Decision-making in the IETF: Functions and Process

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Contents

• IETF: what it is and what is it working on?
• Standards: Why? How?
• Role of the community
• Decision processes
IETF
The Internet Engineering Task Force is a loosely self-organized group of people who contribute to the engineering and evolution of Internet technologies.

It is the principal body engaged in the development of new Internet standard specifications. (RFC 4677)
The mission of the IETF is to make the Internet work better by producing high quality, relevant technical documents that influence the way people design, use, and manage the Internet.

(RFC 3935)
Standards
Standards: Why? How?

Benefits

• Everybody benefits from creating a large market and ecosystem with compatible products
• Customers need standards to avoid being locked to a vendor
• The more reviewers, the less errors; security

Standards is just one mode of operation

• Agreements on specs vs. code
• Proprietary or partially proprietary tech
Different Approaches to Standards

• Open processes
• Legitimacy through involvement of people who deploy and build
• Improving proven proprietary tech, making it open, and elevating status to a standard
• Developing new tech openly, together
• Code is the standard – open source
• Legitimacy through an authority
• Closed
Some Areas of Active Work at the IETF

• Web protocol stack (HTTP2, QUIC)
• Security and privacy
• Real-time communications in browsers
• Management, orchestration, virtualisation, software- and data-model driven networking
• Internet of Things
• Running code and open source
Case Web Stack Developments

• We needed all this those things…
• But also, consolidation of Internet services, traffic, OSs and applications plays a role
• Prediction: Big shifts so far, even bigger ahead
• Functionality moves to applications & browsers, fast change

Standards don’t exist in vacuum
Functions and Processes
Who is in charge?

- The community!
  
  “We reject: kings, presidents, and voting
  We believe in rough consensus and running code”

- IETF leadership helps ensure spec quality, but ultimately informed community opinion trumps other concerns

- Rough consensus is achieved when all issues are addressed, but not necessarily accommodated
Publishing a Spec through the IETF

The entire IETF community

Working group participants

Initial proposal (Internet-Draft)

Internet Engineering Steering Group (IESG)

WG chairs

Final specification (RFC)
Discussion items

• Is this process hard to go through?
• What is involved in starting a new WG?
• How to engage the participants? Are there enough people commenting on all topics?
• Where was that running code again?
• If anybody can have an opinion, does that result in chaos?
• How to deal with tradeoffs where interests differ?
Thank You