



# DNS-OARC

Domain Name System Operations Analysis and Research Center

## Members report, Nov 2019 - Feb 2020

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Dear OARC Members,

[OARC31](#) was held in Austin, Texas in October in conjunction with NANOG77 and was well attended with some 139 attendees. As a result of our AGM Board elections, Members selected Paul Ebersman and Benno Overeinder as new Directors. In addition, Ondřej Surý was re-elected for a second term. We are sorry to lose David Lawrence and Duane Wessels from the Board, and in particular are very grateful for Duane's many years of service to OARC. Slides and Video of OARC31 are available via the [workshop site](#) and the [OARC YouTube Channel](#).

2019 has seen a number of challenges for OARC, in particular with our storage and newly-adopted DNSVIZ infrastructure, and reduced revenue due to some departing Members earlier in the year. However, now that the provisional 2019 financial figures are in, the good news is we came in close to plan, with adjustments to expenses leaving us with a small deficit on the the year. We're pleased to welcome **Charter** as our second Diamond-level Member, and a number of other new Members, Supporters and upgrades.

Engineering work on planning our next-generation storage infrastructure is well under way, and we'll be seeking funding for this as part of our 2020 budget. We have also been awarded a significant grant by Member **SwelntFnd** to do code coverage and analysis tests on our existing open-source toolset.

## 1. San Francisco OARC32 Workshop

Our February workshop, [OARC32](#), is imminent, and will take place in San Francisco, CA, USA on the 8<sup>th</sup> of February, co-located with [NANOG78](#). On February 9<sup>th</sup> we will be holding our first ever Member Round Table, giving our Members a more intimate setting for smaller group discussion on timely topics of mutual interest. We will also be hosting the [EDDI February Meet Up](#) on the morning of February 9<sup>th</sup>.

OARC32 would not be happening without the generous support of::

- **VeriSign** (2020 Workshop Promoter Patron)
- **Comcast** (OARC32 Deluxe Sponsor)

and co-location assistance from **NANOG**.

## 2. New Members

Please join us in welcoming the following additions and upgrades to OARC Membership in the last 5 months:

- **Charter** as a new Diamond Member
- **Facebook upgraded** to a Silver Member
- **PIR upgraded** to a Silver Member
- **USC/ISI upgraded** to a Blue Member
- **NASA upgraded** to a Blue Member
- **True Names – ENS** as a new Blue Member
- **CBN Internet** as a Supporter
- **John Hopkins University** as a Supporter
- **IDC Herzliya University** as a Supporter
- **LACTLD** as a Supporter

As ever we would appreciate your help in spreading the word about the benefits of OARC Membership - to help you do this, you may find our [Brochure](#) and [Briefing](#) documents useful. See also our new 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 Sue via [<admin@dns-oarc.net>](mailto:admin@dns-oarc.net) if you have any questions and/or would like to upgrade your membership or donate to support our mission and the DNS community.

### 3. Software Development

OARC maintains a growing set of open source software related to DNS which we make new releases for regularly.

We are pleased to report that a software development application we made to Member **The Swedish Internet Fnd (Internetstiftelsen)** was successful, this was for an award of \$25k to fund code coverage and analysis tests across our open source DNS toolset, which we are calling the *Soteria* project.

There appears to be demand for us to add DoH capability to our *dnsperf* tool, and we are seeking funding sources and/or partners to support this work, please get in touch if you are interested.

Our [Check My DNS](#) tester can now check if RPKI origin validation is enabled for the resolvers that query it, see Jerry's [blog post](#) for more information on this, and his regular [Development Updates](#) for the latest on our Software Engineering activities, or talk to him at the OARC32 to find out more. A list of all our software is here:

[<https://www.dns-oarc.net/oarc/software>](https://www.dns-oarc.net/oarc/software)

Finally, don't forget that OARC can develop new, or enhance features of existing, tools via a custom for-hire development contract. OARC Members will receive priority for such work, and at a discounted rate depending on their membership tier.

### 4. Systems Engineering

Maintaining the storage infrastructure and our dataset that lives on it has been a challenge for much of 2019, and this stimulated a discussion arising from Matt's presentation at OARC31 of a proposed way forward. Matt has now generated a detailed engineering plan for the new infrastructure, and is iterating this with a number of vendors to find the optimal cost/configuration sweet spot. We anticipate building this will require some \$90k capital investment in 2020, with lower growth/maintenance costs than the current infrastructure in subsequent years.

We intend to fund this infrastructure investment from at least some of a number of potential sources:

- carrying over some \$30k of unspent funds from the 2019 CapEx budget
- allocating most of the usual \$50k CapEx element of the annual budget from 2020 to this project
- seeking donations from Members and/or external grants
- phasing the deployment and continuing to use at least some of our existing file store platforms in parallel until 2021
- financing and/or discount terms from the supplier
- drawing some funds from our cash reserves

While we have made progress in stabilizing OARC existing data store over the past months, several of our servers still have issues, and we remain blocked on post-processing of some DITL datasets. As there are substantial other demands on Matt's time, we have posted a set of requirements for a short-term contractor to work on these servers and address their various issues.

You can find this at [<https://www.dns-oarc.net/oarc/careers>](https://www.dns-oarc.net/oarc/careers), along with an additional set of requirements to tackle other backlog work in our network configuration. At the moment we are not posting these contracts publicly, but we're inviting OARC Members to have a look and make recommendations, or pass the work descriptions on privately to anyone you feel might be appropriate and available. Anyone interested should feel free to send questions, proposals, and/or quotes to [<jobs@dns-oarc.net>](mailto:jobs@dns-oarc.net).

The Board's Privacy sub-committee has meantime been making progress in reviewing OARC's Data Sharing policies to investigate options for greater flexibility in where we host our data, and will be sharing their initial findings during the Member Round-Table at OARC31.

[DNSVIZ](#) is now established in its new home at OARC, and we have recently commissioned a new back-end database server in support of this. However, restoring the historical database remains a challenge. While this multi-month process continues, we are looking at ways that would allow co-existence of a new active history database with restoring the old one.

Finally, due to the closure of our existing supplier's DNS secondary service, we have solicited bids from Members for a replacement to this, and have received an excellent set of 5 responses. We hope to announce the awardee during OARC31, and thank Member **ISC** for their years of providing this service on their public benefit platform.

## 5. 2020 Fee Increases

A reminder that on 1<sup>st</sup> January 2020, for the first time in over 5 years, we made a number of inflation-based increases to most of our Membership subscriptions. You can find the new fee levels at our [Member benefits page](#). Please help us by ensuring that your finance departments have the correct new amount in any budgeting and/or purchase orders for your OARC Membership.

## 6. Future workshops

For 2020 and beyond, we will be switching from two 2-day workshops per year to two 2-day plus one additional 1-day workshop. From 2021 we would then usually co-locate with a specific event at the same time of year, e.g. NANOG in Q1, ICANN IDS in Q2, and RIPE in Q3. To transition to this model, we will during 2020 have the following meeting schedule:

- [OARC32](#) will be co-located with NANOG78 in **San Francisco**. This will be a one-day workshop on the Saturday (February 8<sup>th</sup>) before NANOG78, with some additional activities (tutorials, Member round-table, etc) on Sunday 9<sup>th</sup>.
- [OARC33](#) will be co-located with ICANN's IDS in Paris on May 9<sup>th</sup> and 10<sup>th</sup> 2020, after ICANN's GDD and RoW events (and immediately before RIPE80).
- For **OARC34** in September 2020, we are planning to co-locate with RIPE81 and CENTR Tech in Milan Italy, subject to venue confirmation.

Opportunities are open for sponsorship and patronage of all the above workshops, please see:

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

and contact [Denesh](#) for further information.

Keith Mitchell  
OARC President

February 2020