



OARC 29 & 39th CENTR-Tech Workshops, Amsterdam 13-14 October 2018



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DNS-OARC Status Report

**Keith Mitchell, President
OARC29
October 2018**

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*



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2018 Achievements

- Special DITL for Root ZSK size increase
- Verisign funding of RSSAC DNSCAP anonymisation
- *drool* DNS Replay Tool inspired development and release of *dnsjit*, funded by Comcast
- Engaged new Systems Engineer
- Record >10TB DITL 2018 data gathering completed
- Added 125TB storage capacity and 2 new servers



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2018 Achievements

- First workshop in Caribbean region
- New workshop registration charging scheme
- Conduct Policy
- Major upgrade to Indico conference platform
- Implemented new Member portal website
- Board Director election and anti-capture changes
- Finances YTD tracking budget break-even target
- Diversified banking arrangements



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2018 Challenges

- Almost net zero growth in paying new Members
- Unexpected Systems Engineer change-over
- Significant problems with existing bankers
- Banking now split across two providers, migration painful & time-consuming
- Costs have however been contained to track below-budget revenue



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Welcome New Members!

(since OARC28 - May 2018)

Participant

Level

CoxCom

Silver

GoDaddy

Bronze

auDA

Bronze

Quad9

Blue

RNIDS

Blue

Nimbus

Supporter

DISA

Supporter

Double Shot Security

Supporter

Member Non-Renewals

(since OARC28 - May 2018)

Participant

Level

Nominum

~~Bronze~~

(acquired by Akamai)

Beijing Internet Institute

~~Bronze~~

TU Delft

~~Bronze~~

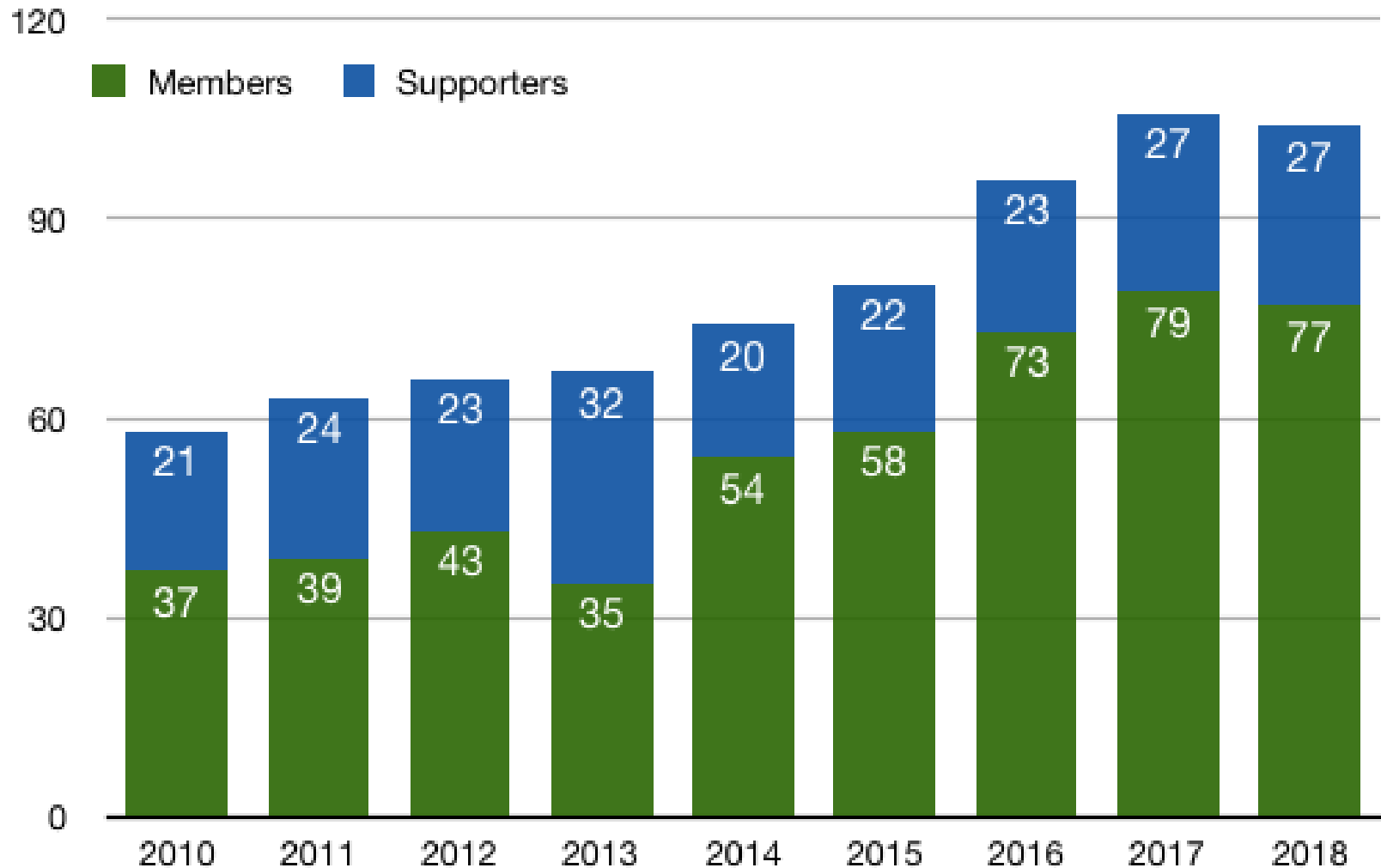
Sinodun

Blue

Secure64

~~Supporter~~

OARC Members and Supporters Growth



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Membership Challenges

- We lost 6 **Bronze** Members at end 2017, and have found it difficult to sign up new paying Members for much of 2018
- Those losses seem to have been a one-off, but too early to say if dry period for sign-ups is ending
- Despite strong macro-economic conditions, tech industry structure is changing with much M&A and investor activity, privacy concerns
- We have identified and reached out to some less-engaged “at-risk” Members
- Workshop sponsorship is also more challenging to secure
- Supporters who do not contribute require pro-active policing



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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



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2017-8 OARC Board

- Jacques Latour, *CIRA*, Treasurer
- David Lawrence, Director
- George Michaelson, *APNIC*, Director
- Ondřej Surý, *ISC*, Director
- Jaromír Talíř, *CZ.NIC*, Director
- Duane Wessels, *Verisign*, Chairman



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2018 OARC Programme Committee

- Piet Barber, *Verisign*
- Ray Bellis, *ISC* (Chair)
- Anand Buddhdev, *RIPE NCC*
- Ralph Dolmans, *NLnet Labs*
- Robert Edmonds, *Fastly*
- Shumon Huque, *Salesforce*
- Ricardo Schmidt, *UPF*
- Jacques Latour (OARC Board Liaison)



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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) 1.0 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



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OARC Office

- OARC needs a physical address of record for mail
 - Banks, tax etc getting increasingly picky about this
- Also place to store our paper archives, gear
- *c/o PIN Bureau*
Suite 101 #5
325 S College Ave
Indianapolis
IN 46202, USA



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OARC Banking

- Due to auditor recommendation, and issues with our existing provider, we have switched much of our banking to different provider
- Wire transfer payments go to new bank & account
 - please inform your accounts department
- Checks should still go to Belmont, CA address
- We can now accept direct credit card payments 😊



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OARC Membership Categories

Category	Contacts	Annual
Supporter	1	\$0
Blue	2	\$1k
Bronze	3	\$6k
Silver	5	\$9½k
Gold	8	\$14k
Platinum	10	\$25k
Diamond	18	\$50k

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



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OARC Strategy 2017→

- OARC's current strategy appears successful
 - needs enhanced rather than overhauled
- No longer run OARC at deficit to achieve growth ✓
- Adjust Membership and Workshop fees to changing market conditions ✓
- Consult and Engage Members ✓
- Develop more structured methodology for workshop selection ✓
- Leverage Board/Officer resources including via working groups
- Data Privacy needs further work
- Role in incident/operational security is as facilitator rather than actor
- Prioritize opportunities by (1) Revenue (2) Reputation (3) Relevance ✓



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OARC's Value Proposition

Member testimonials from Survey (Thank You !):

"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."



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OARC Workshops

- Feedback from multiple Member surveys indicates strong preference for:
 - 2 workshops per year, 1½-2 days long
- Co-location with RIPE/NANOG/ICANN/IETF meetings:
 - saves attendee time and \$\$\$\$ costs
 - demands more OARC resources to plan and host
 - more expensive venues
 - better connectivity
- Sponsor and Patron support helps a lot !
 - <https://www.dns-oarc.net/workshop/patronage-sponsorship>



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OARC Workshops

- Registration charging introduced for all attendees for OARC29 to address above challenges
- New Registration charging policy:
 - Complimentary, Discounted, Standard, +Late
- Appears to have worked well for OARC29:
 - Attendee numbers not notably impacted
 - Fees covered 60% of workshop expenses, at premium venue
- **Thank you** for your strong support in making OARC workshops more sustainable
- This will be model for future workshops, may vary where we have costs covered primarily by Host organizations

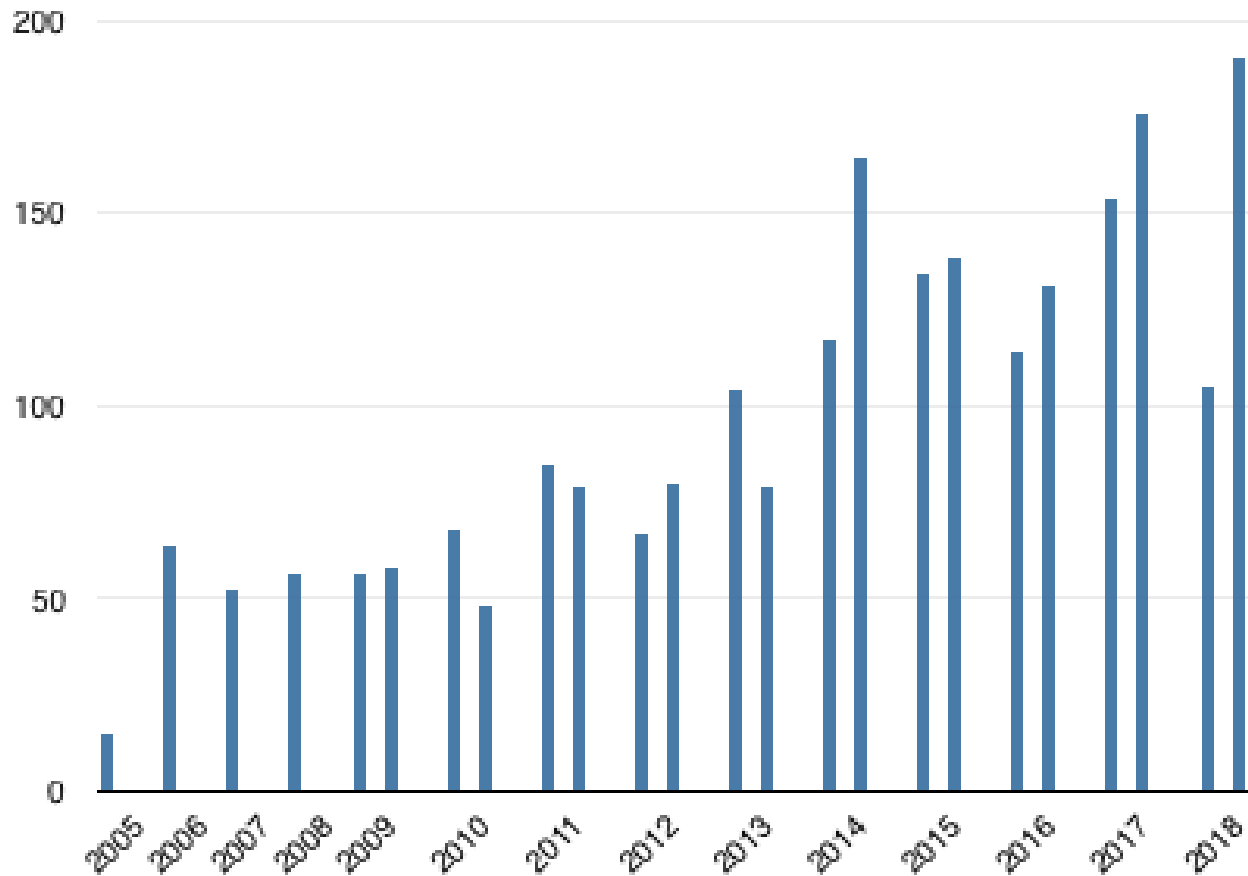


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Workshop Attendance

DNS-OARC Per Meeting Attendee Growth



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2019 OARC Programme Committee

- A number of our existing PC members have reached their 3-year term limit
 - Thank You !
- Board will select 2019 PC during Q4 2018
- Please let us know if you are interested in serving !
 - nominations to [*<pc2019@dns-oarc.net>*](mailto:pc2019@dns-oarc.net)
 - by 9th November



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Future Workshops

- OARC30
 - May 12/13th 2019
 - Bangkok, Thailand
 - Hosted by ICANN, co-located with GDD, ROW, IDS
- OARC31
 - Oct 26/27th 2019
 - Austin, Texas
 - Co-located with NANOG77 and ARIN44



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Things we could do

- Round-table working operations discussions
- Poster sessions at workshops
- Increase analysis capacity
- Migrate storage to cluster architecture
- C-DNS DITL uploads
- ELK query analysis engine
- Suggestions, Pony, ??



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2019 Plans

- New Member Portal into service during Q1
- Modernize/automate systems management
- Further funded software tool development
- Upgrade analysis capacity/cluster
- Enhance storage architecture
- Privacy Policy
- Bi-annual Board retreat during Q1
 - possibly also staff all-hands



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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



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Questions ?



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