IETF 114 Hackathon

23-24 July 2022

This session is being recorded

IETF 114 Philadelphia
hosted by



NBCUniversal

Internet Engineering Task Force
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Welcome back!

- First IETF Hackathon?

Welcome back!

- First IETF Hackathon?
- First IETF event?

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- First IETF Hackathon?
- First IETF event?
- First in-person event since COVID-19?

Why Are We Here

- Advance pace and relevance of IETF standards
  - Bring speed and collaborative spirit of open source community into IETF
  - Flush out ideas, feed into working group sessions
  - Produce sample code, reference implementations, utilities
- Attract developers, new people to IETF
  - Match new, skillful developers with IETF veterans
  - University engagement

Note Well

This is a reminder of IETF policies in effect on various topics such as patents or code of conduct. It is only meant to point you in the right direction. Exceptions may apply. The IETF's patent policy and the definition of an IETF "contribution" and "participation" are set forth in BCP 79; please read it carefully.

As a reminder:

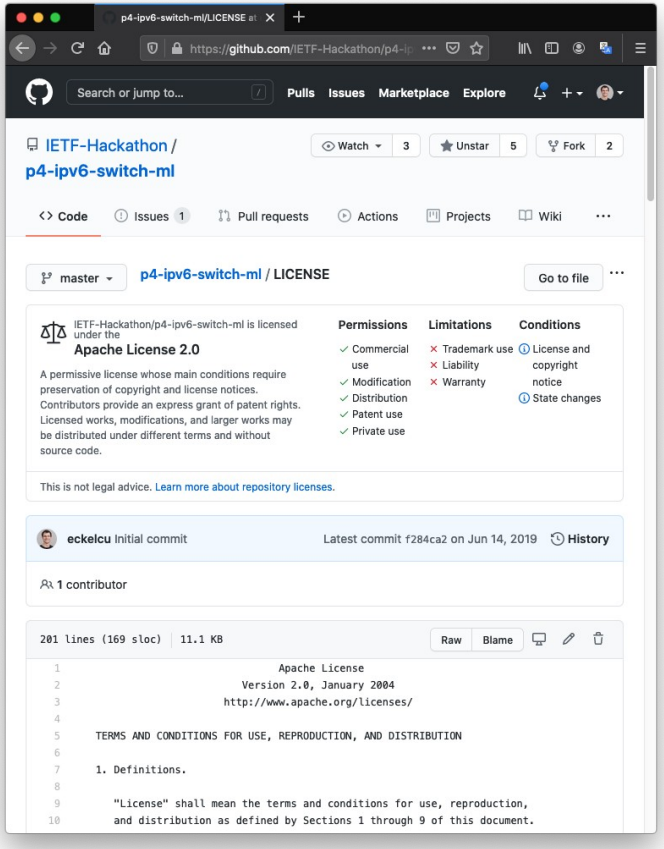
- By participating in the IETF, you agree to follow IETF processes and policies.
- If you are aware that any IETF contribution is covered by patents or patent applications that are owned or controlled by you or your sponsor, you must disclose that fact, or not participate in the discussion.
- As a participant in or attendee to any IETF activity you acknowledge that written, audio, video, and photographic records of meetings may be made public.
- Personal information that you provide to IETF will be handled in accordance with the IETF Privacy Statement.
- As a participant or attendee, you agree to work respectfully with other participants; please contact the ombudsteam (https://www.ietf.org/contact/ombudsteam/) if you have questions or concerns about this.

Definitive information is in the documents listed below and other IETF BCPs. For advice, please talk to WG chairs or ADs:

- BCP 9 (Internet Standards Process)
- BCP 25 (Working Group processes)
- BCP 25 (Anti-Harassment Procedures)
- BCP 54 (Code of Conduct)
- BCP 78 (Copyright)
- BCP 79 (Patents, Participation)
- https://www.ietf.org/privacy-policy/(Privacy Policy)

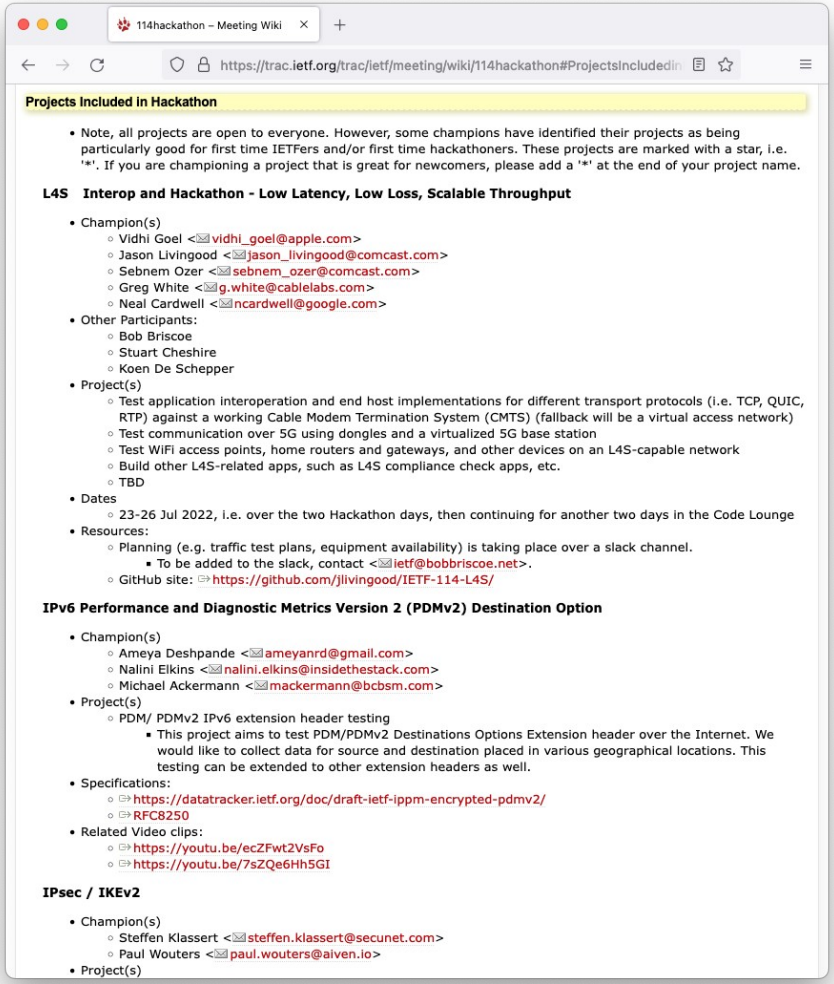
Code Contribution Guidelines

- Participants can work on any code
- Rules regarding code are per participant's organization and the code's license
- The code itself is NOT an IETF contribution
- Discussions, presentations, and demos in Hackathon are IETF contributions. In this context, Hackathon is like a working group, and the usual IETF copyright and IPR disclosure rules apply



Projects

- On the [Hackathon wiki]



114hackathon – Meeting Wiki

https://trac.ietf.org/trac/ietf/meeting/wiki/114hackathon#ProjectsIncludedin

Projects Included in Hackathon

- Note, all projects are open to everyone. However, some champions have identified their projects as being particularly good for first time IETFers and/or first time hackathoners. These projects are marked with a star, i.e. '*'. If you are championing a project that is great for newcomers, please add a '*' at the end of your project name.

L4S Interop and Hackathon - Low Latency, Low Loss, Scalable Throughput

- Champion(s)
  - Vidhi Goel <vidhi_goel@apple.com>
  - Jason Livingood <jason_livingood@comcast.com>
  - Sebnem Ozer <sebnem_ozer@comcast.com>
  - Greg White <g.white@cablelabs.com>
  - Neal Cardwell <ncardwell@google.com>
- Other Participants:
  - Bob Briscoe
  - Stuart Cheshire
  - Koen De Schepper
- Project(s)
  - Test application interoperation and end host implementations for different transport protocols (i.e. TCP, QUIC, RTP) against a working Cable Modem Termination System (CMTS) (fallback will be a virtual access network)
  - Test communication over 5G using dongles and a virtualized 5G base station
  - Test WiFi access points, home routers and gateways, and other devices on an L4S-capable network
  - Build other L4S-related apps, such as L4S compliance check apps, etc.
  - TBD
- Dates
  - 23-26 Jul 2022, i.e. over the two Hackathon days, then continuing for another two days in the Code Lounge
- Resources:
  - Planning (e.g. traffic test plans, equipment availability) is taking place over a slack channel.
    - To be added to the slack, contact <ietf@bobbriscoe.net>.
  - GitHub site: https://github.com/jlivingood/IETF-114-L4S/

IPv6 Performance and Diagnostic Metrics Version 2 (PDMv2) Destination Option

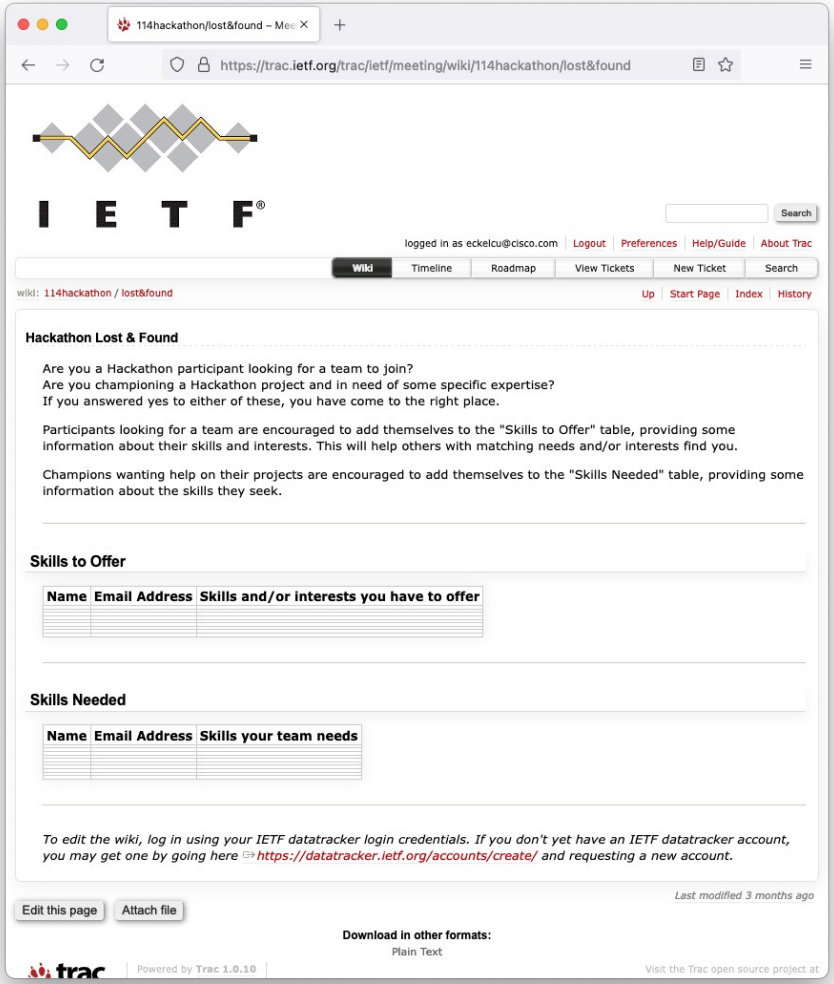
- Champion(s)
  - Ameya Deshpande <ameyanrd@gmail.com>
  - Nalini Elkins <nalini.elkins@insidethestack.com>
  - Michael Ackermann <mackermann@bcbsm.com>
- Project(s)
  - PDM/ PDMv2 IPv6 extension header testing
    - This project aims to test PDM/PDMv2 Destinations Options Extension header over the Internet. We would like to collect data for source and destination placed in various geographical locations. This testing can be extended to other extension headers as well.
- Specifications:
  - https://datatracker.ietf.org/doc/draft-ietf-ippm-encrypted-pdmv2/
  - RFC8250
- Related Video clips:
  - https://youtu.be/ecZFwt2VsFo
  - https://youtu.be/7sZQe6Hh5GI

IPsec / IKEv2

- Champion(s)
  - Steffen Klassert <steffen.klassert@secunet.com>
  - Paul Wouters <paul.wouters@aiven.io>
- Project(s)

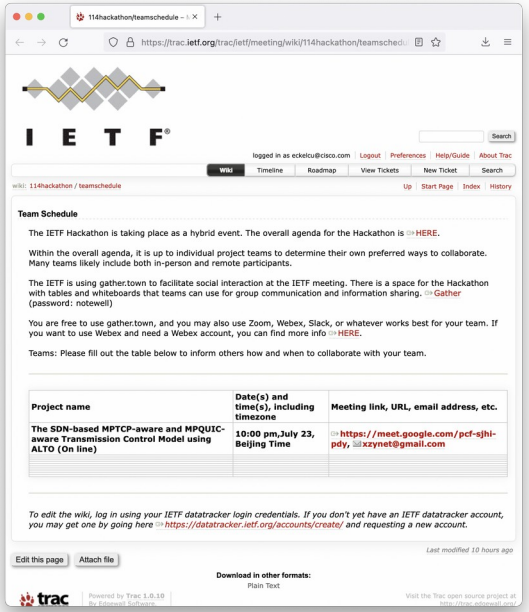
Projects

- On the Hackathon wiki
- Not sure which project to join?
- Check the Lost & Found



Agenda - Saturday

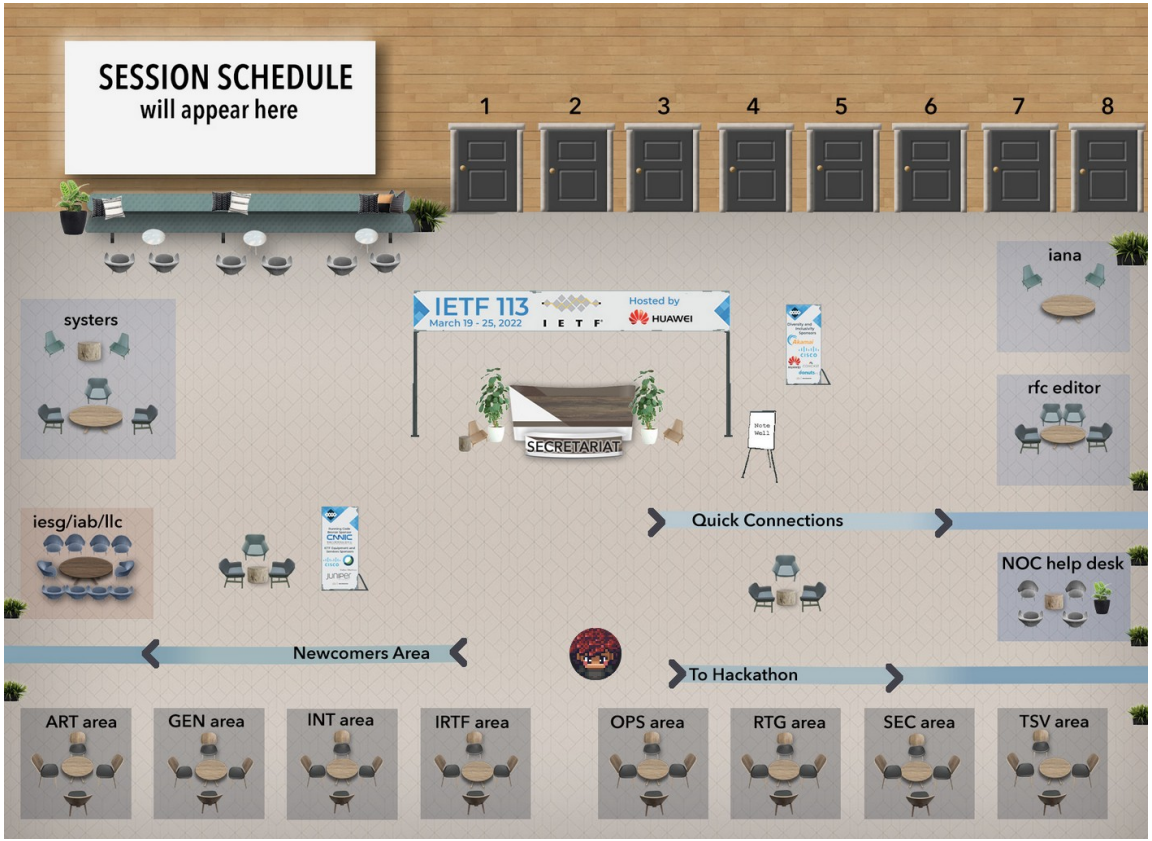
- 09:30: Room open for setup by project champions
- 10:00: Room open for all - Pastries and coffee provided
- 10:30: Hackathon kickoff, Meetecho
- 10:45: Form Teams, see Team Schedule
- 12:30: Lunch provided
- 15:30: Afternoon break - Snacks provided
- 18:30: Dinner provided
- 21:00: Room closes



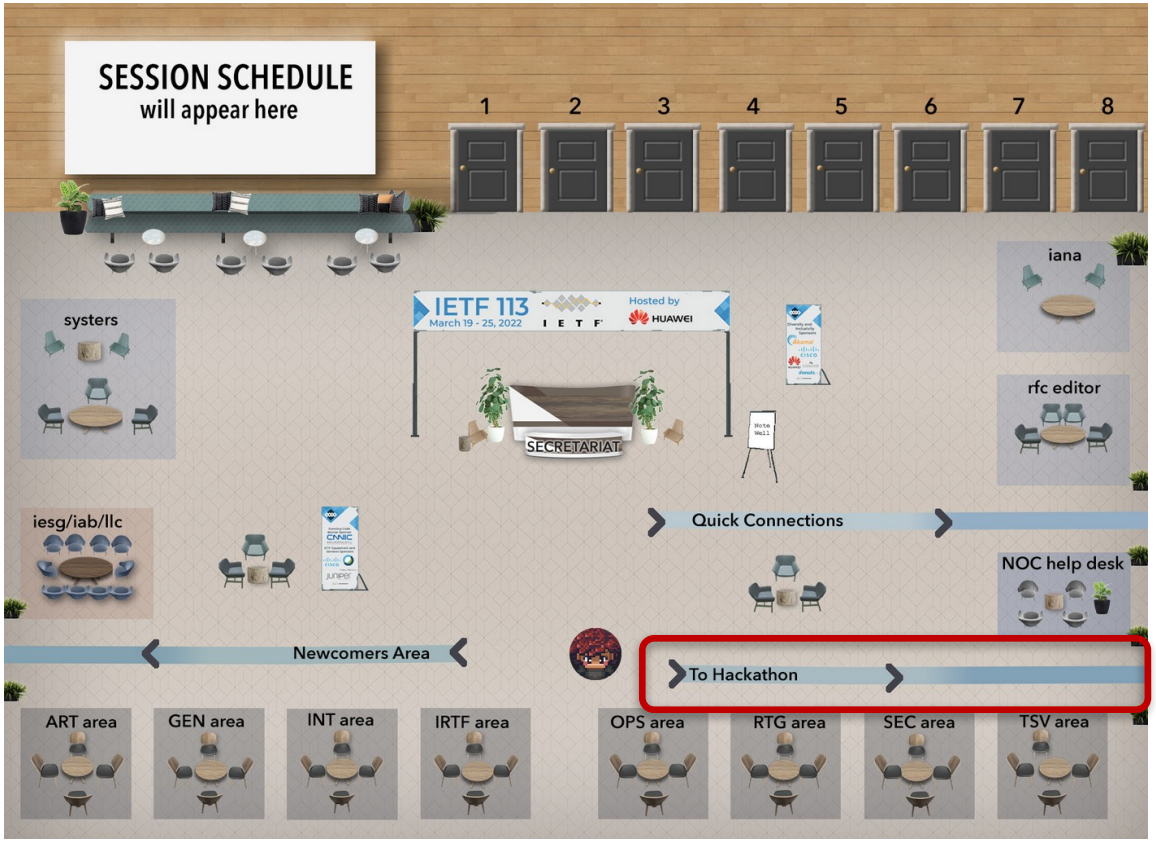
Agenda - Sunday

- 09:30: Room opens - Pastries and coffee provided
- 12:30: Lunch provided
- 13:30: Hacking stops, prepare brief presentation of project
- 14:00: Project Results Presentations, Meetecho
- 16:00: Hackathon ends
- 17:00: Tear down complete

Gather https://app.gather.town/app/L4fNNdm1NJa1sE2v/ietf



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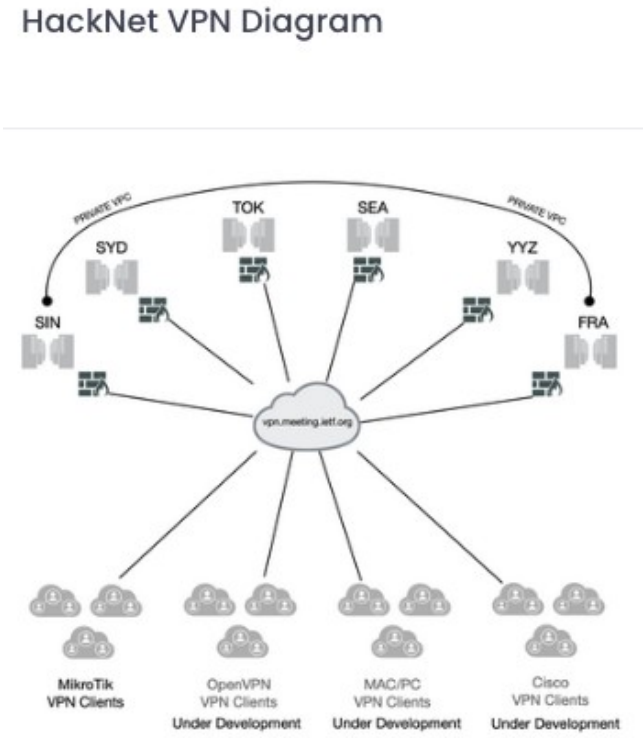


Hackathon Space



HackNet (https://hacknet.meeting.ietf.org)

- The NOC team experiment allows you to join the IETF network while attending remotely
- Version 2 is a complete rebuild of the network
  - Auto provisioning of credentials and device configuration
  - MikroTik is the only hardware that is supported
  - More device types to be added
  - Legacy Pi network is still active but will not have future development or support



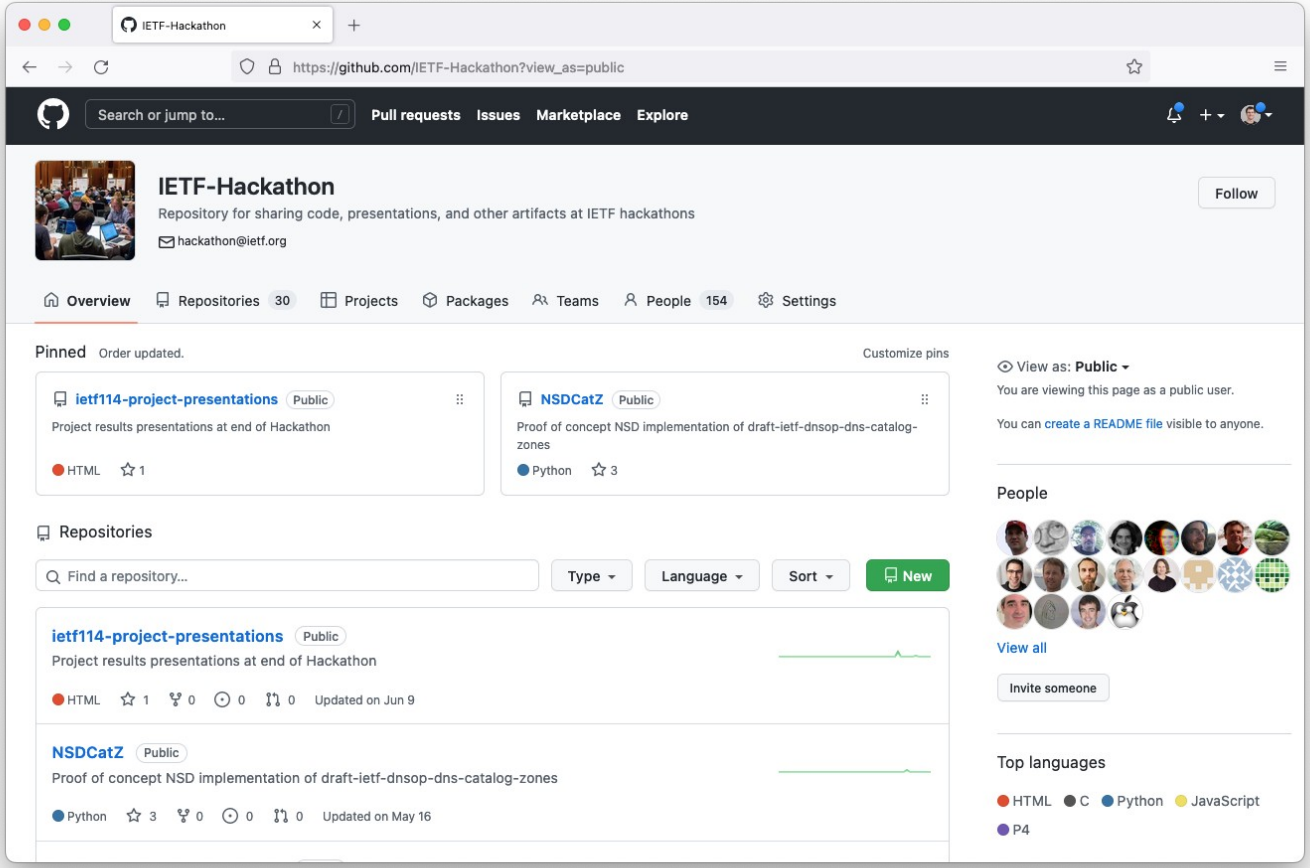
Results Presentations

1. What problem you tried to solve?
2. What you achieved?
3. Highlights
   - Lessons learned
   - Feedback to working group
   - Open source, other SDOs

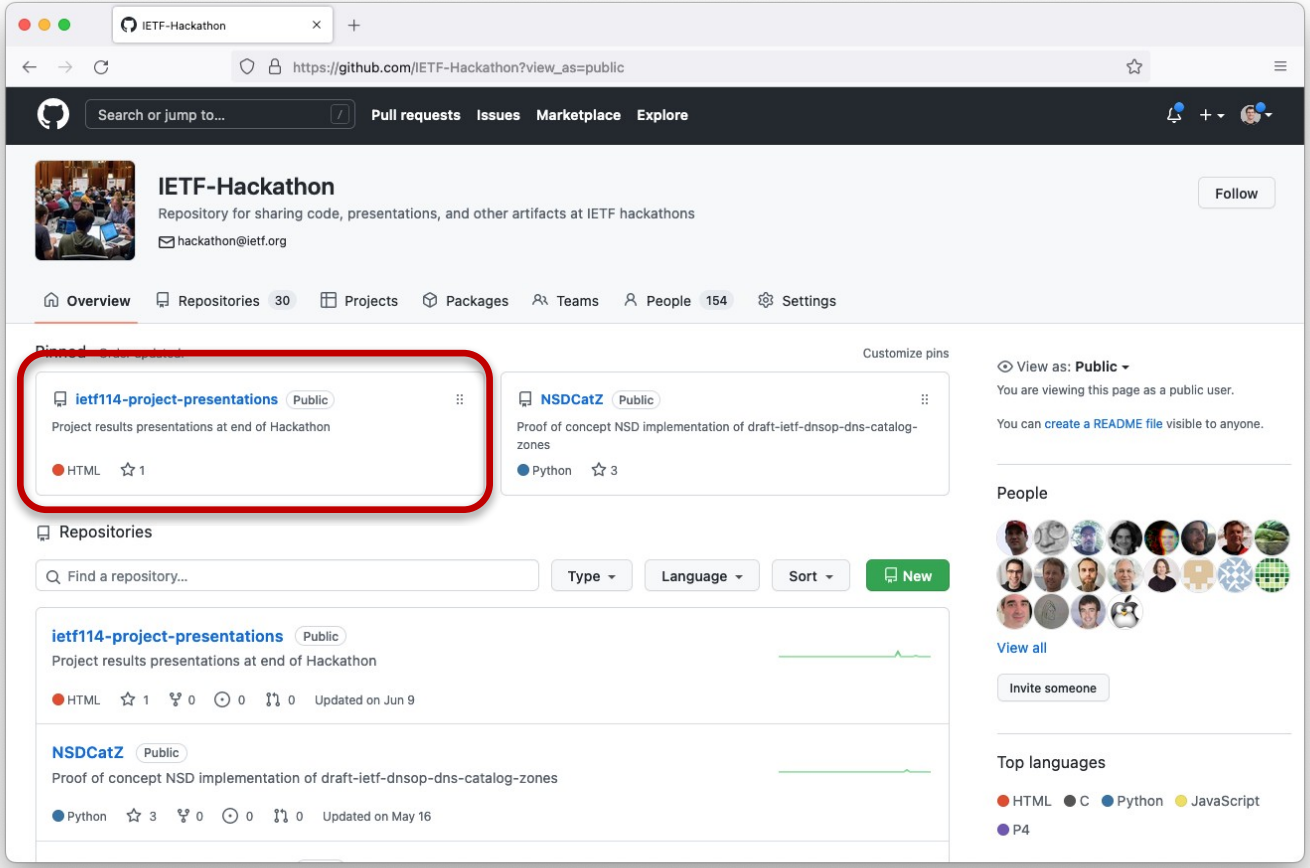


4 minutes max

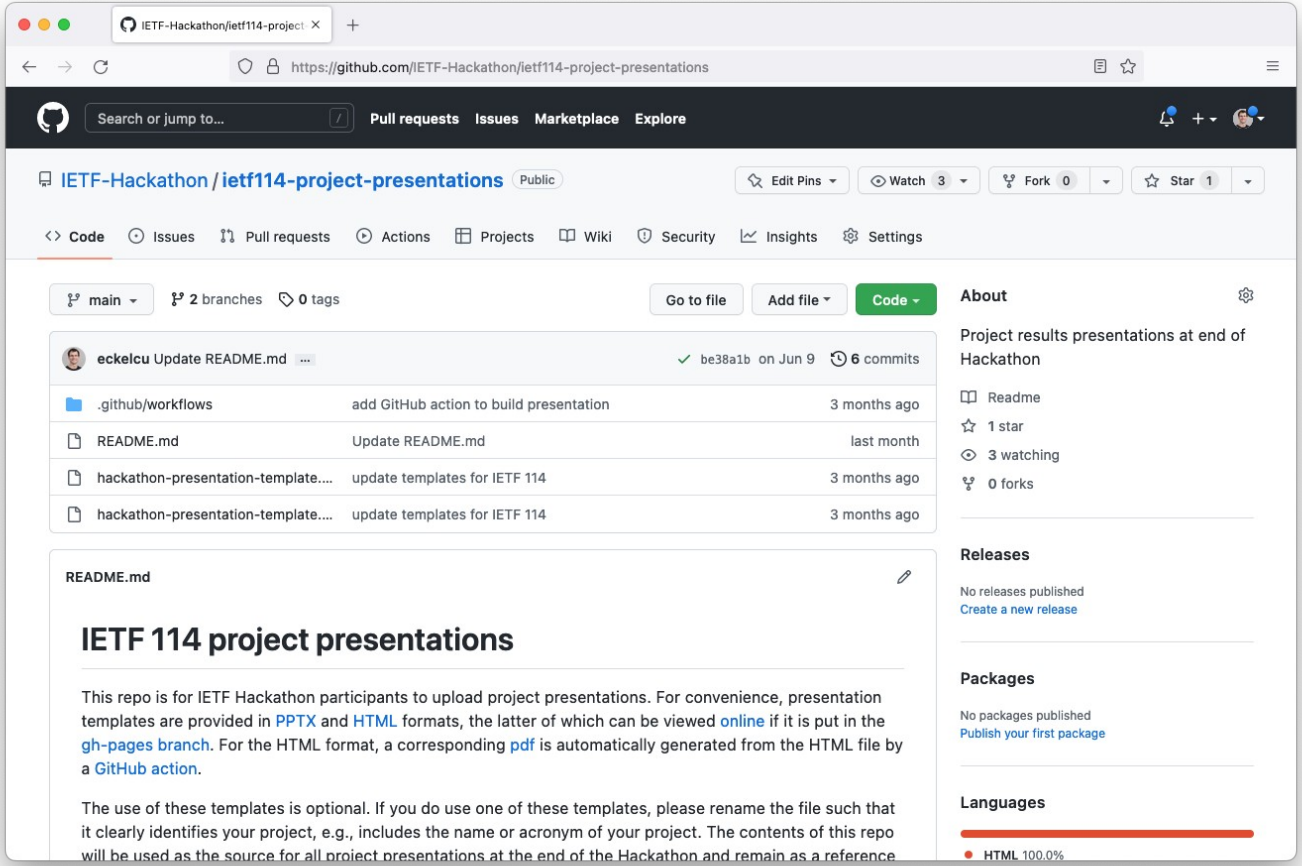
https://github.com/ietf-hackathon



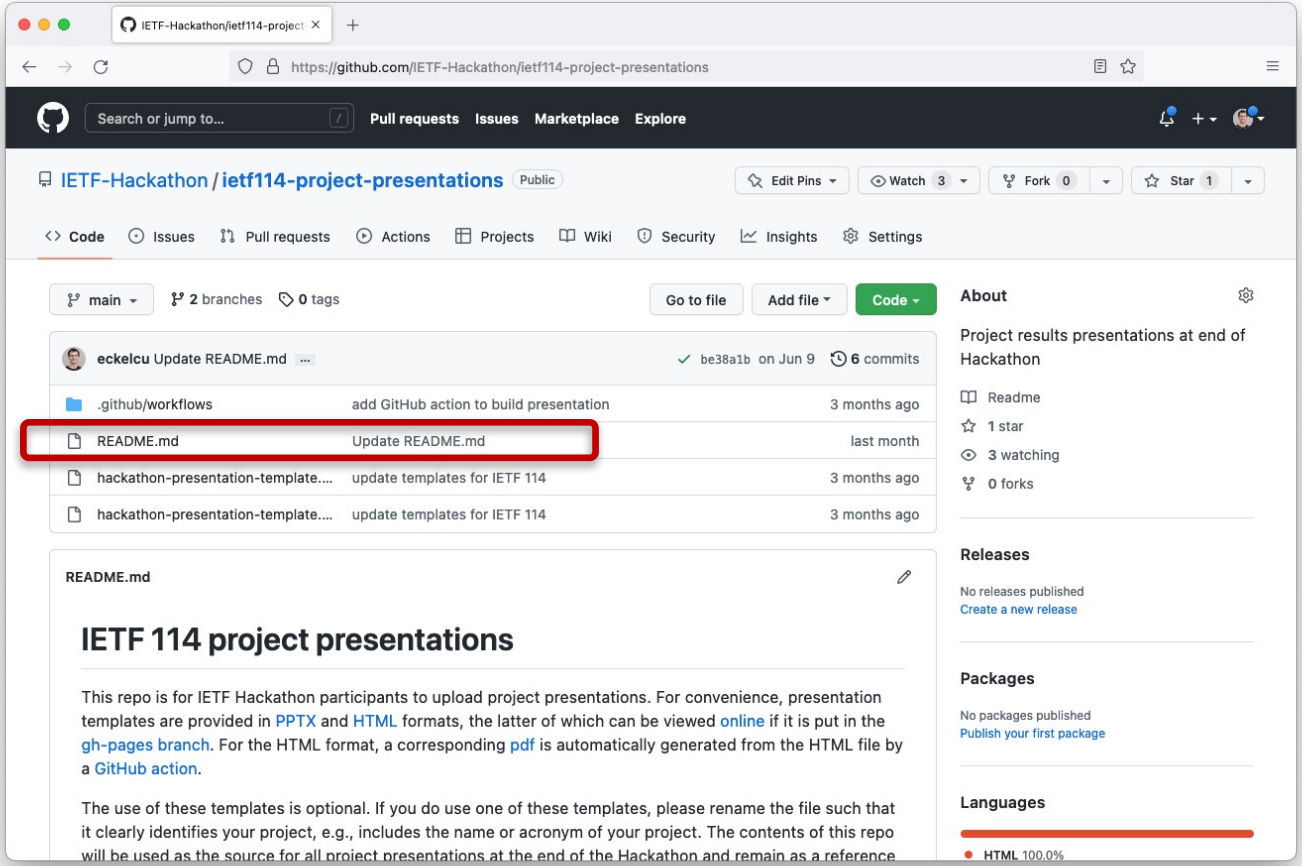
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https://github.com/IETF-Hackathon/ietf114-project-presentations



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README

17 lines (10 sloc) | 2.35 KB

Raw Blame

IETF 114 project presentations

This repo is for IETF Hackathon participants to upload project presentations. For convenience, presentation templates are provided in PPTX and HTML formats, the latter of which can be viewed online if it is put in the gh-pages branch. For the HTML format, a corresponding pdf is automatically generated from the HTML file by a GitHub action.

The use of these templates is optional. If you do use one of these templates, please rename the file such that it clearly identifies your project, e.g., includes the name or acronym of your project. The contents of this repo will be used as the source for all project presentations at the end of the Hackathon and remain as a reference after the Hackathon. Presenters are encouraged to run their own presentations using the screen sharing functionality in Meetecho. Alternatively, the Hackathon Chairs can share your presentation and advance slides for you. **For portability, please upload your presentation in PDF or HTML format.**

You MUST be a member of the IETF-Hackathon GitHub org to add or update a presentation.

To be added as a member, please be sure to:

- include the name by which you are known as part of your in your GitHub profile
- enable two-factor authentication (2FA)
- send your GitHub username to hackathon-chairs@ietf.org

DO NOT WAIT until just before project presentations start or your request may be lost in the chaos.

For more info on the Hackathon, including the complete and most up to date agenda, please see the Hackathon Wiki.

README

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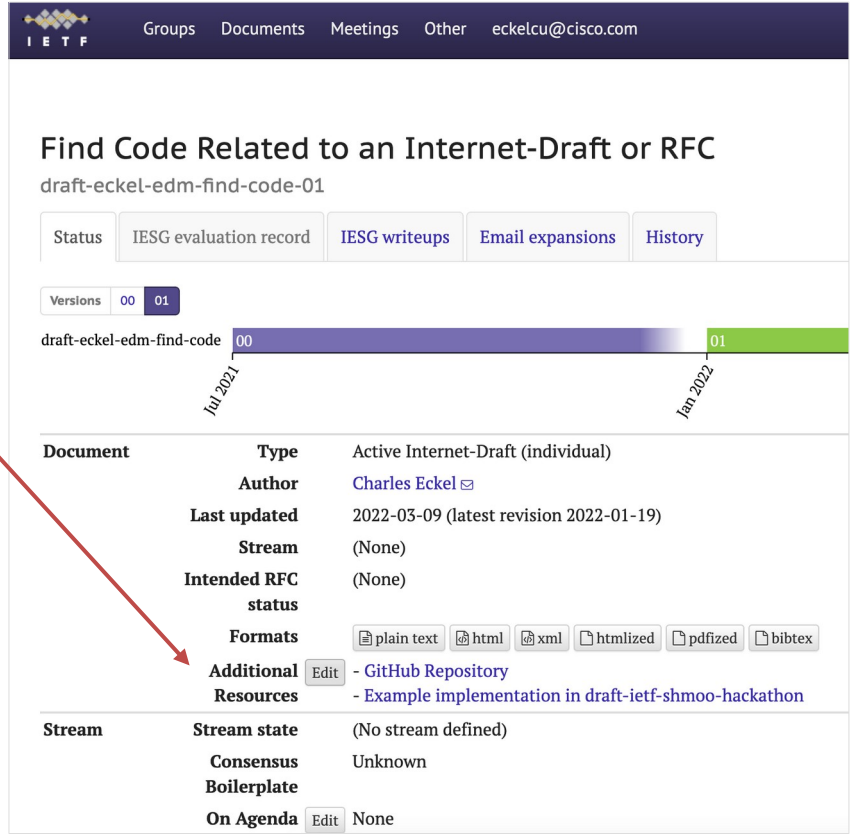
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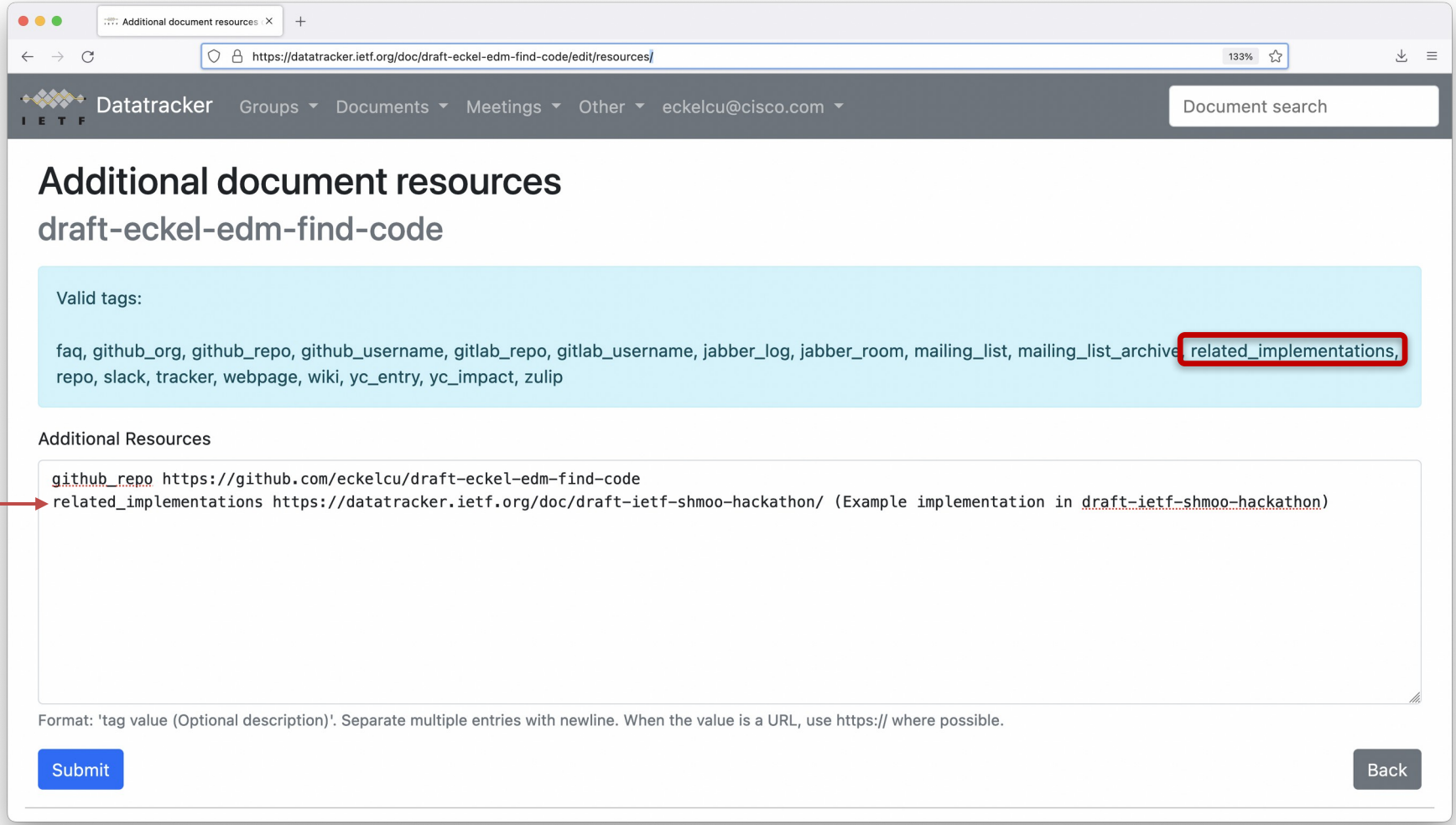
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related-implementations

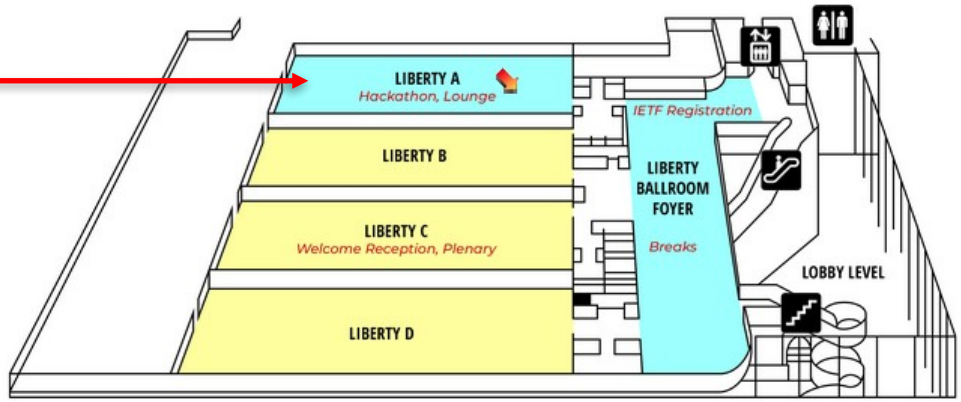
- For individual drafts, authors can edit the set of “Additional resources”
- For WG drafts and RFCs, the chairs can edit the additional resources




Additional document resources
https://datatracker.ietf.org/doc/draft-eckel-edm-find-code/edit/resources/
133%
Datatracker
Groups
Documents
Meetings
Other
eckelcu@cisco.com
Document search
Additional document resources
draft-eckel-edm-find-code
Valid tags:
faq, github_org, github_repo, github_username, gitlab_repo, gitlab_username, jabber_log, jabber_room, mailing_list, mailing_list_archive, related_implementations, repo, slack, tracker, webpage, wiki, yc_entry, yc_impact, zulip
Additional Resources
github_repo https://github.com/eckelcu/draft-eckel-edm-find-code
related_implementations https://datatracker.ietf.org/doc/draft-ietf-shmoo-hackathon/ (Example implementation in draft-ietf-shmoo-hackathon)
Format: 'tag value (Optional description)'. Separate multiple entries with newline. When the value is a URL, use https:// where possible.
Submit
Back

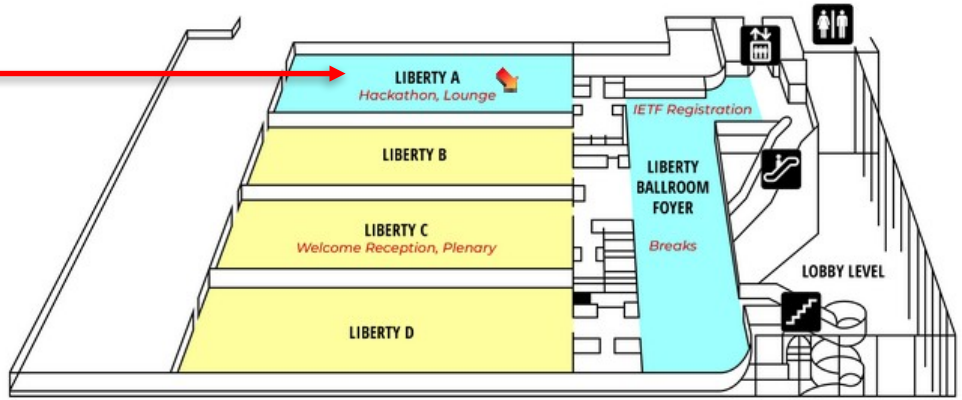
Hackdemo Happy Hour

- Share hackathon projects with IETF Community
- Liberty A
- Monday 17:30 - 18:30
- Register your team
  - MUST REGISTER BY 12:00 MONDAY



Code Lounge

- Liberty A
- Space reserved in IETF lounge all week
- Collaborate on running code
- Schedule time for your team



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Questions?





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