Members Report, May – October 2021

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Dear OARC Members,

2021 has been another year of virtual-only meetings, and the world only realizing how much we have all come to depend on our online infrastructure when some of it fails. Whenever the DNS gets blamed (again !), it's good to see the OARC Community do its part in helping to fix things, a reminder of the relevance and importance of what we all do.

There are some encouraging signs over the past month or two that light at the end of the long pandemic tunnel may be in sight, with a few industry events taking place in-person, and the promise of more as we get into 2022. In the meantime our short OARC35a online workshop in August had over 180 attendees (videos now available) and plans are well in-hand for a full-length OARC36 virtual workshop in November.

The OARC AGM is being run as a stand-alone event on 28th October, please make sure you register to attend and to vote ASAP if you didn't already.

We have now completed all the software development projects which were funded during 2020, and another successful annual DITL data collection. OARC's financial position is the strongest ever, but plans to expand our staff have foundered in the face of the current challenging hiring environment, and the long-standing Data Store project, while now 90% completed, is consequently not yet finished.

OARC has however, been able to welcome a new team member, Steve Sullivan, on board as our Membership Co-ordinator, and it remains to extend our huge gratitude to Sue Graves for all her service to OARC, and our and very best wishes on her retirement.

1   OARC 2021 AGM and Board Elections

OARC's 2021 Annual General Meeting takes place online this week as a Zoom meeting on the 28th of October between 14:00 and 16:30 UTC. Registration is required to attend, you can find a link for this and other meeting information at:

https://www.dns-oarc.net/oarc/agm-2021

We have five candidates for 4 Board positions:

- Ray Bellis   **ISC**
- Brett Carr   **Nominet**
- Joao Damas   **APNIC**
- Paul Ebersman   **Neustar**
- Benno Overeinder   **NLnet Labs**

and you can find their platforms at:

https://www.dns-oarc.net/oarc/agm-2021/elections

As with last year, we will be using will be using https://www.opavote.com/ to run the elections, and a Zoom Poll during the AGM to vote on resolutions. To make the process smoother this year, we have added a new feature to the OARC Member Portal, which allows you to designate who your organization's voting representative will be. Unique voting tokens will be sent by email to this contact shortly after 17:01 UTC on Thursday 28th October. The election result will be announced on the 29th October.

2   Strategy and Succession Planning

In the absence of our usual 2-yearly in-person retreat, the OARC Board had some online strategy sessions over the summer, and one of the major topics was succession planning. I've now been involved with OARC for some 13 of the past 15 years, and I'm not getting any younger. While I have no intention of quitting the Internet industry soon, I have set myself the personal target of stepping back from my executive roles by one year from now, October 2022, including as President of DNS-OARC. I do however plan to remain available to help OARC into the future in a non-executive/advisory capacity, e.g. as Company Secretary and/or supporting the Indianapolis office, as long as appropriate.

A key task for the incoming Board will thus be to search for and appoint new leadership for OARC. Work was done during the retreat on a plan and requirements for this, and you should expect to see announcements and activity on this in the coming months.

Another and related key topic during the strategy retreat was how OARC goes about attracting the talent it needs to keep operating. It is clear we are significantly staff under-resourced for all the activities that we support, and the 2021 budget allowed for hiring several new contractor positions. Unfortunately for various reasons, including the challenging tech+pandemic hiring environment which many of you are experiencing first-hand, we have not made the progress we had hoped with this. Part of the strategy identified that we should open up to having employees in addition to contractors, and looked at what our ideal longer-term staff resource might look like. This will be an objective for the new leadership to implement.

At present, we have vacancies for 3 long-term 75-100% FTE contractor positions:

- A Software Engineer
- A Systems/Network Engineer
- An Office Administrator

All of these roles are on a remote/WFH basis so can be based anywhere, though the Administrator at least needs to be local to OARC's Indianapolis, USA office.

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.

3   **New Members**

Please join us in welcoming the following OARC new Members and upgrades in the last 5 months:

- **PANDI** (Indonesia ccTLD) as a new Blue Member
- **Honest Consulting** as a new Blue Member
- **Double Shot Security** as a new Blue Member
- **Microsoft** have upgraded from Bronze to Silver Membership
- **NS1** have upgraded from Bronze to Silver Membership

If you'd like to spread the word about the benefits of OARC Membership, you may find our Brochure and Briefing documents useful. 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 and/or would like to upgrade your membership or donate to support our mission and the DNS community.

4   **Software Development**

During 2020, we took on a larger than usual number of externally-funded open-source software development projects, in an intentional effort to keep OARC financially secure through uncertain times. While this was highly successful, and we have now delivered on all these projects, it did somewhat over-commit our development capacity, which led to some routine software maintenance tasks getting less attention. We're now back in a more regular situation, and while we're still open to further development projects in 2022, we won't be taking on quite such a big commitment going forwards.

4.1 dnsperf DNS-over-HTTPS

This project, funded by the Mozilla Open Source Support (MOSS) program, and the **Comcast** Innovation Fund, has now been completed with release v.2.7.0 of *dnsperf*.

4.2 DSC/Grafana "crash" course

Jerry has been running a number of interactive workshops on how to integrate OARC's Domain Statistics Collector software (*DSC*), with InfluxDB and Grafana using *dsc-datatool*. These have been open to groups of individual Member attendees, or can be run for a group from the same Member by arrangement.

See Jerry's separate report and upcoming AGM presentation to find out about other tools new releases, more about our Software Engineering activities, and also news about member software projects of interest.

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, receive a discounted rate depending on membership tier.

5   Systems Engineering

5.1 DITL 2021 and Dataset Policy Changes

Our annual "Day In the Life" of the Internet data collection took place in the spring, and we are once again grateful to all the root and other operators that collected and submitted data. While new hardware purchased for the new data store made this process much smoother than last year, we ran into growing challenges with post-processing the uploaded data, with the operation of converting "raw" uploaded data into a researcher accessible "clean" format taking more months than previous collections. This is down to a number of factors which are becoming a trend over the past years, such as more diverse collection technology at contributors, and the increasing using of PCAP uploads synthesized from in-house data-collection formats/platforms. This creates a need to work with the contributors to resolve anomalies, a time-consuming task requiring manual intervention.

We therefore took the policy decision from 2021 onward to instead make the "raw" datasets available as soon as all uploading completes for a given DITL collection, with appropriate caveats on data quality, and to make "clean" datasets available on a per-contributor basis as soon as they are processed. We will also be taking steps from 2022 onward to gather better quality metadata for DITL contributions (see Matt's Systems Engineering report for more details).

In the meantime, we will be working on finishing the post-processing of the 2021 dataset, and would welcome help from researchers and contributors to achieve this promptly.

5.2 New Data-store

There have been many conflicting demands on Matt's finite time over the past 18 months, and it is also clear that we vastly underestimated the amount of effort required to implement the new CEPH-based Data Store project that was initially proposed 2 years ago. While not wholly under our control, it is a matter of significant regret that a year after acquiring the hardware, this is not yet fully operational. There have been numerous externalities which have delayed this, but no escaping we simply need more systems engineering resource. We are sorry for the inconvenience, delay and our failure to meet expectations, which I take full responsibility for.

We are however very close to completion of this project – all the hardware is installed, commissioned, and with software deployed, we are just in the final phase of configuring and integrating the cluster, and aim to go live before the end of the year.

6   Financial, Administrative, Legal

OARC's 2020 Financial Statements have once again been given a clean bill of health by our auditors, and you can find these together with various AGM documents here. Despite the macro-economic strangeness, it was an exceptionally good year for OARC, with strong continued support from our existing Members, and a record amount of grant-funded project development work. This pattern continued into 2021, and has allowed us to make significant contributions towards OARC's financial reserves. Our budget did plan to spend some of our revenue-growth on additional personnel, but as mentioned above it's proving a challenging hiring environment, and we've not succeeded in that so far. We should however be able to make a further capital investment in our infrastructure next year and purchase a new analysis server cluster.

The Privacy Committee continues to meet with the aim of modernizing our approach to data-sharing in the Participation Agreement, and will be reporting on progress, including a Committee Charter, during the AGM.

Our Member Portal has had various incremental enhancements over the past year. Further work is planned during Q4 2021 to make it easier for Members to maintain up-to-date contact information, and to be able to reach out to each other when operational and other situations make this important.

OARC's Mattermost-based chat platform continues to grow in popularity, and we are now supporting per-vendor channels for OARC Members who offer services/products. Please note these are intended for community outreach only, and not to be used for paid-for support or commercial sales activities.

There has been reference at various points over the past 18 months to a 3rd-party legal case OARC has got entangled in. While this matter has yet to be formally closed, various developments related to this have surfaced in recent media coverage of US Federal and civil cases involving other parties, and our understanding from our lawyers is OARC is unlikely to be further caught up in this.

7   **Future workshops**

As 2021 progressed, our hopes that the last quarter of 2021 might allow a round of hybrid industry meetings faded, and the decision was taken that all our 2021 events, including the AGM and our Fall OARC36 workshop, should remain fully online. OARC36 will be a 1½ to 2-day workshop, taking place on the 29th and 30th November. The CFP closed on 15th October, and although we have another strong slate of content, there may still be room for some late-breaking/lightning talks. Registration for OARC36 will open during the AGM, and you can find out full workshop details at:

   https://www.dns-oarc.net/oarc36

For 2022, we remain committed to physical event space for OARC37 co-located with NANOG84 in Austin, Texas, in February, and the plan is to run this as a hybrid online/in-person event. Assuming the pandemic continues to recede as 2022 progresses, we are hoping that OARC38 in May will see us resuming to co-location with the annual ICANN IDS event, and to co-locate OARC39 with RIPE85 in a year from now.

Whether our workshops are online, hybrid and/or in-person, 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 sponsorship of OARC35a and OARC36.

Keith Mitchell
OARC President

October 2021