DNS-OARC
Domain Name System Operations Analysis and Research Center

Members Report, May – July 2022

Summary:

Dear OARC Members,

Spring 2022 brought the return of travel and face-face-meetings to our industry after a long absence. This is letting OARC both have productive internal team planning meetings, and to get back to interaction with our Members and the wider DNS community at various in-person meetings - it has been great to see many of you again. We're looking forward to seeing more of you at the hybrid format OARC38 in less than 2 weeks, co-located with an IETF meeting for the first time in some years, in Philadelphia.

Now that a long-overdue addition to our engineering team is on-board, we've been able to do some longer term planning, and worked up a plan for systems projects, responsibilities, and objectives over the coming year. The raw DITL data collection for 2022 has also been released, with the cleaned-up version planned shortly.

We've defined a strategy for longer-term software development over the coming year, and this is already bearing fruit with the addition of features like DoQ to our CheckMyDNS tester.

The Privacy Committee has been making progress towards modernizing our Participation and Data Sharing Agreements.

OARC's membership base remains stable, though we have not seen any new paying members over the past 3 months. We have meantime been continuing development of our Member portal, and OARC38 will include interactive sessions on how you can make the best use of this.

1. OARC38 Workshop

OARC 38 will take place on Saturday/Sunday July 30th/31st, 2022 both online, and in-person at the Sheraton Downtown in Philadelphia, PA USA. Registrations are open for both in-person and remote attendance. Full meeting information, including agenda and registration are available at:

<https://www.dns-oarc.net/oarc38>

Registration is discounted for OARC Members, and points of contact within the OARC Portal should have received their discount codes - please contact <admin@dns-oarc.net> ASAP if you did not.

Covid-19 pandemic safety measures remain in place, and we require attendees to have been fully vaccinated no later than July 15th, 2022 to attend at the venue. We are planning fully interactive remote participation via a Zoom webinar and Mattermost chat for anyone who is unable to attend in-person.

We currently have 15 presentations scheduled, including a guest DNS Talk Series presentation on DANE from Shumon Huque of **Salesforce,** a panel from vendors of open-source DNS software, and an update session from the OARC team. Attendance is currently 57 in-person and 34 remotely, and remains open until 31st July.

In addition to the OARC38 workshop in Philadelphia, most of the OARC Team will be present during the preceding week of the co-located IETF114 meeting. We'll be using this time to have Programme Committee, Board, and Staff All-Hands meetings. The latter will be our first such gathering all in one place since before the pandemic, and an opportunity to do further strategic and long-term operational planning. Please do come talk to us if you also be in Philadelphia :-)

Our thanks to **Comcast** for sponsorship, local support, and providing connectivity for OARC38, and to IETF LLC for helping host our workshop.

2. OARC Team Activity

May and June were very much on-the-road months for the OARC team. In addition to our first in-person Board meeting since 2019, OARC staff were present at UKNOF49 Manchester, RIPE84 Berlin, NANOG85 Montreal, and ICANN74 in The Hague. It was great to re-connect with many of you, and to do ground-work for future growth of the OARC community.

We are still planning to grow the team by adding an Office Administrator, to be based partially out of our Indianapolis office – see <https://www.dns-oarc.net/oarc/careers> for more information. Interested parties may submit a Resume/CV and any supporting documents, or questions, by email to <jobs@dns-oarc.net>. Please spread the word and/or put us in touch, if you can think of anyone suitable.

You will note that we have recently experienced minimal growth in new paying Members, and it would be very helpful if you could spread the word about the benefits of OARC Membership. You may find our Brochure and Briefing documents useful for this. See also our referral discounts, where existing Members who refer a new party to OARC who becomes a paying Member can receive a 10% discount. Supporters who refer a new paying Member can receive an upgrade to Blue Membership.

Please contact Steve via <admin@dns-oarc.net> if you have any questions about your membership and our services.

3. Software Development

Further to a review of our software development strategy, it was decided to concentrate on one particular area for more extensive long-term development, rather than spreading our development efforts thinly across the 20+ software projects we manage. The priority, for at least the next 1-2 years, will be on DNS testing tools, rather than DNS statistics and measurement software.

This focus on testing tools embodies OARC's core mission of facilitating development of the DNS. It allows us to develop platforms (in particular *CheckMyDNS*) which can be used to provide users with relevant live results. These can also gather research data on their use, and the deployment of the DNS features they are testing. It is also compatible with continuing to develop open-source testing software for wider use by the community (e.g. *dnsperf*, *dnsjit*).

This tighter focus on CMDNS development ensures better use of our finite software development resource (Jerry), and more extensive development of the testing tools being worked on. This has already resulted in some innovative new features in CMDNS, in particular new user interfaces, and the addition of DoQ (DNS-over-QUIC) tests. Jerry has an exciting list of new features planned, which you can read about in his report here. We're also open to Member suggestions for new tests and features.

Other software development work has included new releases of *dnsjit*, *dsc-datatool*, *packetq*, *dsc*, and *dnscap*.

There have also been a number of minor feature and usability enhancements to our Member portal. Steve will be presenting a summary of these during the Member-update session of OARC38, and on-hand to give interactive tuition in making the most of this key resource during the workshop in Philadelphia.

A list of all our software is here:

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

Finally, OARC can develop new tools, or enhance features of existing tools, via a custom for-hire development contract. OARC Members will receive priority for such work, and a discounted rate depending on membership tier.

4. Systems Engineering

4.1 DITL

Shortly after our Day in the Life 2022 data collection, the "raw" un-cleaned version of the data was released to researchers. This dataset is undergoing the "cleaning" process, and we plan to make the processed data available very shortly. Our attempts to find volunteers to help work on anomalies in the 2021 dataset have unfortunately not been successful, we will attempt to work on this as we are able.

4.2 California Site Visit and Team Meeting

During June, we were able for the first time in over 2 years to get our recently-grown Systems Engineering team together with our new California-based team members. As well as a chance to get to know our pandemic "Zoom-hires" better, this was also an opportunity to review and work on our Fremont site after a long period of hands-off operation, and to do some systems planning. The output from this is a set of objectives for Matt and Mike individually and collectively which will burn down our technical debt over the coming year, and deliver some necessary upgrades and service enhancements.

In particular, Mike will be taking over management of the stalled CEPH data store project, and you should expect updates from him on how we will finally be completing this over the coming months. We were also able to work together on a grant proposal for developing one of our services, watch this space..

4.3 Router Upgrades

New Cisco routers have been delivered for our Fremont and Ottawa sites, and we've now established supplier relationships which should make purchasing such equipment simpler in future. These will address a number of routing issues with our existing aging hardware, and we plan to deploy them both during August.

4.4 Website upgrades

Upgrades have now been completed on two of our major web properties, the Drupal-based platform which runs the main www.dns-oarc.net , and indico.dns-oarc.net on which we run our workshops, are now both running the latest software versions.

5. Governance

The Privacy Committee has been meeting on a semi-regular basis over the past few months, and has made progress with a proposed Charter, received expert legal input, and produced a report on Data Storage and Usage. The committee will be presenting an update on its activities at OARC38.

OARC is keeping an eye on inflation in the wider economy. This has already started to impact our travel/event expenses and contractor costs. As it has been nearly 4 years since OARC last increased its membership fees, we are planning to make an inflation-index based increment to the fees effective 1st January 2023. The amount of this will be determined in advance of the 2022 AGM to be held in October, and presented there for Member approval.

6. Future workshops

[OARC39](https://www.dns-oarc.net/oarc39) is planned to be a 2-day hybrid workshop, taking place on the 22nd and 23rd October, co-located with the [RIPE85](https://www.dns-oarc.net/oarc39) meeting in Belgrade, Serbia. We are planning to resume the practice of holding an annual joint workshop with **CENTR**-Tech in Belgrade, and are looking forward to working with our Serbian participants **RNIDS** (.rs) and **SOX**. The Call for Presentations will open shortly after OARC38, and registration will open during August. You will be able to find the CFP and more workshop details at:

> https://www.dns-oarc.net/oarc39

The 2022 OARC Annual General Meeting is likely to be held as a stand-alone virtual event once more, the exact date in early October to be confirmed. Watch this space for announcements.

We will continue to run our workshops as hybrid online/in-person events for the foreseeable future. The plan remains to co-locate OARC40 with NANOG87 in Atlanta in February 2023, and we are open to possibilities for OARC41 in spring 2023.

Opportunities remain open for sponsorship and patronage of all OARC's events, please see:

> https://www.dns-oarc.net/workshop/patronage-sponsorship

and contact Denesh via <sponsor@dns-oarc.net> for further information.

Our thanks in particular to **Verisign** for their renewed Patronage of our workshops for 2022.

Keith Mitchell
OARC President

July 2022