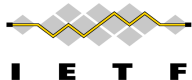




Running an IETF Hackathon

draft-eckel-shmoo-ietf-hackathon

IETF 109 – SHMOO WG
November 20, 2020



Abstract

- IETF Hackathons encourage developers to collaborate and develop utilities, ideas, sample code and solutions that show practical implementations of IETF standards.
- **This document provides a set of practices for running IETF Hackathons.**

Agenda

- Weekend at start of IETF meeting
- Ends in time for Newcomer event
- Optimized for in-person participation
- Remote participation supported

Hackathon

** Sample agenda, from IETF 105*

- Saturday, July 20
 - 08:30: Room open for setup by project champions
 - 09:00: Room open for all - Pastries and coffee provided
 - 09:30: Hackathon kickoff - [Join via Meetecho](#) [slides](#)
 - 09:45: Form Teams
 - 12:30: Lunch provided
 - 15:30: Afternoon break - Snacks provided
 - 19:00: Dinner provided
 - 22:00: Room closes
- Sunday, July 21
 - 08:30: Room opens - Pastries and coffee provided
 - 12:30: Lunch provided
 - 13:30: Hacking stops, prepare brief presentation of project
 - 14:00: Project presentations to other participants [Join via Meetecho](#)
 - 15:45: Closing remarks and opportunities for next time
 - 16:00: Hackathon ends
 - 17:00: Tear down complete

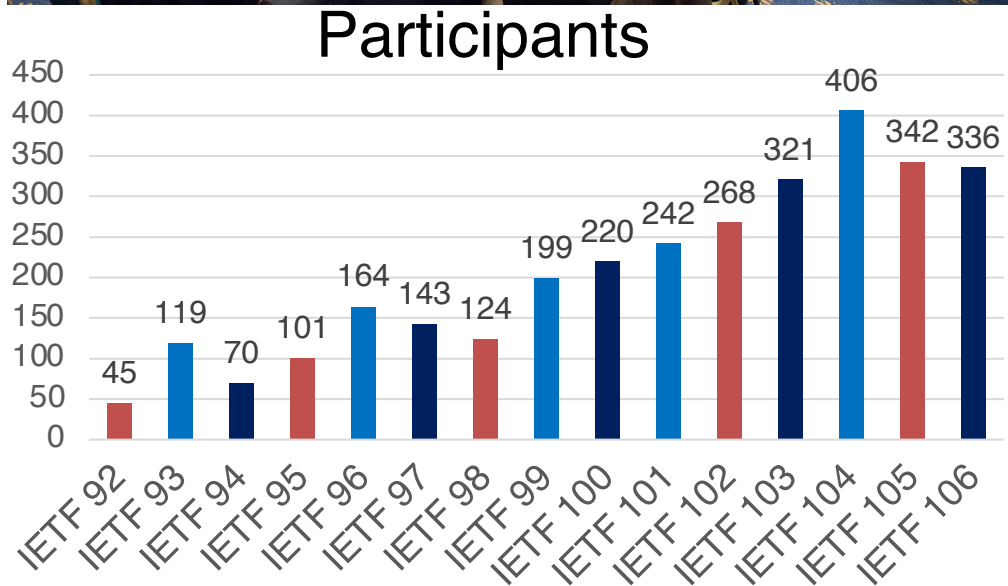
Related activities before and after the Hackathon weekend

- Hackdemo Happy Hour
 - Share your hackathon project with IETF community
 - Monday, July 22, 18:10 - 19:40, Room: [Parc Mont-Royal](#)
 - View the [schedule](#) or reserve space for your team/project
 - Reservations for space must be made by 12:00, Monday, July 22
- Code Lounge
 - Space for groups to gather and collaborate on running code
 - Monday - Friday, July 22-26, Room: [Parc Mont-Royal](#)
 - View the [schedule](#) or reserve space for your team/project

Participants

- In person (checked in) + remote (registered)
- In-person – 88%*
- Remote – 12%*
- First IETF – 30%*
- First Hackathon – 43%*

* Rough estimates based on IETF 104, 105, 106



IETF 107 - CANCELLED

- Preparations were well underway and as usual
- COVID hit, IETF 107 switched to online
- Survey via hackathon@ietf.org
 - <https://www.surveymonkey.com/results/S-M-9HLRXN8M7/>
- Few positive responses (22)
- Very few project champions
- Spread across projects and time zones

By the time of the official announcement of the cancellation of the onsite meeting and the switch to IETF being completely online, the hackathon had 23 projects and 176 registrations. With only 10 days until the anticipated start of the hackathon, a survey went out to the hackathon community, including all project champions and registered participants, to see if they wanted to participate in the hackathon exactly as planned except with everyone participating remotely rather than in person.

A relatively small number of people expressed interest in participating, with even fewer wanting to continue to champion their projects. The fact that the hackathon was planned for the weekend before the IETF meeting and in the Vancouver time zone, two things which were generally very convenient and attractive to hackathon participants, suddenly became huge obstacles. How could people all across the globe with special networking requirements and the need for close, long duration collaboration work effectively entirely online.

The answer ...? You tell me. We could not find one.

Consequently, the IETF 107 Hackathon was cancelled, making IETF 107 the first since IETF 92 to not have a hackathon and reminding me of, "The Year Without a Santa Claus", one of my favorite childhood holiday specials on TV.



IETF 108 Goes Online

- Altered format to address the challenges that led to cancellation of IETF 107 Hackathon
 - occurring on a weekend
 - restrictions due to different time zone
- Expanded schedule to run entire work week before IETF 108 meeting
- Kickoff Monday, closing Friday
 - Timing aligned with rest of IETF 108
- Teams establish own schedule rest of week

Agenda

Hackathon

- Monday, July 20
 - 08:00 PDT / 11:00 EDT / 15:00 UTC - Hackathon kickoff ➡ [Recording](#)
- Monday, July 20 - Friday, July 24
 - See ➡ [Team Schedule](#) and ➡ <https://ietf.gather.town/z6N2SDxHebMdDAfo/IETF-108>
- Friday, July 24
 - 07:00 PDT / 10:00 EDT / 14:00 UTC - Hackathon closing ➡ [agenda](#) ➡ [Recording](#)

NOTE: You will need a datatracker account to login to the Hackathon Meetecho sessions and gather.town. When you register for the hackathon, you are sent a separate email to create a datatracker account. If you already have a datatracker account, please ensure that the email address you registered with is added to your account. If you received the email but the link to create an account has expired, please see the instructions below:

1. Go to ➡ <https://datatracker.ietf.org/accounts/create/>
2. Select 'new account' from the User menu at the top
3. Enter the email address that you registered with for the hackathon
4. Follow the instructions in the email you receive

Online Only sections in draft

- Funding
- Timing
- Wiki
 - Hackdemo Happy Hour schedule (removed)
 - Code Lounge schedule (removed)
 - Team schedule (added)
 - Results presentation schedule (added)
- Webex
- Gather
 - CodiMD

Project Name	Presenter's name
Performance Evaluation of APN6	Weihong Wu
YANG Mediator Framework	Yongbo Liu
RATS EAT implementation	Thomas Fossati
DNS	Willem Toorop
LPWAN	Dominique Barthel
QUIC Measurements	Fabio Bulgarella
ASDF: Getting ready for SDF 1.1	Carsten Bormann
Roughtime: implementing version 3	Watson Ladd
BGP Monitoring Protocol (BMP) and YANG Push	Thomas Graf
IPv6 IOAM	Justin Iurman
ns-3 TCP	Tom Henderson
I2NSF Framework	Jaehoon Paul Jeong
IPWAVE Basic Protocols	Jaehoon Paul Jeong
MUD, MUD-PD, and such	Paul Watrobski
BMWG - Containerized Infra Benchmarking	Hyunsik Yang



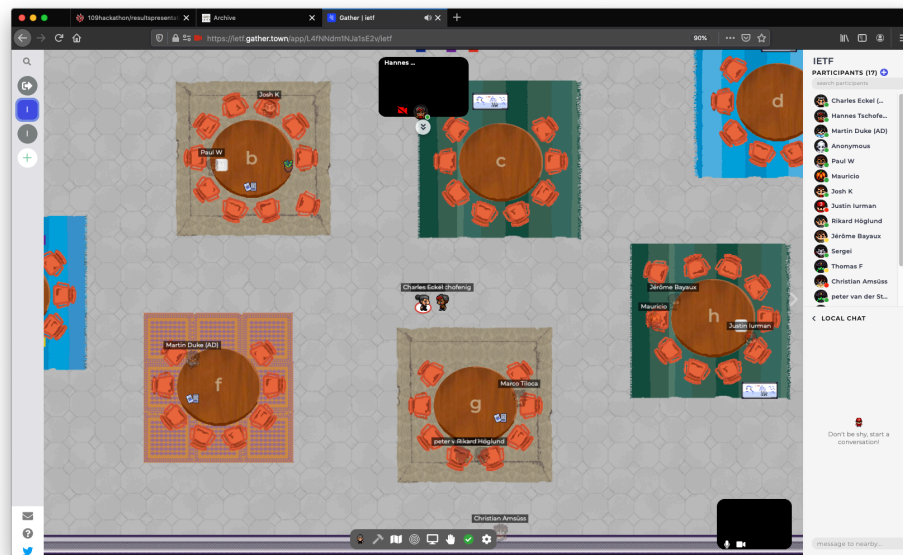
Networking

- Unfettered internet access important for many projects
- NOC provides wireless IETF network in time for Hackathon
- Wired access and special networking functionality available by request
- Inspired by online only Hackathon, NOC developed recipe to provide same network access remotely via Raspberry Pi
- Champions request via:
 - <https://tickets.meeting.ietf.org/newticket>



IETF 109

- 284 registered participants
 - 296 at IETF 108
 - 37 for kickoff (70 for IETF 108)
 - 42 for closing (74 for IETF 108)
- 24 projects
 - 19 at IETF 108
- 15 results presentations
 - 10 at IETF 108



Feedback

- Timing of kickoff and closing challenging for many participants
- Hard to dedicate time, expected to do day job, when not traveling
- Gather worked well, whiteboard and CodiMD help collaborate

Version -01

- Updated based on IETF 109 experience
- Comments from Michael Richardson
 - Participation and benefits beyond running code
 - Time zone distribution and alignment still a challenge
- Comments from Benson Muite
 - PDF for presentations not good for change management or storage, Markdown and HTML are better alternatives
 - Remote participation can be extended to in-person Hubs
 - Bandwidth and CPU requirements for Gather can present challenges for participants

Next steps

- Update based on prep for IETF 110 Hackathon
 - Results presentation templates
- Online Hackathon better than no Hackathon, but participation, collaboration, social interaction, networking, and productivity suffer
 - Should this be captured in draft?
- Metrics results, survey results
 - Would these be useful? Importance of precision and verifiability?
- Sponsor benefits
 - Is this the right place to capture these?
- Is an internet-draft appropriate for capturing these practices?
- Is shmoo WG appropriate place to continue this effort?

Thank you!



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