Operators and the Internet Engineering Task Force (IETF)

NANOG 72
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I E T F®

IETF Mission

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]

From NANOG 63
"Operators and the IETF"

Some of these issues easy to solve:

- Don't know what IETF does: 8%
- Don't know how to participate: 58%
- Aware that the work in the IETF happens on mailing lists: 54%

Some are harder:

- Don't have enough time: 64%
- Don't feel my operator input is welcomed: 44%

Source: https://www.internetsociety.org/deploy360/projects/operators-and-the-ietf/

TL;DR:
How to participate / find out more

- Work in the IETF takes place in Working Groups
- Working Groups are clustered into Areas
- Participation is open to any interested individual
- Work happens on lists
- Remote meeting participation is possible

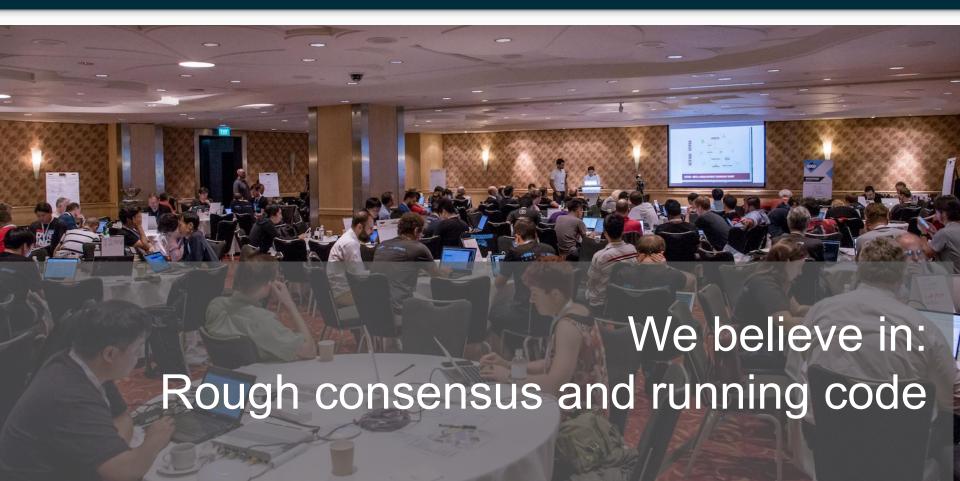**Best starting point:** https://www.ietf.org/about/participate/

How to get started

1. Come talk to us
2. Visit https://www.ietf.org/about/participate/
3. Join some of the Working Group mailing lists
4. Review and comment on documents

You **really** don't have to attend meetings to actively participate or contribute.

Review documents / participate on lists / participate remotely

We believe in:
Rough consensus and running code

Operations and Management Area (OPS) Update

- Data Model-driven Management
- Network Slicing

Benoit Claise

Operations and Management Area Director

Transport Area (TSV) Update

- Increasing use of encryption, for both transport and applications
  - Some examples: TCPINC (opportunistic TCP encryption), QUIC (encryption-only)
- Evolving transport protocol behavior
  - Some examples: L4S, Dual-AQM, PIE, FD-CoDEL, plus research like BBR
  - User-space protocols can evolve more quickly, without OS/middlebox upgrades
- Monitoring and debugging a heavily-encrypted network
  - Examples: Alternate Marking and In-situ OAM from IPPM working group

Spencer Dawkins
Transport Area Director

Routing Area (RTG) Update

- More than Just IP Routing!
  - 26 Active WGs: https://datatracker.ietf.org/wg/#rtg
  - MPLS, SDN/Overlays, Mobility/Hybrid Networks, IoT, IP Routing
- Routing Security -- What is needed?
- New work new WGs: Focus on DC Routing
  - New Hybrid Distance Vector/Link State Protocols
  - Link State Vector Routing (lsvr): Leverages BGP (transport + BGP-LS)
  - Routing In Fat Trees (rift): Purpose-Build Protocol for CLOS/Fat-Tree Topologies

Alvaro Retana
Routing Area Director

Internet Architecture Board (IAB) Update

- Workshops
  - Explicit Naming workshop
- Programs:
  - PrivSec, StackEvo, RSOC, Plenary, Liaison Oversight, IANA stewardship
- Documents
  - draft-arkko-arch-low-latency
  - draft-arkko-arch-virtualization

Lee Howard and Jeff Tantsura
IAB Members

What next?

Talk to us:

- Just after this session at the table
- … or at any other time.

About:

- Specific drafts **you** have concerns about or issues with
- Other introductions with the authors or IETF participants
- Something like a BoF / Track at NANOG 73 in Denver
- Anything else related to the IETF

We need your help to build
what you need.

Come tell us what that is!

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