

Human Rights Protocol Considerations RG meeting
July 19, 2018
IETF 102

Scribe: Allison Mankin
Note taker: Beatrice Martini

Proposed Agenda HRPC IETF 102

- Research Group status (5 min)
- Update from the Hackathon (10 min)
- Talk by Roya Ensafi - "Ethical Concerns for Censorship (and risky) Measurement (45 Min)
<https://censoredplanet.com/>
- Draft update (20 min)
 - Update/discussion on draft-irtf-hrpc-anonymity
 - Update/discussion on draft-tenoever-hrpc-association (Gisela, Niels)
 - Update/discussion on draft-tenoever-hrpc-political (Niels)
 - Update/discussion/discussion on implementation of 451 (Shivan)
- HR & Architecture for IoT Devices (Gurshabad)(15 min)
 - * draft-ietf-suit-architecture-01
 - * draft-moran-suit-manifest-02
 - * draft-ietf-suit-information-model-01
- Human Rights Review Team (Niels)(15 min)
 - Update on any drafts under RFC8280 considerations review
 - Update/discussion on draft-irtf-hrpc-guidelines
 - Early impression of usefulness of RFC8280 for the task
- Open Discussion
- AOB
 - draft-ietf-uta-smtp-require-tls

Status of Research Group

- Niels leaves role of co-chair.Thanks!
- Mallory joins as co-chair. Thanks!
- 2 RG drafts in progress
 - anonymity
 - guidelines

Apologies from Avri re missing meeting notes from the last meeting. Avri will re-organize and share them soon.

Talk by Roya Ensafi - "Ethical Concerns for Censorship (and Risky) Measurement (45 Min)

Summary:

"Active network measurement, and active measurement of censorship in particular raise important ethical considerations. As a result, researchers are often confused on how to assess the safety of their measurement (or the risks they impose). In this talk, through a series of case studies, I will showcase various ethical questions and challenges that measurement researchers from academia and civil society have encountered. Based on my experience working on many censorship projects and wrestling with such questions, I provide a series of recommendations.

Finally, I will introduce censoredplanet, a system for continuously monitoring global Internet censorship that uses novel remote measurement techniques to detect instances of interference almost anywhere on the Internet without end-user participation."

<https://censoredplanet.com/>

Slide deck:

<https://datatracker.ietf.org/meeting/102/materials/slides-102-hrhc-ethical-scale-and-continuity-concerns-for-censorship-measurement-00>

- Why/ How To Measure Internet Censorship?

- Project shout out: OONI: Open Observatory of Network Interference <https://ooni.torproject.org/>

- Measuring Internet Censorship Globally...Remotely!

-- Problem: Can we identify intermediary machines that arguably constitute "infrastructure" to reduce risk for volunteers?

-- Spooky Scan: project that uses TCP/IP side channels to detect whether a user and a site can communicate (and in which direction packets are blocked)

-- Augur: is a follow up system that uses the same TCP/IP side channels to detect blocking from off-path

Q Theresa E: Have you had problems with the state firewall? Would you get false positives?

A: Spooky Scan: we use it to measure censorship at the national level. You can eliminate false positive, if the connection is controlled.

Q Marcelo Bagnulo/ Stephane Bortzmeyer: Ask details about the technique

A: Answers coming later in the talk :)

Q from Jabber: If QUIC is censored, does it give any indicators at all?

A: No

- Coverage

Challenge: the need of global vantage points from which to measure

Use only infrastructure devices to source probes.

- Continuity

Challenge: Need to repeat measurements over time,

- Running Augur in the wild

Selected 2050 reflectors, and 2134 sites (half selected by Citizen Lab <https://citizenlab.ca/>, half taken from the the Alexa Top-10k)

- Top blocked sites

Questions to analyze the data:

-- Site-to-reflector blocking?

-- Reflector-to-site blocking?

-- How many other servers are blocking content from other regions because they don't see revenue in it?

- Satellite (Iris): is a system that uses DNS open resolvers to detect whether a user can resolve a domain accurately

- Echo protocol to the rescue!

The Echo Protocol, as defined in RFC862 in 1983 by J. Postel, is a network debugging service, predating ICMP Ping. Using the Echo Protocol: An Echo service simply sends back to the originating source any data it receives.

Quack is a system that uses Echo servers to detect whether a keywords/URLs are blocked Goal: scalable, ethical, and statistically robust system to continuously detect application-layer blocking

<https://censoredplanet.com/> is a system that provides a continual and global view of internet censorship

- daily reachability measurements

- data collected and combined with side channels and other network layers

- tools for mapping and comparative analyses across location and time.

Q Rafael: What kind of studies you'd like to do, but cannot do to ethics issues?

A Roy:

Q Niels: Can you give an explanation of how you came to use the Echo protocol?

A Roy: It was 3 years that we were banging on this problem, and wanted a solution to our problem.

Someone told me about Ping. And I thought: This is it!

Uni of Michigan supported this work.

Followup is using HTTP servers that are organizational. We send HTTP requests for google.com for "government of XYZ". To study control measurement / what they respond, to avoid sharing that content

Update from IETF 102 Hackathon (Niels)

- MLS implementations

- 451: great contributions re Drupal plug in from the group in Mauritius

- interviews for the HR Review for QUIC (will talk about it later in the session)

Drafts Updates

draft-irtf-hrpc-anonymity (Stephane)

There are no updates

Avri: Anyone to share comments?

Niels: If you give us info re what kind of input you want, that would help folks to give you comments more productively

Stephane: Any input would be useful.

Stephen Farrell: People think that anonymity means "lets encrypt this and it would be anonymous": we should mention that as well.

Amelia: I would also add text about the concept of anonymity in law (which is about abstraction), which is different from anonymity in computer science (where there are only some cases in which you can achieve it). I have good resources to be used to write this.

draft-tenoever-hrpc-association (Gisela, online)

See slide deck: <https://datatracker.ietf.org/meeting/102/materials/slides-102-hrpc-slides-association-final-00>

Changes overview:

- removed discussion on Internet as association and consequences
- cleaned up conclusion
- edited typos

Methodology:

- Collect a number of cases. Ethnographical approach: this overview does not aim to cover all possible ways in which people can collectively organize or reach out but rather cover typical uses
- Analyze cases with theoretical framework

Conclusions:

- see slides

Authors hope the edits resolve now previous comments.

Is the Research Group ok with proceeding with adoption?

Wendy Seltzer: I didnt find the framing compelling to me, re connection between protocols and association. level of abstraction didnt see quite right.

I shared comments on the list. But cant see what could make it compelling, so I would not spend time to work on it.

Stephane B:

The HRPC has been less productive in the past few months. We should make sure to focus on review work.

Avri:

We are already reviewing 2 drafts. Adding a 3rd is too much work?

We will take the question to the list, since in the room there is no sure answer?

Niels:

I think we already did everything we were asked. What else could be done?

To answer Wendy: this draft has very similar approach to RFC8280, that is the methodology. How would another level of abstraction be possible? The level of abstraction is already in the methodology we adopted.

Avri:

Sounds good. I will check also with the list, but I think we can move along, there are no actual objections.

draft-tenoever-hrhc-political

See slide deck: <https://datatracker.ietf.org/meeting/102/materials/slides-102-hrhc-slides-policial-00>

we want to understand the political aspect of protocols.
Part of this process is political, including economics.

Changes overview:

- Typos
- New abstract
- Tried to create a new structure and flow
- Better signposting for the argument
- Created a new conclusion (thanks Gisela and Mallory for help with edits!)

Where is it going?

- Is there anything missing?
- RG adoption?

Shivan: I think it's time to adopt it. Just some details with the language, but we can take care of it quickly

Stephen Farrell: My comment is "Meh". Not clear what it is for? Maybe I should read it better

Niels: It documents the conversation on "is the tec neutral?"; different positions of technological and sociological determinism; conclusion "The discussion and literature show that in our RG processes we should take this into account"

Stephen: Text is fine. But the conclusion baffles me.

Niels: I think we should see this as modular building blocks.

Stephen: There is tendency to use Drafts and turn them into RFCs and I don't think this should be done with this doc.

Avri: We could adopt it, and it does not necessarily mean that it would become a RFC

Niels: This is a document to create a foundational underpinning. I would NOT add information about how this doc should bring to tweaks and implementations.

Georg Mayer: When I read it I found it useful. I am surprised we are discussing not to adopt it.

Allison Mankin: I hear ppl say "Whats the point?". I wonder, couldn't you do a shorter version of this? Sometimes less is more"

Stephen Farrell: Change the title? I think it is over-stating.

Avri: I will take it to the list, to discuss adoption. But we won't take it to the next meeting.

implementation of 451 (Shivan)

<https://datatracker.ietf.org/meeting/102/materials/slides-102-hrpc-slides-451-00>

Last call: July 30

HR Review Meeting Venue Selection Criteria (Beatrice)

<https://datatracker.ietf.org/meeting/102/materials/slides-102-hrpc-slides-hrreview-marnew-00>

HR Review MARNEW Report (Amelia, Shivan)

- Identified problems and solutions:

- Non-value neutral language
- Mix of technical and regulatory requirements in a non-HR conducive way
- Overlooking positive properties of QUIC. Solution: clarify

Following RFC8280 as structure is very useful.

We receive one very positive comment on our review.

HR Review: Firmware Updates for IoT Devices (Gurshabad)

<https://datatracker.ietf.org/meeting/102/materials/slides-102-hrpc-slides-suit-00>

draft-ietf-suit-architecture-01

draft-moran-suit-manifest-02

draft-ietf-suit-information-model-01

For concerns and recommendations made, see slide deck

Dave Thaler, SUIT WG: Thank you for the review!

We appreciated this a lot, as it came early in our process. More work for our reviewers, but that's greatly productive!

Making recommendations can sometimes be tricky, bc you might recommend something that would be difficult to implement. Discussing with WG folks is great!

HR Review (in progress): QUIC protocol (Beatrice)

see slides: <https://datatracker.ietf.org/meeting/102/materials/slides-102-hrpc-slides-hrreview-quic-00>

Time is over, ran through the presentation.

Chair suggests to start from this at the next meeting.

AOB: draft-ietf-uta-smtp-require-tls

No time for it :(

