IETF Hackathon

IETF 101
17-18 March, 2018
London
Welcome

• First IETF event?
• First IETF Hackathon?
• Not attending IETF meeting?
Why Are We Here

• Advance pace and relevance of IETF standards
  – Bring speed and collaborative spirit of open source software into the IETF
  – Flush out ideas, feed into WG session
  – Produce sample code/reference implementations, utilities

• Attract developers, young people to IETF
  – Match young, skillful developers with IETF veterans
  – University engagement around hackathon projects
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/](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)
IPR and Code Contribution Guideline

• Hackathon participants free to work on any code
• Rules regarding that code are what each participant's organization and/or open source project says they are
• The code itself is NOT an IETF contribution
• Discussions, presentations, and demos done as part of the hackathon are the same type of IETF contributions as those made in working groups; therefore, the usual IETF copyright and/or IPR disclosure rules apply
Agenda - Saturday

- 08:00: Room open for setup by champions
- 09:00: Room open for all - Pastries and coffee provided
- 09:30: Hackathon kickoff
- 09:45: Form Teams
- 12:30: Lunch provided
- 15:30: Afternoon break - Snacks provided
- 19:00: Dinner provided
- 22:00: Room closes but is NOT locked
Agenda - Sunday

- 09:00: Room opens - Pastries and coffee provided
- 12:30: Lunch provided
- 13:30: Hacking stops, prepare brief presentation of project
- 14:00: Project presentations
- 15:45: Closing remarks and opportunities for next time
- 16:00: Hackathon ends
- 17:00: Tear down complete
Project List

• 6LoRITT: 6LoWPAN Interoperability Testing Sessions (plugtest) with the F-Interop Testing Platform
• ANIMA voucher and ACP
• ARC (related to DMARC WG)
• DHCPv6
• DNS
• DNS Service Discovery (DNSSD)
• DOTS Interop
• DTN (Delay Tolerant Networking) - Bundle Protocol v7 PoC Python implementation
• EAP TLS with large certificates and long certificate chains

• ECN / AQM Testing & Interop
• Firmware Updates for Internet of Things
• ICN-RIOT
• ICN for critical, time sensitive systems
• IETF Mailing List Analysis
• Interface to Network Security Functions (I2NSF) Framework
• Interoperation between NEAT and PvD (provisining domains - intarea)
• JMAP
• Limited Usage of Remote Key (LURK) for TLS1.2
Project List (cont)

- LPWAN: IPv6 compression + fragmentation implementation and testing, a shot at ICMPv6
- Making Multicast IP more successful
- Messaging Layer Security
- Multilingual email
- Network Time Security (NTS)
- NFV on a Federated and Orchestrated Virtualisation Platform
- (Privacy-Friendly, Scalable, Passive/Hybrid?) Transport Measurability
- Public interest technology
- QUIC
- SACM/XMPP Interface Discovery
- TLS 1.3
- WebRTC Data Channels
- WebRTC Identity
- WISHI (Work on IoT Semantic / Hypermedia Interoperability)
- YANG/NETCONF/RESTCONF
- YANG based EVC Service Modeling in OpenDaylight
- YANG/NETCONF interface in Kea DHCPv6 server
Project Presentations

1. What problem you tried to solve?
2. How you planned to solve it?
3. What you achieved?

Things to highlight

• Lessons learned
• Feedback to work group
• First time IETFers
• Open source, other SDOs

3 minute time limit
IETF-Hackathon

Repository for sharing code, presentations, and other artifacts at IETF hackathons

hackathon@ietf.org

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Pinned repositories

- **delaydns**
  - C
  - ★3

- **ietf100-project-results**
  - Presentations of project results at end of hackathon
  - ★1

- **ietf101-project-presentations**
  - Presentations of project results at end of hackathon
  - ★1 ⬤1

- **smartcards4dnssec**
  - Code to allow stock BIND to use smartcards
  - C ⬤1 ⬤1

- **webrtc-e911-psap**
  - WebRTC Emergency Services with Indoor Location
  - JavaScript ⬤1 ⬤4

- **Yang-Catalog**
  - Yang Catalog
  - Python ⬤1 ⬤1

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https://github.com/ietf-hackathon
Spread the News

• Post to Twitter
  #IETFHackathon
  #IETF101
Code Lounge

- Space reserved in IETF Lounge all week
- Collaborate on running code
- Schedule time for your team
Hackdemo Happy Hour

- Share hackathon projects with IETF Community
- Monday 1800-2000
- Code Lounge
- Register for space: [https://trac.ietf.org/trac/ietf/meeting/wiki/101hackdemo](https://trac.ietf.org/trac/ietf/meeting/wiki/101hackdemo)
THANK YOU!

Support provided by:
Questions?
Let’s Start Hacking!