IETF 118, Prague 2023 - Report with Pictures

Prague, November 4 - 10, 2023 https://www.ietf.org/how/meetings/118/ https://datatracker.ietf.org/meeting/118/agenda

Vesna's Goals & Achievements

- learn about the way the ITF does hackathons &
- learn how IETF does: diversity, inclusion, equity...
- participate in the hackathon!
 - listed on the slides for the project presentation
 - got added to the draft
 - connected Marisol with NCC colleagues
 - made a new collection: https://wiki.techinc.nl/

Sustainability

- plan future hackathon for NCC
 - sustainable networking : with Cisco, APNIC, NANOG?
- get participants for Local Hub in Amsterdam (or other places)
- work on/learn more about my topics of interest: mainly sustainability (climate justice),
 - plus federated protocols (activity pub & email <-> DNS), alternative networks (social justice)

Plans for the future:

- take part in BIAS workshop!
 - submit proposal by... (deadline)
- attend all 3 IETFs remotely in 2024 (via Local Hubs?); attend Madrid IETF in 2025 & Vienna in 2026!
- persuade RIPE NCC leadership that sustainability is an important topic for us & RIPE Community!
 - make sustainability cooperation bigger & official part of my work!

Example Job Descriptions: "sustainability advisor", Sustainable Internet Lead (Mozilla Foundation), PO for (Network) Sustainability Insights (Cisco)

Sun 11/5

Tue 11/7

Wed 11/8

Thu 11/9

Hackathon

https://wiki.ietf.org/en/meeting/118/hackathon

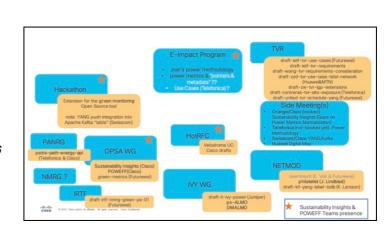
-> Sustainability Insights

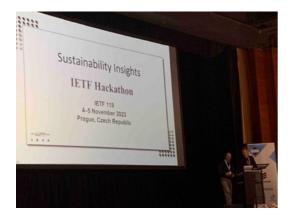
https://datatracker.ietf.org/doc/draft-almprs-sustainability-insights/https://github.com/cisco-open/green-monitoring/tree/main

Marisol from Cisco told me that their talk proposal for RIPE86 was rejected!

and for RIPE87 3 sustainability talks were rejected!!

my contribution: https://wiki.techinc.nl/ Sustainability





Wrap Up

Team members:

Emile, Esther, Gonzalo, Jan, Marisol, Per, <u>Snezana</u>, <u>Ajit</u>, Vesna

Open Source Github project:

https://github.com/cisco-open/green-monitoring

Many thanks to all the people who came by to discuss!

Read more in

- draft-lindblad-tlm-philatelist
- · draft-opsawg-poweff
- draft-almprs-sustainabilityinsights
- draft-kll-yang-label-tsdb-00

IETF Hackathon – Sustainability Insights

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Fri 11/10

Achievements:

- listed on the slides for the project presentation
- will be added to the draft
- connected Marisol with NCC colleagues
- made a new collection: https://wiki.techinc.nl/Sustainability

TODO:

- contribute to the draft via GitHub
- follow up on the connections made between staff & Cisco
- keep updating the collection

Of interest, but I did not join:

-> Streamlining Social Decision Making for Improved Internet Standards (sodestream) (Ignacio Castro, RACI candidate for RIPE87) https://sodestream.github.io

- -> Does Not Scale: Rethinking DNS for the Future of the Internet
- -> SCION

MONDAY, 6 November 2023

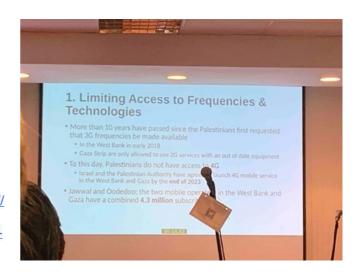
09:30-11:30 Monday Session I

I followed a start of one WG & the end of the other:

Human Rights Protocol Considerations (hrpc) Bohemia 1/2/3

This research group aims to explore the relations between Internet architecture and human rights, and to discuss how human rights and public interest policy are considered in the development of the Internet.

First presentation was about Internet in Gaza, interrupted: https://datatracker.ietf.org/meeting/118/materials/slides-118-hrpc-palestinian-ict-infrastructure-and-its-impact-on-human-and-digital-rights-updated



Decentralization of the Internet Research Group

https://datatracker.ietf.org/meeting/118/materials/agenda-118-dinrg-03

Marc: "A Taxonomy of Internet Consolidation" https://datatracker.ietf.org/doc/html/draft-mcfadden-consolidation-taxonomy ... which pointed to: Centralization, Decentralization, and Internet Standards https://datatracker.ietf.org/doc/draft-nottingham-avoiding-internet-centralization/

I've added them both to my collection: https://wiki.techinc.nl/MeshNet#Consolidation

& then I followed a webinar by... [IP] -> Mike Nelson will walk us through Carnegie Endowment's recent roundtable discussion about "Who's Shaping Our Digital Future—New Developments in Internet Governance"

which pointed me to this book: Digital Empires: The Global Battle to Regulate Technology; Anu Bradford

- Book: https://academic.oup.com/book/46736
- https://blog.oup.com/2023/10/the-three-empires-of-our-digital-world-infographic/

https://datatracker.ietf.org/meeting/118/session/rasprg/

- * 1st presentation mentioned that they received funding by RIPE NCC! Carolina Caeiro (onsite), Internet Standards Tracker
- * https://datatracker.ietf.org/meeting/118/materials/slides-118-rasprg-standards-tracker
 - * https://dnsrf.org/research/isto/
- * https://dnsrf.org/blog/internet-standards-observatory--selected-research-projects-on-internet-standards-and-fragmentation-announced/index.html
- * 2nd: BigBang update
 - * mailing list analysis tool!
- * source: https://github.com/datactive/bigbang // contact: spb413@nyu.edu // https://bigbang-py.readthedocs.io/en/latest/
 - * This should be interesting to Fergal & Data Storytelling circle!!
- * (historically, Mihna & me used it to analyse atlas list...)(May 2016, RIPE72, Bucharest?)
- https://ripe72.ripe.net/wp-content/uploads/presentations/127-BECHA-mat-wg-ripe-atlas-update-RIPE72-v42.pdf
- \star 3rd talk: How to develop standards through. . Consensus decision-making in the IESG: Susan Hares
- * https://datatracker.ietf.org/meeting/118/materials/slides-118-rasprg-hares-consensus-decisions-iesg
- - * "effectiveness in making decisions can be predicted by solidarity"
- * how to improve "solidarity" decision making process: GIVE THEM TIME TO SOCIALISE!!! dedicate funding for that! (because the solidarity is based on trust!)
- * this is very useful for RIPE chairs & working-group chairs !! & for RIPE NCC leadership.
- * 4th Matthew Russell Barnes: Communication Patterns in the IETF.
- * https://datatracker.ietf.org/meeting/118/materials/slides-118-rasprg-communication-patterns-in-the-ietf-matthew-barnes-00.pdf
 - * discussions MOVED AWAY FROM MAILING LSITS ->
 - * interesting comment -> discussions moved to GitHub!!!
- * super interesting for RIPE chairs & working-group chairs !! & Leo Vegoda!
- * Nick Merrill: CDNs and States.
- * https://datatracker.ietf.org/meeting/118/materials/slides-118-rasprg-cdns-states-00.pdf
 - * Death of Tier-1 networks!!
 - * "Inside the Internet" https://scholarship.law.duke.edu/dlj online/101/
 - * USA hegemony!! (@@@image) with red bars :)
 - * question -> DECOLONISING?!?!
 - * https://arxiv.org/pdf/2308.12436.pdf
 - * https://wiki.techinc.nl/Hackers tribes#Decolonising Internet
 - * https://www.rfc-editor.org/rfc/rfc8890
 - * GAIA
- * "What do the states want the Internet to be?" VS "What do the CDNs want Internet to be?!?!" ->
- -> broadening the question -> what do End Users want, what do the communities want, "nothing about us without us" (feminism); what do squirrels want?
 - * neither the state nor CDN -> Malory -> Armenia !!

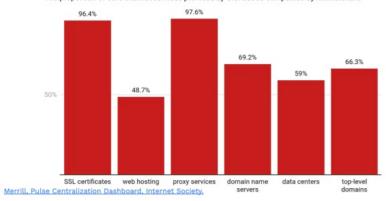
Pretty analysis of RIPE Atlas list



https://github.com/sbenthall/bigbang



The proportion of core internet services provided by U.S.-based companies by marketshare.



Leadership theories for antecedents

- Collaborative and reciprocal leadership: "more adaptable" when "no one person has the solution to a multi-faceted problem" (Allen and co-authors (2010))
- Solidarity An individual who contributes more effort toward a group or person has greater solidarity (Hetcher (1987).
- OCB "discretionary" efforts outside of their normal roles indirectly "or explicitly recognized by the formal reward system, that in the aggregate, promote organizational goals". (Organ, 1997)
- Conflict task and relationship ((Jenn, 1995, 1997), (Jehn and Chatman, 2000))
- Task interdependence the extent to which members rely on others to complete their jobs

Newcomers Social! (part of DEI)



Tuesday

11:45-12:45 Tuesday Break Session

Environmental Impacts of Internet Technology (e-impact) https://datatracker.ietf.org/meeting/118/materials/agenda-118-eimpact-02

This is a meeting related to the IAB E-Impact Program, which is a venue for discussing environmental impacts and sustainability of Internet technology. Within this scope, the program looks at trends, issues, improvement opportunities, ideas, best practices, and subsequent direction of work related to Internet technology, architecture, and operations, including visibility and efficiency on energy and other environmentally-impacting attributes. In particular, the group focuses on Internet architecture's role in these topics

- "Reducing greenhouse gas emissions to address climate change is one of mankind's "grand challenges"
- This challenge also extends to network technology
- How to reduce environmental impact of networks?
- How to make them more sustainable & what can we do at IETF? "

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eImpact Program Meeting Agenda https://datatracker.ietf.org/meeting/118/session/eimpact/
Administrivia - Chairs (5 mins)
Telemetry, Metrics and Data Modeling - Alex & Marisol (25 mins)
      * https://datatracker.ietf.org/doc/draft-irtf-nmrg-green-ps/
            TODO!!! contribute to this draft!!
      * https://datatracker.ietf.org/doc/html/draft-cx-green-metrics-02
      * Question to not be answered: who will PAY for the CO2 emissions equivalent /
pollution?? via tax? & what about water (Mallory's talk?)
      * "This calls for immediate discussion/debate!"
      Comments:
            C1: HOW TO REDUCE ON ALL THE METRICS is a more urgent question!! & what are the
consequences & tradeoffs.
            C2: translate this to $$$ / cost // C6 : do NOT use a "cost" , take holistic
view!! (Ali Rezaki!)
            C3: questioning the premise -> costs of measurements should be reduced too!
Mallory <3
            C4: What are you measuring?? what is the scope??
            C5: where will be the metrics be used? -> what are the use cases! (Ali Rezaki!)
            C7: Core & derived metrics... (Colin Perk..)
            Q: which parts should move towards the standardisation & where?? / which WGs??
SDO Update: HEXA-X-II - Ali Rezaki (5 mins)
      https://datatracker.ietf.org/meeting/118/materials/slides-118-eimpact-overview-of-
existing-standardization-work
      -> add this to my wiki
      -> send this to Chafic
Infrastructure Sharing - Ali Rezaki (5 mins)
https://datatracker.ietf.org/meeting/118/materials/slides-118-eimpact-infrastructure-sharing
      AMAZING -> get back to him = TODO
Beyond Carbon - Mallory Knodel (5 mins)
      SHE MENTIONED ME :)
https://datatracker.ietf.org/meeting/118/materials/slides-118-eimpact-lightening-talk-beyond-carbon
      https://github.com/mallory/draft-beyond-carbon TODO!!! contribute to this draft!!
      https://github.com/mallory/draft-beyond-carbon/blob/main/draft-knodel-beyond-carbon.md
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In the session I've met

- ex-co-chair of RIPE IoT-WG, who said that AFNIC is being requested by their customers to look into sustainable hosting & sustainability reporting.
 - Ali, in person after we've emailed on the list
 - Mallory, who quoted me in her presentation & draft!

15:30-16:30 IAB Open Meeting

Congress Hall 2

In this session, the Internet Architecture Board (IAB) provides a more detailed update on their technical programs, workshops, and current work-in-process architectural guidance documents, and seeks community input. This session will also feature an invited talk on nation-state threats by Sandra Elvin from Microsoft.

E-Impact Program

- Venue for discussing environmental impacts and sustainability of Internet technology
- Targets topics not yet progressed into concrete standards or research efforts in the IETF or IRTF
- Coordination point for work across multiple WGs/RGs
 - o also highlight related/ongoing work at external SDOs
- Open to all participants
 - o Regular virtual meetings with periodic hybrid meetings at IETF
 - o Meetings will be publicly announced
- First in-person meeting was on Tuesday Nov 7, 11:45-12:15, Congress Hall 3
- Join mailing list: e-impact@ietf.org

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Wednesday 17:00-19:00

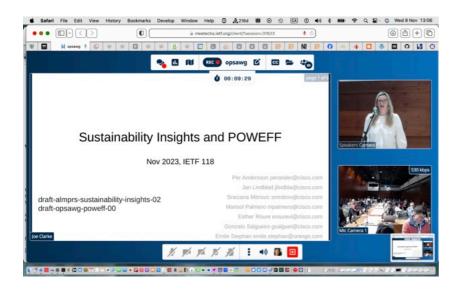
What: OpsAwg Supplemental Meeting

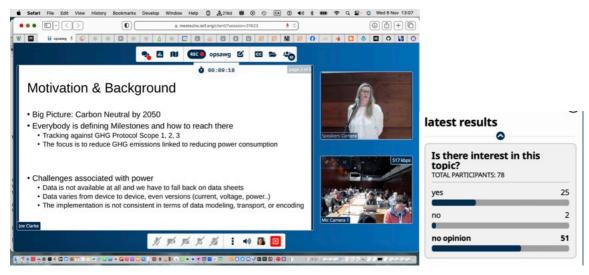
When: 13:00 - 14:00 Wednesday Afternoon Session II, November 8, 2023

Where: Congress Hall 1

Sustainability Insights , Snezana Mitrovic 10 minutes
Drafts: https://datatracker.ietf.org/doc/draft-almprs-sustainability-insights/ & https://datatracker.ietf.org/doc/draft-opsawg-poweff/

https://datatracker.ietf.org/meeting/118/materials/slides-118-opsawg-sessb-sustainability-insights-and-poweff





17:00-18:30 IETF Plenary Congress Hall 1/2

The plenary is the one meeting addressed to the entire IETF community. There are leadership reports about the state of the IETF, as well as "open mic" sessions for community feedback on a broad range of topics.

https://datatracker.ietf.org/meeting/118/materials/slides-118-ietf-sessb-all-slides-ietf-118-plenary

IETF Chair & Internet Engineering Steering Group (IESG) Report Lars Eggert

Keep Ukraine Connected Jan Žorž

Internet Architecture Board (IAB) Report Mirja Kühlewind
Internet Research Task Force (IRTF) Report Colin Perkins
Nominating Committee (NomCom) Report Martin Thomson

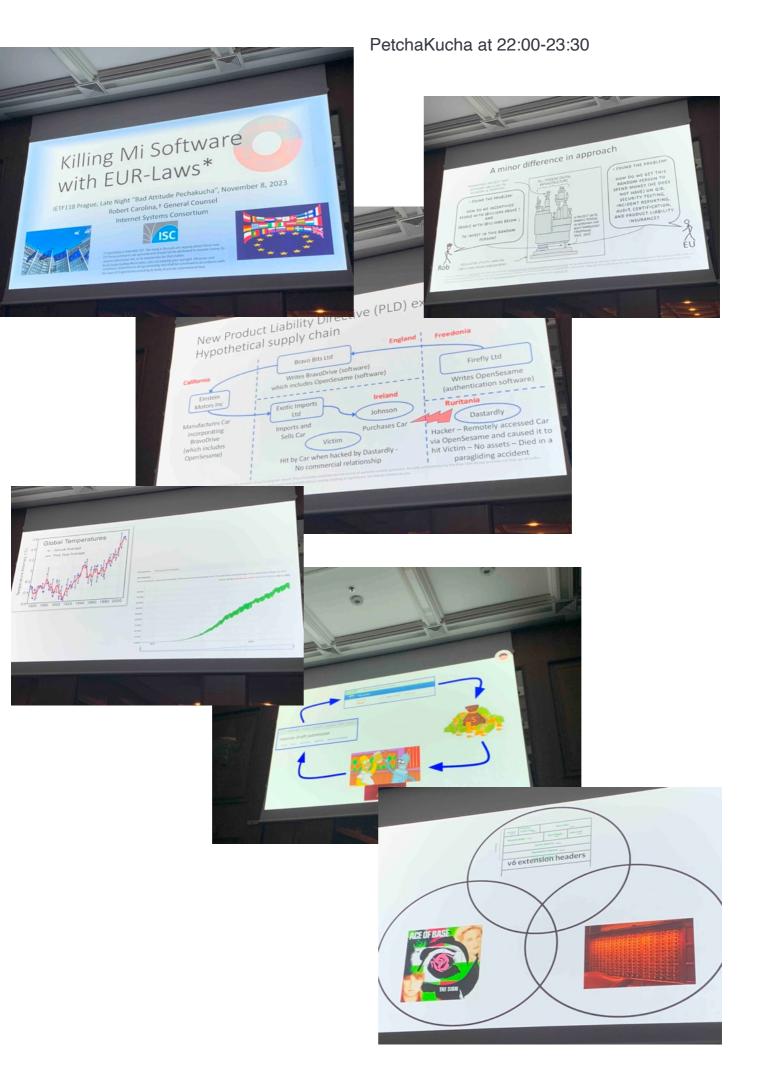
IETF Administration LLC Report Jay Daley, Jason Livingood

IETF Trust Report Glenn Deen

In Memoriam: Vittorio Bertocci Rifaat Shekh-Yusef

Open Mic Session: Internet Architecture Board (IAB)

Open Mic Session: IETF Administration LLC IETF LLC Board Open Mic Session: Internet Engineering Steering Group (IESG)



Thursday

11:30 - 13:00 MLiben 3 Systers Lunch **Liben 3**

- wonderful DEI initiative!
- I've met "sisters within systers" = ex-yu group! Olgica (Dublin), Snezana (?),

Dragana (Vienna)

- TODO**** contribute to the "charter & mission"

17:00-18:30 (online)

IRTF Open Meeting (irtfopen) Congress Hall 1

- interesting: ISPF paper

Routing Area Open Meeting

- again: Susan Hares: https://datatracker.ietf.org/meeting/118/materials/slides-118-rtgarea-presentation-by-susan-hares

Friday

GAIA <3 <3 <3 https://datatracker.ietf.org/meeting/118/session/gaia/

My contributions:

Africa -> atlas, training, NOGs support

ISOC -> adding 5th pilar to resilience - "sustainability"

nmrg Congress Hall 3

14:35 Challenges and Opportunities in Green Networking, Alex Clemm, 10 min

https://datatracker.ietf.org/doc/draft-irtf-nmrg-green-ps/

https://datatracker.ietf.org/meeting/118/materials/slides-118-nmrg-challenges-and-opportunities-in-management-for-green-networking-draft-nmrg-green-ps-01

My contributions: I expressed support.

TODO: CONTRIBUTE to this draft!!



Diversity, Equity, Inclusion (DEI) Insights

Newcomers info: https://www.ietf.org/how/meetings/new-participants/ & ... highlight of some of the Working Group meetings that may be of interest at IETF 118: https://www.ietf.org/blog/ietf118-new-topics/

Free day ticket through "fee waiver programme"

Systers lunch! https://www.ietf.org/about/groups/ietf-systers/ https://www.ietf.org/mailman/listinfo/systers https://datatracker.ietf.org/group/systers/about/

Specific diversity & inclusion sponsors! (while we moved in the opposite direction:() Diversity travel grants for IRTF (see message on GAIA on 21.8.) https://www.irtf.org/how/meetings/registration-fee-waivers/ https://www.irtf.org/how/meetings/registration-fee-waivers/ https://www.irtf.org/travelgrants.html

