

The Internet Engineering Task Force: Making the Internet Work Better

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Global IETF Community











IETF Working Groups

http://datatracker.ietf.org/wg/

133 Working Groups in:

- Applications
- Transport
- Internet
- Operations and Management
- Real-time Applications and Infrastructure
- Routing
- Security

behave, tcpm, rmcat

tls, jose, oauth, dane

ccamp, pwe, pim ospf, isis, mpls, pce, idr

httpbis,scim, websec, iri, eai

> homenet, trill, lisp, dhc, 6lowpan, sunset4, ntp

clue, codec, dispatch, rtcweb, vipr, xmpp, payload

6renum, dime dnsop



Examples of IETF protocols

- Domain Name System (DNS)
- Email (IMAP, POP, and SMTP)
- World Wide Web transport (HTTP)
- Internet Protocol (IPv4 and IPv6)
- Instant Messaging (XMPP)
- Transmission Control Protocol (TCP)
- Open Shortest Path First (OSPF)
- Border Gateway Protocol (BGP)
- Session Initiation Protocol (SIP)
- Multiprotocol Label Switching (MPLS)



Mission of the IETF

Make the Internet work better by producing high quality, relevant technical documents that influence the way people design, use, and manage the Internet.



Ethos of the IETF

- Open standards process
 - Everyone is invited to participate at all levels
 - Our primary venue is email
 - All working and published documents are freely available online
- One Internet
 - Open standards for a global Internet
 - Maximum interoperability and scalability
 - Avoid specialized protocols in different places
- Contributions are judged on technical merits:
 rough consensus and running code



OpenStand Principles

- Due process
- Broad consensus
- Transparency
- Balance
- Openness



Case Study: Internationalized Domain Names for Applications



IDNA first proposed in the IETF

Standard updated to improve real-world performance

1996

2008

2003

IDNA standard first published

2010

Deployed in global Domain Name System

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Multiple standards in a single device



• ITU-T: Codecs

• ITU-R: Spectrum

• IEEE: 802.11

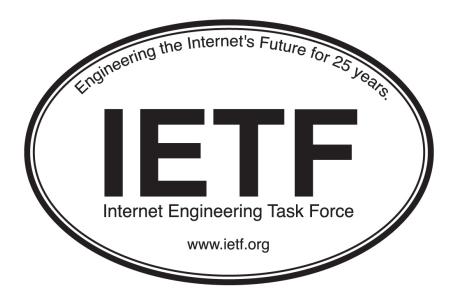
• GSMA: 3G

IETF: TCP/IP

• W3C: HTML

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Thank You

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