Recording Notice

- This is a joint IRTF MAPRG + RIPE MAT-WG meeting managed using IETF tools.
- This meeting session will be recorded and published on the IETF/IRTF YouTube channel: <u>https://www.youtube.com/user/ietf/videos</u>

MAP+MAT Interim Meeting

IRTF Measurement and Analysis for protocols Research Group (MAPRG) and RIPE Measurement, Analysis & Tools Working Group (MAT-WG) Wednesday, August 5, 2020

> MAPRG co-chairs <maprg-chairs@ietf.org>: Mirja Kühlewind <mirja.kuehlewind@ericsson.com> **Dave Plonka** <dave@plonka.us>

MAT-WG co-chairs <mat-wg-chairs@ripe.net>: **Nina Bargisen** <nihbster@gmail.com> Brian Trammell <ietf+ripe@trammell.ch>

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Administrivia

- Charters: <u>https://datatracker.ietf.org/group/maprg/charter/</u> <u>https://www.ripe.net/participate/ripe/wg/active-wg/mat</u>
- Mailing Lists: <u>maprg@irtf.org, mat-wg@ripe.net</u>
 Subscriptions: <u>https://www.irtf.org/mailman/listinfo/maprg,</u>
 <u>https://www.ripe.net/mailman/listinfo/mat-wg/</u>
- Today's slides: <u>https://datatracker.ietf.org/meeting/interim-2020-maprg-01/session/maprg</u>
- Remote participation via WebEx: https://ietf.webex.com/ietf/j.php?MTID=m8506f91d53fc769f2afaaa81c917c0ef

Agenda (part I)

1300 UTC Intro, Overview & Status, 10 mins chairs: Nina (MATWG) & Dave (MAPRG)

MAT: Mechanism and Performance Evaluation of RIPE IPmap Active Geolocation, 15-20 mins Massimo Candela

MAT: Internet Measurements of the COVID-19 pandemic, 15-20 mins Emile Aben, Vesna Manojloivic, Lai Yi Ohlsen

MAT: RIPE NCC Tools Update, 10-15 mins Robert Kisteleki

Intellectual Property Rights (IPR)

The IRTF follows the IETF Intellectual Property Rights (IPR) disclosure rules. This is a summary of these rules as they relate to IRTF research group discussions, mailing lists and Internet Drafts:

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See RFC 3979 (BCP 79) for definitions of "IPR" and "contribution" and for the detailed rules (substituting "IRTF" for "IETF").

Agenda (part II)

MAP: Latency & AQM Observations on the Internet, 15 mins Jake Holland

MAP: Analyzing Security Considerations, 10 mins Mark McFadden

MAP: Packet Latencies in Mobile Network, 15 mins Philipp Bruhn

MAP: MUST, SHOULD, DON'T CARE: TCP conformance in the wild, 10 mins Mike Kosek

MAP: Debogonising 2a10::/12, 15 mins Stephen Strowes

Cache Me If You Can: Effects of DNS Time-to-Live

Giovane C. M. Moura (1) John Heidemann (2) Ricardo de O. Schmidt (3) Wes Hardaker (2) 1: SIDN Labs and TU Delft 2: USC/Information Sciences Institute 3: University of Passo Fundo

ABSTRACT

DNS depends on extensive caching for good performance, and every DNS zone owner must set Time-to-Live (TTL) values to control their DNS caching. Today there is relatively little guidance backed by research about how to set TTLs, and operators must balance conflicting demands of caching against agility of configuration. Exactly how TTL value choices affect operational networks is quite challenging to understand due to interactions across the distributed DNS service, where resolvers receive TTLs in different ways (answers and hints), TTLs are specified in multiple places (zones and their parent's glue), and while DNS resolution must be securityaware. This paper provides the first careful evaluation of how these multiple, interacting factors affect the effective cache lifetimes of DNS records, and provides recommendations for how to configure DNS TTLs based on our findings. We provide recommendations in TTL choice for different situations, and for where they must be configured. We show that longer TTLs have significant promise in reducing latency, reducing it from 183 ms to 28.7 ms for one country-code TLD.

Counterfighting Counterfeit: detecting and taking down fraudulent webshops at a ccTLD

> Thymen Wabeke¹, Giovane C. M. Moura^{1,3}, Nanneke Franken², and Cristian Hesselman^{1,4}

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University of Twente, Enschede, The Netherlands

Abstract. Luxury goods such as sneakers and bags are in high demand.

Papers, slides, videos are posted from IMC 2019 (Oct), PAM 2020 (Mar):

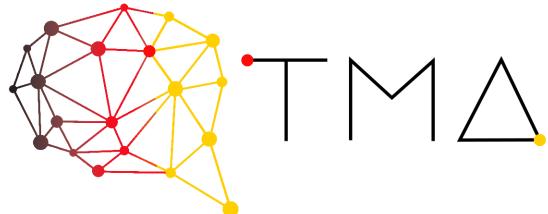
4

https://conferences.sigcomm.org/imc/2019/program/

https://pam2020.cs.uoregon.edu/Program.html

.nl DNS zone. We have developed two detection systems and partnered with registrars and a large credit card issuer, which ultimately led to





Videos are now posted from the Network Traffic Measurement and Analysis Conference - TMA 2020 (June).

Links to papers and videos in agenda: <u>https://tma.ifip.org/2020/main-conference/</u> YouTube playlist: <u>https://www.youtube.com/playlist?list=PL4iXY1PzLoNoKnTqvLWzB4Tdak1Gow93d</u> Coverage and Deployment Analysis of Narrowband Internet of Things in the Wild – Dataset Available

- Two measurement campaigns in Oslo (1.4M) and Rome (51K)
 - Four different scenarios
 - Deep Indoor, Indoor, Outdoor Walking, Outdoor Driving
 - Collected Attributes
 - Timestamps, User and Cell Positioning, ...
 - RSRP, RSRQ, SINR, ...
 - MCC, MNC, CellID, ... (anonymized)
- Complementary LTE measurements
- Interactive Visualization
- Dataset page
 - <u>https://mosaic-simulamet.com/nbiotcoverage</u>
- Paper page
 - <u>https://arxiv.org/abs/2005.02341</u>
 - IEEE Communications Magazine (Internet of Things and Sensor Networks Series)

