Overview of OARC's Software Tools Suite for DNS Data Capture, Analysis and Sharing

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.

OARC's mission includes particular focus on promoting and facilitating DNS research with operational relevance through data collection and analysis, enabling co-operation and collaboration between the researcher and operator communities, and providing useful services and tools for responsible sharing of information.

This presentation will give an overview of OARC's extensive suite of software tools for DNS data gathering, sharing and analysis, including recent efforts to refresh, consolidate and update these tools to modern development platforms and practices.

Potential Topics:

- A new Presenter for DNS Statistics Collector (DSC) using Grafana
- Ownership changes and fixes to the DNSCAP packet-capture tool
- Use of pcap-thread in new releases of DSC and DNSCAP
- OARC's new "Check My DNS" Test client resolver platform, including tests for QNAME Minimisation (RFC7816), TCP/IPv6 Connectivity and DNSSEC
- Use of GitHub, Travis CI, Jenkins CI and Coverity Scan for software development and testing
- Available Packages for Debian and Ubuntu with CentOS and Ports in development
- Amendments to OARC's software licensing policy
- Overview of OARC's Dataset and usage policies

Lundström, J., Mitchell K.N.
DNS-OARC