Open Source - Killing standards organizations or saving them

Open source and standards join forces for mutual benefit

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Why Standards?

- Standards have played key role in many/most industries
- Industry demand standards compliance from vendors
  - Ensure interoperability, avoid lock-in
- Vendors work together to define standards
  - Establish credibility for products
  - Ensure interoperability with partners and competitors
Traditional Standards Process

Standards formed over several years

Products and services built on these standards

Become interoperable over next few years
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Photo credit: https://play.google.com/store/apps/details?id=com.mobilerise.hourglass
Open Source Transforming Networking

• Fuel industry transformation
• Engage a vast community
• Innovate at rapid pace
• Result in de facto standard
Complexity of Open Source

- Some assembly required
- Poor documentation
- Moving target
- Projects fade away
- Fragments
Combine Open Source with Standards

• Bring speed and collaborative spirit of open source to standards
• Validate correctness and completeness of evolving specifications
• Add support for key standards to open source projects
• Speed adoption by providing usable code together with standards

1 + 1 = 3
IETF

• Internet Engineering Task Force
• Founded in 1986
• Goal – Make the Internet Work Better
• Definition of Internet Drafts (I-Ds) and RFCs
• Networking protocols, e.g. TCP/IP, DNS, HTTP, TLS, VXLAN, GRE, YANG, NETCONF, RESTCONF, ...

We reject kings, presidents and voting. We believe in rough consensus and running code.

- David Clark, Tao of the IETF
Challenges

• Slow
• Aging community
• Too much time on rough consensus, not enough on running code
• Overrun by pace of innovation
• Code (potentially open source) as de-facto standard
IETF Hackathons

• Advance pace and relevance of IETF standards
  • Flush out ideas, feed back into working groups

• Attract developers, universities
  • Team newcomers with veterans
  • Reduce time to meaningful contribution

• Free, open to everyone
• Collaborative

Participants
Code in Hands of Developers
https://github.com/ietf-hackathon
Process in Hands of Developers
https://datatracker.ietf.org/wg/git/about/

GitHub Integration and Tooling (git)

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<thead>
<tr>
<th>WG</th>
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Personnel

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<tr>
<th>Chairs</th>
<th>Christopher Wood</th>
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<tr>
<td>Paul Hoffman</td>
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<tr>
<td>Area Director</td>
<td>Alissa Cooper</td>
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Mailing list

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Jabber chat

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Charter for Working Group

Many IETF working groups use external code repository services, primarily GitHub, in managing their work. Individual working groups, while continuing to operate within IETF guidelines for working group activity, have developed their own policies and practices for how they use these services. These policies and practices cover aspects such as: managing discussion between working group mailing lists and GitHub issues and pull requests; how text contributions are expected to be made; labeling and naming conventions; maintaining readable draft snapshots; using tooling and automation; informing participants about IETF policies; and others.
Call to action - Open source and standards join forces
https://ietf.org/how/runningcode/hackathons/107-hackathon/

• Champion combination of open source and standards
• Make standards consumable by developers
• Make open source consumable by industry
Thank you!