

Panel discussion: DNS Best Current Practices



That 'O' in OARC...



DNS

Operations

Analysis

&

Research

Center

Who participates in OARC



- Software developers & vendors
- Researchers

Operators

Best Common Practices?



Recommended DNS deployment, configuration and operational guidelines

... that a majority of operators agree is beneficial to a robust, reliable and secure DNS infrastructure

Source of these BCPs



- Some are guided by operational experience and measurements
 - They may become configuration defaults, or lead to changes in the protocol
 - They may also influence policy making processes ("what do experts say/do?")
- Some of these guidelines and recommendations are driven by policy
 - NIS2, CRA, US executive order on CyberSec 14144)
- Some originate from best practices in other operational areas
 - e.g.: MANRS

Best Practice Initiatives



Routing:

Mutually Agreed Norms for Routing Security (MANRS)
 https://www.manrs.org/

DNS

- Knowledge-Sharing and Instantiating Norms for DNS and Naming Security - https://www.kindns.org/
- RIPE-823 Resolver Recommendations
 https://www.ripe.net/publications/docs/ripe-823/

Who decides?



- In summary: the community!
- Who is the DNS community? :-)

What can OARC do?



- OARC is the place where these discussions are happening:
 - dns-operations mailing list
 - chat.dns-oarc.net MatterMost server
 - OARC meetings
- Wouldn't be OARC the place to evaluate DNS Best Practices?
 - Proving ground for new ideas and improvements to the DNS
 - Review, refine or retire existing BCPs
 - Draw the line between desirable and recommended practices
 Not all best practices apply to everyone
 - Define the scope zone content affects operations

Outcomes



- Goal of this panel?
 - Does the OARC community believe this is a worthy undertaking?
- Define the scope (ops, systems, network, content)
- Consider existing initiatives (KINDNS, RIPE, MANRS, etc.) to avoid duplicating effort
- Review, validate, categorize, prioritize existing BCPs
 - Improve robustness, resilience and reliability of the DNS

OARC's role - who's "We?"



- Promote discussions around this
 - MatterMost channel?
 - BCP "committee/working group"
 - Panel Session at OARC Meetings
- Support & collaborate with initiatives to measure effect of BCPs
 - Do they have the positive outcomes expected?
 - How do we make them measurable?
 - What metrics do we measure/collect?
 - From where ?
 - By whom ?