

Engineering the Internet's Future for 25 years.

IETF

Internet Engineering Task Force

www.ietf.org

IETF@25 by the Numbers

<http://www.ietf.org/25years>

Numbers as of 16 January 2011:

- RFCs: 4742
- RFC authors: 3612
- IETF meetings: 79
- Participants at IETF 1: 21
- Participants at IETF 79: 1207
- Total IETF meeting participants: 80,156

Mike Corrigan

First IETF Chair
16 January 1986

IETF 1 Participants Present at IETF 80

- Ross Callon
- Mike Corrigan
- Bob Hinden
- Mike St Johns
- Lixia Zhang

Original

**Proceedings of the
16-17 January 1986
DARPA
Gateway Algorithms and Data Structures
Task Force**

**Prepared by:
Phillip Gross**

FIRST IETF

Gateway Algorithms Task Force

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Notes from 16 Jan 1986

Internet Engineering Agenda

- Support → Dev/schedule ⇒ For protocols too.
- 1 ⇒ Protocol Stabilization/Rationalization
 - 2 ⇒ New networks & new network ⇒ op. network transition
 - 3 ⇒ Protocol Police
 - TCP group
 - * BGP group
 - Nameservers
 - 4 ⇒ Implementor's Conf. ⇒ DOD Arch/ISO Arch.
 - 5 ⇒ State of Internet Measurement
 - Future:
 - Multicast
 - Int. L.A.
 - T.O.S.
 - Congest. Ctl.
 - Dynamic between internet regmts:
 - 1) Stabilization of environment
 - 2) Support for new regmts/research
 - Pinging
 - Per network/per host redirects
 - * Subnetting
 - Network Time Protocol ⇒
 - IP addressing
 - * Host RFC
 - PC Support ⇒
 - 3 yr cycle. for impl.
 - 7 yr " for research
- Load sharing
- solves netw

Routing in a host IP layer

* Multi-homed hosts (hosts on multiple networks)

Per host
Per TOS
Per bit map
Per network

TOS
Net

Exit gateway routing

Gateway redirect

ARP Hack ⇒

- 1) not all guys.
- 2) ethernet only

Issue: All

* Every host impl. has to do subnetting
every gateway has to support it.

Rickly connected together,
poorly connected to rest of world.

IETF 1 - The Agenda

1. Protocol Stabilization/Rationalization

- TCP Group
- EGP Group
- Nameservers
- Subnetting
- Network Time Protocol
- PC support
- IP Addressing

IETF 1 - The Agenda

Future:

- Multicast
- Congest. Ctl.
- Int. L.A.
- T.O.S.

Dynamic between internet requirements: 1)
Stabilization of Environment; 2) Support for
new requirements/research

Still on the "To Do" List from IETF 1

1. Protocol Stabilization/Rationalization
IP Addressing - IPv6 transition - will addressing "silo"?
3. Protocol Police - "Tarpitting"???
5. New Networks & New Experimental Network => Op.
network transition - Internet2? and what next?
5. State of Internet Measurement - Lixia is still working on it
- Multicast - Efficient and Secure?
- Congestion Control - Do the assumptions of the Van
Jacobsen solution remain valid?
- T.O.S. - Can we support mobile and medical grade networks?

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