IETF 116 Hackathon
25-26 March 2023

This session is being recorded
Welcome!

• First IETF Hackathon?
Welcome!

• First IETF Hackathon?
• First IETF event?
Welcome!

• 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](https://www.ietf.org/wiki/Hackathon)

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Projects Included in Hackathon

Note, all projects are open to everyone. However, some champions have identified their projects as being particularly good for those who are new to the IETF or new to the Hackathon. 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.

**PQ Use in the real world: X.509 keys, signatures, certificates and protocols**

- **Champion(s)**
  - John Gray (john.gray at entrust.com)
  - Mike Ounsworth (mike.ounsworth at entrust.com)
  - Tomofumi Okubo (tomofumi.okubo@digicert.com)
  - Goutam Tamvada (goutam.tamvada at uwaterloo.ca)

- **Drafts**

- **Project info**
  - Purpose is to make use of PQ in real world X.509 structures like keys, signatures, certificates and protocols. This will allow us to test interoperability between different algorithm implementations, gain experience using these new algorithms, and provide feedback to the standards groups about practical usage in the real world.

  A good starting place is our Github repository: [https://github.com/IETF-Hackathon/pqc-certificates](https://github.com/IETF-Hackathon/pqc-certificates)

  Information on OIDs used to create interoperable structures, consult: [https://github.com/IETF-Hackathon/pqc-certificates/blob/master/docs/oid_mapping.md](https://github.com/IETF-Hackathon/pqc-certificates/blob/master/docs/oid_mapping.md)
Projects

- On the [Hackathon wiki](https://example.com)
- Not sure which project to join?
- Check the [Lost & Found](https://example.com)

### Hackathon Lost & Found

Are you a Hackathon participant looking for a team to join? Are you championing a Hackathon project and in need of some specific expertise? If you answered yes to either of these, you have come to the right place.

Participants looking for a team are encouraged to add themselves to the "Skills to Offer" table, providing some information about their skills and interests. This will help others with matching needs and/or interests find you.

Champions wanting help on their projects are encouraged to add themselves to the "Skills Needed" table, providing some information about the skills they seek.

<table>
<thead>
<tr>
<th>Name</th>
<th>Email Address</th>
<th>Skills and/or interests you have to offer</th>
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### Skills Needed

<table>
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<tr>
<th>Name</th>
<th>Email Address</th>
<th>Skills your team needs</th>
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IETF Hackathon
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
• 20:30 : Room closes

(conference center closed completely at 21:00)
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
Gather [https://app.gather.town/app/L4fNNDm1NJah1sE2v/ietf](https://app.gather.town/app/L4fNNDm1NJah1sE2v/ietf)
Gather [https://app.gather.town/app/L4fNNdm1NJJa1sE2v/ietf](https://app.gather.town/app/L4fNNdm1NJJa1sE2v/ietf)
Hackathon Space
HackNet (https://hacknet.meeting.ietf.org)

• Special network designed for supporting IETF protocol development across teams within the IETF Hackathon
• Join the IETF network while attending remotely
• Instructions (https://wiki.ietf.org/meeting/116/hackathon/hacknet_instructions)
• Anyone with their own AP?
  – 5 GHz: Channel 36 only, 20 MHz channels
  – 2.4 GHz
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

3 minutes or less
https://github.com/ietf-hackathon

IETF Hackathon

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

Follow

Overview

Repositories 33  Projects  Packages  Teams  People 18

Customize pins

View as: Public

You are viewing the README and pinned repositories as a public user.

You can create a README file visible to anyone.

Get started with tasks that most successful organizations complete.

Discussions

Set up discussions to engage with your community!

Turn on discussions

People

IETF Hackathon
https://github.com/ietf-hackathon
https://github.com/IETF-Hackathon/ietf116-project-presentations
https://github.com/IETF-Hackathon/ietf116-project-presentations
IETF 116 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 main branch. For the HTML format, a corresponding pdf is automatically generated from the HTML file by a GitHub action and put in the pdfs-from-html branch.

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.
# IETF 116 project presentations

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related-implementations

• For individual drafts, authors can edit “Additional resources”
• For working group drafts and RFCs, working group chairs can edit
related-implementations

Additional Resources

github_repo https://github.com/eckelcu/draft-eckel-edm-find-code
(GitHub repository to collaborate on draft)
related_implementations https://datatracker.ietf.org/doc/rfc9311/
(Example implementation in RFC 9311)

Format: 'tag value (Optional description)'. Separate multiple entries with newline. When the value is a URL, use https:// where possible.
Links to standards and code in wikis


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SRv6 Data-Plane Visibility

- Champion(s)
  - Thomas Graf (thomas.graf at swisscom.com)
  - Benoit Claise (benoit.claise at huawei.com)
  - Alex Huang-Feng (alex.huang-feng at insa-lyon.fr)
- Draft(s)
- Project info
  - Develop and validate running code. Extend IPFIX export in VPP at FD.io and on Huawei VRP.
  - Establish SRv6 network toplogy with network telemetry data-collection and data mesh. Validate exported and transformed IPFIX data.
### Export of Segment Routing over IPv6 Information in IP Flow Information Export (IPFIX)

**draft-ietf-opsawg-ipfix-srv6-srh-06**

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<th>IESG writeups</th>
<th>Email expansions</th>
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#### Versions:

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**Document Type**: Active Internet-Draft (opsawg WG)

**Authors**: Thomas Graf, Benoit Claise, Pierre Francois

**Last updated**: 2023-01-06 (Latest revision 2023-01-05)

**Replaces**: draft-tgraf-opsawg-ipfix-srv6-srh

**RFC stream**: Internet Engineering Task Force (IETF)

**Intended RFC status**: Proposed Standard

**Formats**: [txt](#), [html](#), [xml](#), [htmlized](#), [pdf](#), [bibtex](#)

**Additional resources**: Related Implementations, Mailing list discussion

**Stream**: WG state

Submitted to IESG for Publication
Export of Segment Routing over IPv6 Information in IP Flow Information Export (IPFIX)
draft-ietf-opsawg-ipfix-srv6-srh-06

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### Additional resources
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### Stream
- WG state
  - Submitted to IESG for Publication

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**VPP topologies**

This repository have the vpp configurations for the following POCs in VPP:

- draft-tgraf-opsawg-ipfix-srv6-srh
- draft-tgraf-opsawg-ipfix-on-path-telemetry

**Dependencies**

- VPP fork repository: INSA-unyte-vpp
- Tested in ubuntu/focal64 using Vagrantfile
Find Code Related to an Internet-Draft or RFC


Workgroup: edm
Internet-Draft: draft-eckel-edm-find-code-02
Published: 10 January 2023
Intended Status: Best Current Practice
Expires: 14 July 2023
Author: C. Eckel
Cisco Systems

Abstract
Code related to existing IETF standards and ongoing standardization efforts may exist and be publicly accessible in many places. This document provides a set of practices to make it easier to identify and find such code.

Discussion Venues
This note is to be removed before publishing as an RFC.

Discussion of this document takes place on the Evolvability, Deployability, & Maintainability mailing list (edm@iab.org), which is archived at https://mailarchive.ietf.org/arch/browse/edm/.

Source for this draft and an issue tracker can be found at https://github.com/eckelcu/draft-eckel-edm-find-code.

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   3.6. Known Limitations
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5. Security Considerations
6. IANA Considerations
7. Informative References
Acknowledgments
Author’s Address
Hackdemo Happy Hour

• Share hackathon projects with IETF Community
• Room: G304 (3rd floor)
• Monday 18:30 - 19:30
• Register your team
  – MUST REGISTER BY 13:00 MONDAY, 27 MARCH
Code Lounge

• Room: **G304** (3rd floor)

• Space reserved in IETF lounge all week

• Collaborate on running code

• **Schedule** time for your team
Running Code Sponsors - THANK YOU!

ERICSSON

Meta

ICANN
Questions?