand**
 - Use Zoom **Raise Hand**, wait for the session chair to ask you to unmute
- If you want to type your question:
 - Use the Zoom **Q&A** panel, it will be read out by the session chair
- *First-come, first-served, time-permitting*
- Please identify yourself and affiliation when asking



DNS-OARC

Domain Name System Operations Analysis and Research Center

Presentation Feedback

- We are once again using real-time Zoom Polls for rating talks
- Will be displayed (*only*) during Q&A – please vote !
- Data gathered really helpful for Programme Committee
- General event feedback welcome at:
 - <https://bit.ly/oarc36-survey>



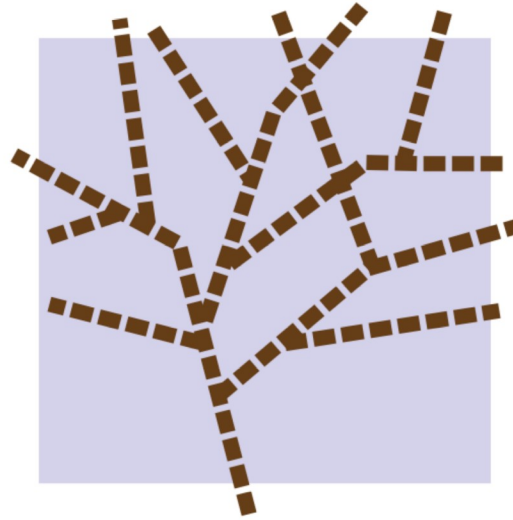
DNS-OARC

Domain Name System Operations Analysis and Research Center



DNS-OARC

Domain Name System Operations Analysis and Research Center



OARC 36

Nov 2021

Introduction to DNS-OARC

Keith Mitchell

President

OARC's Mission Statement

The Domain Name System Operations Analysis and Research Center (DNS-OARC) is a non-profit, membership organization that seeks to improve the security, stability, and understanding of the Internet's DNS infrastructure.

DNS-OARC's mission is to:

- promote and conduct research with operational relevance through data collection and analysis*
- offer useful services and tools*
- build relationships among its community of members*
- facilitate an environment where information can be shared responsibly*
- enable knowledge transfer by organizing open workshops*
- increase public awareness of the DNS's significance*



DNS-OARC

Domain Name System Operations Analysis and Research Center



OARC's Members



DNS-OARC

Domain Name System Operations Analysis and Research Center

2021 Achievements

- Completed funded development of dnsperf-DoH, CMDNS RPKI OV
 - Thank You donors ! ARIN, Comcast, Mozilla
 - <https://www.dns-oarc.net/oarc/grants>
- 3½ fully online workshops
- Exceeded \$1M revenue for first time
- DITL 2021 Data Collection completed
- Significant progress on systems clean-up and automation



DNS-OARC

Domain Name System Operations Analysis and Research Center

2021 Achievements

- New CEPH Data Store hardware and software commissioned
- Appointed new Membership Co-ordinator: Steve Sullivan
- Real-time co-ordination during recent major “DNS” outages
- Ran 7 DSC/Grafana “crash course” learning sessions
- Privacy Committee progress including Charter
- Operational continuity throughout pandemic



DNS-OARC

Domain Name System Operations Analysis and Research Center

OARC Technical Resources

- >250TB, 15+ year DNS data catalog
- Core infrastructure in Fremont, California
 - major upgrade to data store in progress
- Open-source DNS tool software
 - <https://www.dns-oarc.net/oarc/software>
- Suite of active DNS test services
- Secondary sites in Ottawa and Stockholm



DNS-OARC

Domain Name System Operations Analysis and Research Center

OARC Membership Categories

Category	Contacts	Annual
Supporter	1	\$0
Blue	2	\$1.1k
Bronze	3	\$6.5k
Silver	5	\$10k
Gold	8	\$15k
Platinum	10	\$25k
Diamond	18	\$50k

- **Supporter** requires annual in-kind contribution
 - e.g. data, presentations, services
- **Blue** category for ^{small} organizations/individuals only



DNS-OARC

Domain Name System Operations Analysis and Research Center

OARC Governance

- Independent legal entity
- Diverse member base
- Financially self-supporting
 - ~\$1M annual revenue > expenses
- Self-governing, neutral
- Elected Board reflecting Member interests
- Contracted Executive Staff
- Volunteer Programme and Privacy Committees
- 501(c)3 non-profit public benefit corporation



DNS-OARC

Domain Name System Operations Analysis and Research Center

2021-22 OARC Board

- **Ray Bellis**, *ISC*, Director
- **Joao Damas**, *APNIC*, Director
- Paul Ebersman, *Neustar*, Director
- Jacques Latour, *CIRA*, Treasurer
- Benno Overeinder, *NLnet Labs*, Chairman
- Jaromír Talíř, *CZ.NIC*, Director



DNS-OARC

Domain Name System Operations Analysis and Research Center

DNS-OARC Staff Resources

- President, Secretary (*Keith Mitchell*, Indiana) 0.75 FTE
- Systems Engineer (*Matt Pounsett*, Toronto) 0.75 FTE
- Software Engineer (*Jerry Lundström*, Stockholm) 0.75 FTE
- Membership Coordinator (**Steve Sullivan**, California) 0.6 FTE
- Events Coordinator (*Denesh Bhabuta*, London) 0.5 FTE
- Book-Keeper (*Pam Stone*, California) 0.1 FTE

Hiring! <https://www.dns-oarc.net/oarc/careers>



DNS-OARC

Domain Name System Operations Analysis and Research Center

2022 OARC Programme Committee

- Pallavi Aras, *Salesforce*
- Manu Bretelle, *Facebook*
- **Hazel Smith** (TBC)
- **John Todd**, *Quad9*
- Willem Toorop, *NLnet Labs*
- Ulrich Wisser, *Swedish Internet Foundation*
- **Suzanne Woolf**, *Public Internet Registry*
- Jaromír Talíř (*OARC Board Liaison*)



DNS-OARC

Domain Name System Operations Analysis and Research Center

Appreciation

- Service on Board
 - Ondřej Surý - 5 years on Board Oct 2016 to Oct 2021
 - Joe Abley: - 1 year on Board Oct 2020 to Aug 2021
- Service on Programme Committee
 - Jan Včelák - 3 years on PC, and as Chair 2018 to 2021
 - Jake Zack - 3 years on PC 2018 to 2021
 - Brett Carr - 1 year on PC 2021



DNS-OARC

Domain Name System Operations Analysis and Research Center

2022 workshops

- OARC37:
 - <https://www.dns-oarc.net/oarc37>
 - Austin TX, Feb 17-18th 2022 (co-located with NANOG84)
 - planning this as our first physical/virtual hybrid event (online fallback)
 - CFP, registration and pandemic precautions will be announced by early Jan
- We hope to co-locate OARC38 with the ICANN IDS workshop in May 2022
 - date/location *TBC*
- We plan to co-locate OARC39 with RIPE85/CENTR-Tech in Fall 2022



DNS-OARC

Domain Name System Operations Analysis and Research Center

Why Become an OARC Member ?

- Access to and participation in the world's premier community of DNS technical experts
- Influence development of open tools and services to support your infrastructure operations
- Ability to share and analyze a unique dataset perspective into global DNS operations
- Use of community co-ordination resources to respond to incidents and threats
- Support a trusted neutral party free of vested interests in the DNS space



DNS-OARC

Domain Name System Operations Analysis and Research Center

OARC's Value Proposition

Member testimonials:

"OARC is the only organization of its kind, dedicated to DNS operations and research. Given my company's deep involvement with DNS and my personal interest, I simply have to be a member and attend the workshops, which have consistently high-quality content."

"DNS-OARC has given me insights in parts of DNS that I didn't even know existed."

"OARC is a unique venue that brings together DNS vendors, operators of DNS services and researchers - the workshops provide a unique and valuable insight into the current state of the art of the DNS."

"Without DNS OARC I would not be aware of the current problems facing the DNS and Internet community nor be a part of their solutions."

"Of all the work-related conferences I attend, @dnsoarc is reliably the one with the fewest uninteresting bits. Approaching zero."



DNS-OARC

Domain Name System Operations Analysis and Research Center



DNS-OARC

Domain Name System Operations Analysis and Research Center

Social Event

- We are using **Spatial.Chat** for a post-workshop social
- Hang out for an hour after today's proceedings
- <https://spatial.chat/s/oarc36>
- <https://help.spatial.chat>
- F2F video avatar mobility - you choose who to connect with
- Looking forward to in-person socials in 2022 !
- Survey reminder: <https://bit.ly/oarc36-survey>



DNS-OARC

Domain Name System Operations Analysis and Research Center