AGM 2023
12 October 2023

Engineering Report

Jerry Lundström, Matt Pounsett, Michael Baer

🖥 Systems
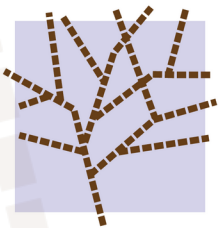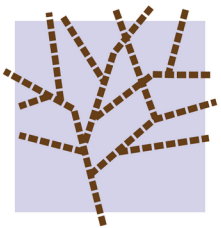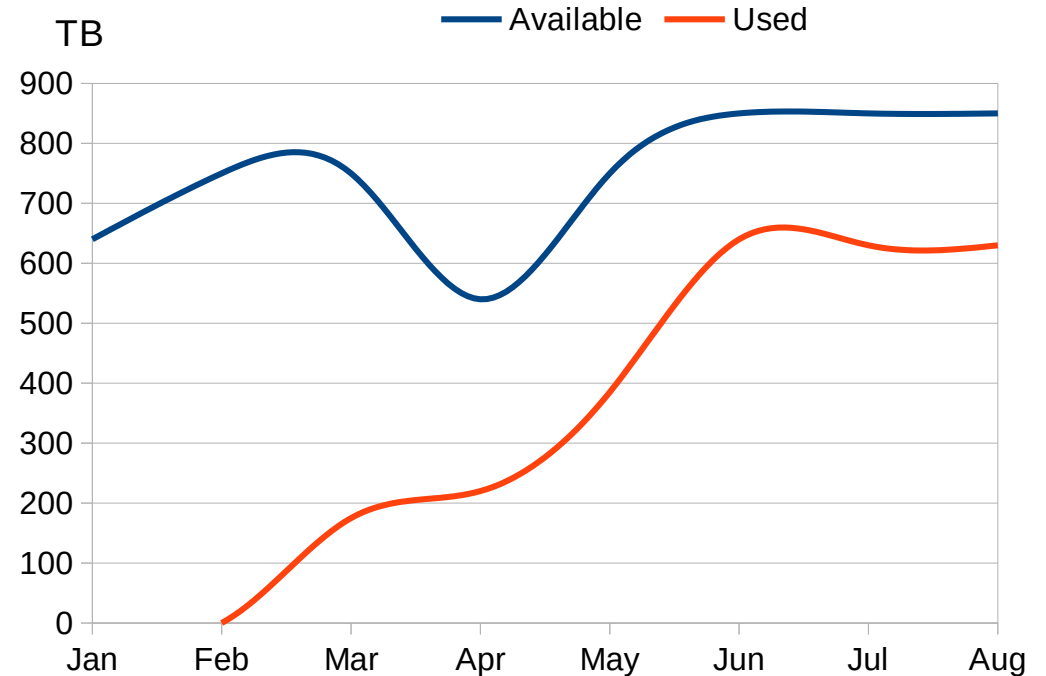
Ceph Cluster

- NFS copied to Ceph
  - pool9 + DITL 2023 available now

- Adding capacity Q423

- Ongoing data recovery from offline systems

TB

Available   Used

900
800
700
600
500
400
300
200
100
0

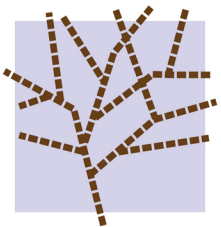Jan   Feb   Mar   Apr   May   Jun   Jul   Aug

DNS-OARC
Domain Name System Operations Analysis and Research Center

Operations, DITL

- Significant amount of work in datacenters

  – New hardware replacement budget process

- Rolling out config management (Saltstack)

- DITL 2023: 12TB (raw available now)

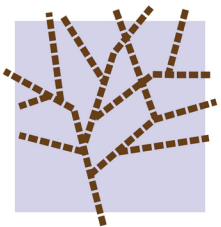 – Seeking input from researchers!

DNS-OARC
Domain Name System Operations Analysis and Research Center

MastoDNS.net

- Launched early 2023

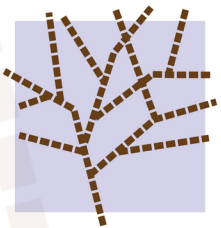- 57 users, 796 statuses, 6431 connections

- Home of @diffroot bot

DNS-OARC
Domain Name System Operations Analysis and Research Center
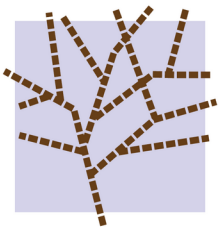
🛣 Network

DNS-OARC
Domain Name System Operations Analysis and Research Center

Routing Improvements

- Configuration cleanup – <u>DONE</u>

- Acquire new hardware – <u>DONE</u>

- Moving into production mid November**!**

  - Redundant transit, more peering**!!**

 - Should solve most of DNSViz IPV6 routing issues**!!!**

DNS-OARC

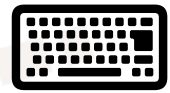Domain Name System Operations Analysis and Research Center

AS112.net

- Completely redeveloped website
  - Modern, device friendly design
  - Operator listing in JSON, support multiple instances
  - Prepped for future enhancements like automated surveys, over-time site statistics to detect issues etc

- Funded by the American Registry for Internet Numbers (ARIN), Community Grant Programme
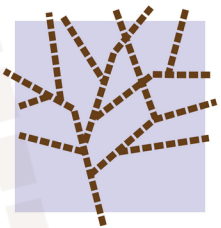
DNS-OARC
Domain Name System Operations Analysis and Research Center
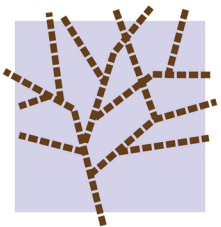
8
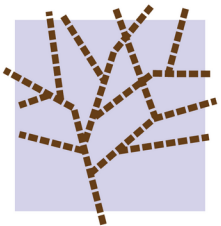
⌨ Software

DNS-OARC
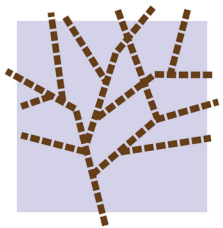Domain Name System Operations Analysis and Research Center

Releases

- 22 open source releases

- 4 Portal releases

- 220+ issues and pull requests

- github.com/DNS-OARC

DNS-OARC
Domain Name System Operations Analysis and Research Center
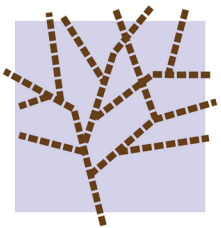
DSC Grafana + Hackathon

DNS-OARC
Domain Name System Operations Analysis and Research Center

🐱 Upcoming! 🐱

- New project related to DITL data started!

- Build a prototype for processing DITL data:
  - Use modern, extendable Big Data systems
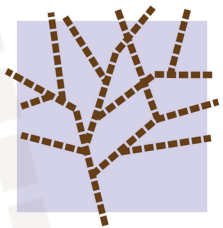 - Use structured query language for analysis

- Test ready within a year!

DNS-OARC
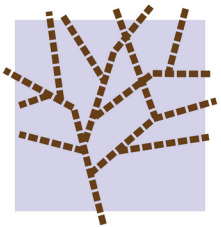Domain Name System Operations Analysis and Research Center

Questions?

DNS-OARC
Domain Name System Operations Analysis and Research Center

Contact Info

- Email:
  - jerry@dns-oarc.net, matt@dns-oarc.net, mike@dns-oarc.net

- Mattermost: https://chat.dns-oarc.net
  - @jelu, @matt, @mikeb

DNS-OARC
Domain Name System Operations Analysis and Research Center