Introduction to DNS-OARC

Keith Mitchell, President OARC33 September 2020

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*





OARC's Members



OARC Technical Resources

- >250TB, 15+ year DNS data catalog
- Core infrastructure in Fremont, California
 - analysis servers for Member use
- Open-source DNS tool software
 - https://www.dns-oarc.net/oarc/software
- Suite of active DNS test services
- Secondary sites in Ottawa and Stockholm



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



OARC Governance

- Independent legal entity
- Diverse member base
- Financially self-supporting
 - ~\$750k annual revenue ~= expenses
- Self-governing, neutral
- Elected Board reflecting Member interests
- Contracted Executive Staff
- Volunteer workshop Programme Committee
- 501(c)3 non-profit public benefit corporation



2019-20 OARC Board

- Paul Ebersman, Neustar, Director
- Jacques Latour, CIRA, Treasurer
- George Michaelson, APNIC, Chairman
- Benno Overeinder, NLnet Labs, Director
- Ondřej Surý, ISC, Director
- Jaromír Talíř, CZ.NIC, Director



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 (Sue Graves, Oregon) 0.5 FTE
- Events Coordinator (*Denesh Bhabuta*, London) 0.5 FTE
- Book-Keeper (*Pam Stone*, California) 0.1 FTE

OARC has been working remotely since inception !



2020 OARC Programme Committee

- Anand Buddhdev, *RIPE NCC*
- Ralph Dolmans, NLnet Labs
- Ulrich Wisser, Swedish Internet Foundation
- Shumon Huque, *Salesforce* (Chair)
- Dave Knight, Snake Hill Labs
- Jan Včelák, NS1
- Jake Zack, CIRA
- Jaromír Talíř (OARC Board Liaison)



Next workshops

- OARC34
 - Feb 2021
 - 1.5 days long
 - Online

• 2021

- one further 2 day workshop: online/physical/ hybrid
- at least one short online workshop
- roughly every 3 months



What we provide to our Members and the Community

- DNS operational best-practice knowledge-sharing
- Development and maintenance of open-source DNS tools
- A range of online platforms and services to support the above
- DNS dataset collection, curation and sharing
- Collaboration venue between operators and researchers
- Workshops as a focus for all the above activities
 - "Global DNSNOG"



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



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."

"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.

"DNS OARC provides the invaluable mingling of DNS operators, developers, researchers, to communicate, collaborate, and share data via workshops, mail lists, and shared computing resources. Without this association 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."

