

Measurement and Analysis for Protocols

~~Proposed~~ Research Group (maprg)

Seoul, Nov 17, 2016

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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").

Administrativa

- Charter: <https://datatracker.ietf.org/group/maprg/charter/>
- Mailing List: maprg@irtf.org
Subscriptions: <https://www.irtf.org/mailman/listinfo/maprg>
- Today's slides: <https://datatracker.ietf.org/meeting/97/session/maprg/>
- Remote participation
Audio: <http://ietf97streaming.dnsalias.net/ietf/ietf97.m3u>
Meetecho: <http://www.meetecho.com/ietf97/maprg>
Jabber: <xmpp:maprg@jabber.ietf.org?join>

Charter

The *Measurement and Analysis for Protocols Research Group (maprg)* will focus on two topics:

- (1) Discussion of measurements and techniques that would inform *the development, deployment, and/or operation of existing IETF-defined protocols.*
- (2) Presentation of measurement results that inform *same.*

Presentations and work items must be obviously or explicitly “mapped” to those aspects of IETF-defined protocols, existing or works-in-progress.

Recent Related Works

- [Internet Measurement Conference \(IMC\) 2016](#) (this week)
 - *Work-in-Progress, Tools, and Datasets* (WIP) session (was Mon)
 - <http://conferences.sigcomm.org/imc/2016/wip.html>
 - *A New MAP: Measurement and Analysis for Protocols Research Group* (presented by David Plonka)
 - *Tunneling for Transparency: A Large-Scale Analysis of End-to-End Violations in the Internet* (T. Chung et al.)
 - *Understanding On-device Bufferbloat for Cellular Upload* (Y. Guo et al.)
 - *TLS Proxies: Friend or Foe?* (M. O'Neill et al.)
- RIPE 73
 - *A Multi-Perspective Analysis of Carrier-Grade NAT Deployment* (P. Richter): <https://ripe73.ripe.net/archives/video/1244/>

Please help contributing...

... by presenting interesting measurement results

- new measurement studies
- evaluation of existing data sets

... by telling other people that have presented interesting measurement results elsewhere about maprg

... by letting the chairs know about interesting presentation and work you've see (and w'll contact the respective people)

We also have a mailing list...

Please use our mailing list to announce your work!

- New measurement results or findings
- Planned and on-going measurements studies (for others to contribute)
- Information about existing or new measurement platform and tools

Goal: Provide a forum to match up people that have data with people that need data

Post on the mailing list or let the chairs know if you belong to one of these categories!

Call for Contributions

- For this meeting we've sent an Call for Contribution (as an experiment)
 - Requesting an abstract with early deadline (4 weeks before meeting)
 - 6 contribution submissions
- Focused this time on measurement results
 - leading to three 25 minute presentations, and
 - offered 5 minutes announcement talks on measurement platforms and methodology: 1 presented today (and 2 one next slides)
- Still open what we do for the next meeting
 - Please provide feedback what you like to see!

AIMO: African Internet Measurement Observatory

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AIMO will involve the design and deployment of a large-scale Internet measurement testbed and data analysis platform for Africa

AIMO is focussed on collecting and analysing Internet-centric data

Collect data from diverse data sources across Africa

Network topology, usage, economic information, service availability etc.

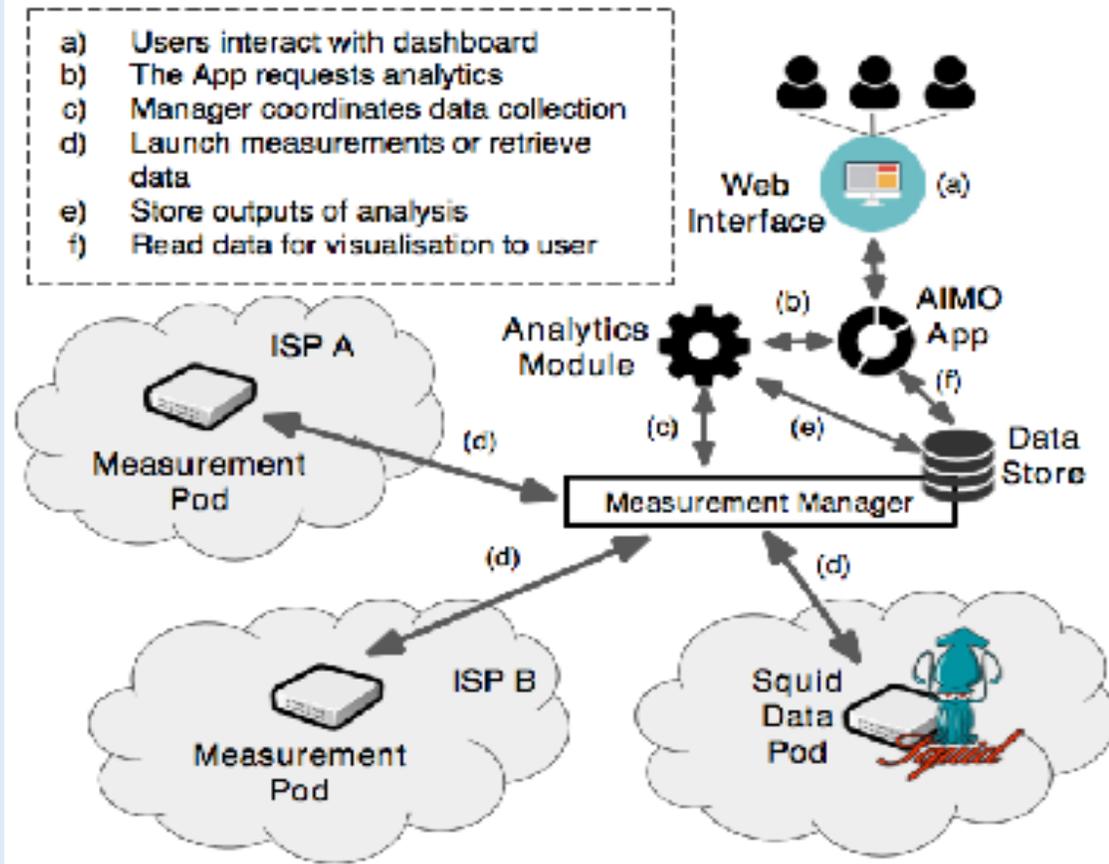
Reusing existing datasets and testbeds

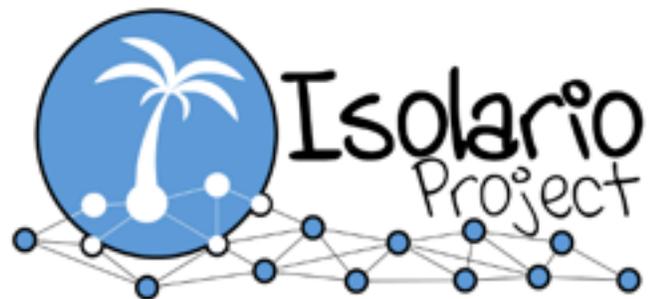
Fuse and analyse the collected data

Allow anybody to create analytic services that are “plugged” in and shared between users

Offer bespoke visualisations via an easy-to-use web interface

Input to both the IETF and IRTF (e.g. protocol performance, IPv6 deployment status etc)





www.isolario.it

- Isolario is a **route collector** project based on the **do-ut-des** principle
- We offer **real-time** monitoring services on BGP sessions **in change of** BGP data
 - IP space reachability, alerting system (e.g. BGP attributes, hijack), flow viewer,...
 - All we require is at least one (full route) BGP session with our route collectors

- Collected BGP data is publicly available in MRT format on our website
- We are open to any kind of collaboration

The screenshot displays the Isolario web interface. At the top, there's a table titled 'No Feeder' with columns for 'Name' and 'ASpath'. Below it, a detailed view of a BGP session is shown, including 'Average AS-Path Length: 6.070', 'LAST MAX' and 'LAST MIN' sections, and a list of IP addresses. On the left, a pie chart labeled 'ASW Public' shows the distribution of public IP space. On the right, a line graph titled 'Future evolution' shows trends for 'Autonomous Systems', 'ASes', and 'Prefixes' over time.

New feeders are very welcome!

To participate contact us at info@isolario.it

Agenda

9:30 Introduction & Overview

Mirja Kühlewind, 5min

9:35 The African Internet Measurement Observatory (AIMO)

Amreesh Phokeer, 5 min

9:40 Video at the Edge: A Measurement Study

Kathleen Nichols (remote), 25 min

10:05 Traffic Policing in the Internet

Yuchung Cheng and Neal Cardwell, 25 min

10:30 H2 performance analysis in cellular networks

Moritz Steiner (remote), 25 min