#### IETF Hackathon





#### IETF 100 November 11-12 Singapore

### Welcome

- First Hackathon?
- First time at an IETF event?
- Not attending IETF meeting?

#### Goals

- Running Code (<u>RFC 6982</u>)
- Open Source
- Speed and Relevance of Standards
- Collaborate and Learn
- Have Fun!

Cenk Gündoğan, RIOT maintainer – The IETF Hackathon provides an excellent opportunity to connect with hackers around the world and share experiences about their implementations as well as interoperability.

Hariharan Ananthakrishnan, Packet Design – My personal thanks for helping out in the IETF Hackathon and plugging me to right group to contribute. I should say I had good time hacking as a first time IETFer.

Sunil Vallamkonda, F5 – I got to learn a lot and meet talented folks. I do not know why such an event never happened till 2015, it should have part of IETF since day one.

Vladimir Vassilev, TransPacket, travelled from Oslo to Seoul just for hackathon - You get all these people with passion for what they are doing trying to accomplish something in these two days that will make the world better in a very practical way.

Nathan Egge, Mozilla – We had Cisco committing to Daala and Mozilla committing to Thor, which truly shows the collaborative spirit of the IETF. Having a hackathon is an excellent way for new ideas to be tested out in running code and NETVC will be back for the IETF 94hackathon in Yokohama.

**IETF Hackathon** 

#### Note Well

Any submission to the IETF intended by the Contributor for publication as all or part of an IETF Internet-Draft or RFC and any statement made within the context of an IETF activity is considered an "IETF Contribution". Such statements include oral statements in IETF sessions, as well as written and electronic communications made at any time or place, which are addressed to:

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- · Any IETF working group or portion thereof
- · Any Birds of a Feather (BOF) session
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- · The RFC Editor or the Internet-Drafts function

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A participant in any IETF activity acknowledges that written, audio and video records of meetings may be made and may be available to the public.

#### 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 of posters at tables 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 and is 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 presentation to other participants and judges
- 15:00: Recap and suggestions for improvements
- 15:30: Awards presented, praise and thanks given
- 16:00: Hackathon ends
- 17:00: Tear down complete

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# Champions

- Anyone can volunteer to "champion" a project
- Before the Hackathon
  - Update <u>hackathon wiki</u> with details about project
  - Share ideas and preparation materials via the <u>hackathon list</u>
  - Recruit participants from working groups, open source projects, etc.
- At the Hackathon
  - Create and display poster for their project
  - Make themselves available to answer questions and help others
  - Hack on things themselves





## **Project List**

- Data Leak Prevention (DLP)
- IPv4-IPv6 Transition Technology Interop
- JMAP Interop
- DNS
- DNS-Based Service Discovery (DNSSD)
- TLS
- SACM
- YANG/NETCONF/RESTCONF
- QUIC
- Captive Portals

- Interface to Network Security Functions (I2NSF) Framework
- Public Interest and HTTP Status Code 451
- Generating Certificate Requests for Short-Term, Automatically-Renewed (STAR) Certificates
- IPv6 compression+fragmentation prototype implementation for LoRaWAN
- DOTS Interop
- ECN / AQM Testing & Interop
- IOAM

## **Project Presentations**

- 1. What problem are you solving?
- 2. How you plan to solve it?
- 3. What did you achieve?
- Things to highlight
  - Lessons learned
  - Feedback to work group
  - First time IETFers

#### 3 minute time limit



# **Judging Criteria**

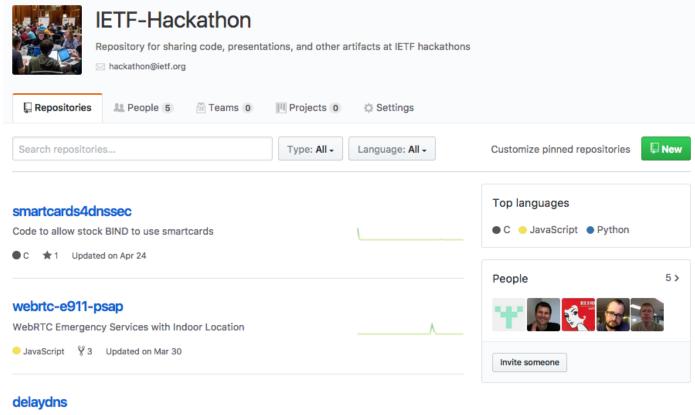
- Advance pace and relevance of IETF standards
  - Bring speed and collaborative spirit of open source software into the IETF
  - Flush out ideas, feed into WG session
  - Produce sample code/reference implementations, utilities
- Attract developers, young people to IETF
  - Match young, skillful developers with IETF veterans
  - University engagement around hackathon projects

#### Collaborate on Code

https://github.com/ietf-hackathon

- Git/GitHub commonly used for open source projects
- Getting started:
  - Install Git on laptop <u>https://help.github.com/articles/set-up-git/</u>
  - Join Hackathon repo https://github.com/ietf-hackathon
  - Fork a project, or the repo, to work on an existing project or add a new one <u>https://help.github.com/articles/fork-a-repo/</u>
  - "Follow" team members and "watch" project(s)
    <u>https://help.github.com/articles/be-social/</u>
- Self Paced Tutorial
  - <u>https://learninglabs.cisco.com/lab/git-intro/step/1</u>

#### https://github.com/ietf-hackathon



### **#IETFHackathon Photo Contest**

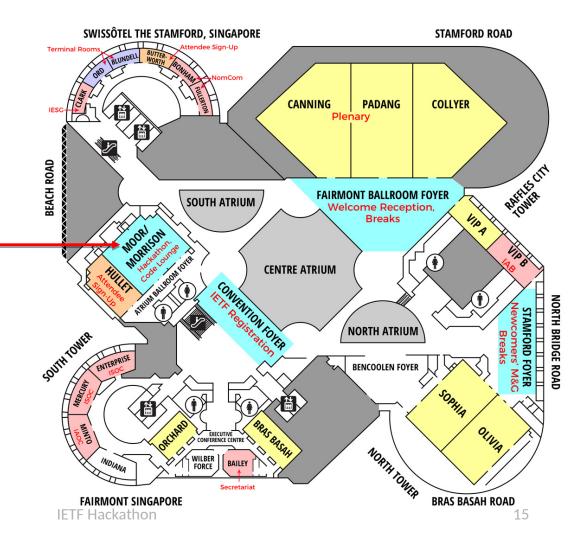
- Best IETF Hackathon Photo
- Post to Twitter
  #IETFHackathon
  #IETF100



kathon #IETF98 pic.twitter.com/a44cnXLvL

## Code Lounge

- Space reserved in IETF Lounge all week
- Collaborate on running code
- <u>Schedule</u> time for your team



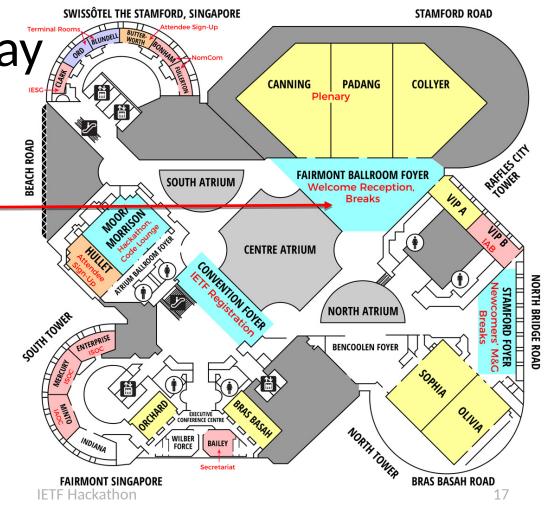
## Code Lab

- Rack of equipment that includes a CMTS, cable modems, and VMs on demand
- Access to generic VMs, a CMTS, a home network environment, etc.
- Questions/Requests email
  - Charles Eckel <u>eckelcu@cisco.com</u>
  - Chris Tuska <u>Chris.Tuska@arris.com</u>



## RunBitsgNC-BiteDay

- Wednesday before and after IETF
   Plenary
- Fairmont Ballroom
  Foyer
- Share hackathon projects with IETF Community



#### **THANK YOU!**

Sponsored by: Cisco Collaboration Group



### Questions?



#### Let's Start Hacking!

