MBone Engineering BOF

34th IETF
Dallas, USA
December 4, 1995

Chairs:
Steve Deering
Dino Farinacci

Goals of the BOF

- identify problems to be solved & steps to be taken to evolve the MBone “pilot” into a ubiquitous, “native” Internet service
- learn the status of current and planned solutions to the outstanding problems
- begin planning for depoyment of those solutions

Agenda (Top-Level)

(1) presentations by Internet service providers

(2) status reports on management debugging tools

(3) status reports on multicast routing implementations

(4) status reports on multicast traffic management mechanisms

(5) next steps for growing/improving the MBone

Agenda (Detail)

(1) presentations by Internet service providers

- BBN Planet — Henry Clark
- DirecPC — Doug Dillon
- Internet Pailroad — Carl Malamud
- MCI — Jeff Young
- Netcom —
- Univ. of Oregon — Dave Meyer
- UUnet — Hank Kilmer
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Agenda (Detail)

(1) presentations by ISPs — possible issues / topics:

- plans for / experiments with native multicast
- un-met software requirements (routing, mgmt, etc.)
- need for hardware upgrades?
- traffic management / congestion concerns
- bandwidth availability forecasts
- vulnerability to misconfiguration, “storms”, etc.
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Agenda (Detail)

(2) status reports on management debugging tools

- multicast debugging architecture — Van Jacobson
- SNMP support for multicast — Dave Thaler
- multicast traceroute — Bill Fenner
- IGMP-based router info messages — Bill Fenner
- mapping tools —
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Agenda (Detail)

(3) status reports on multicast routing implementations

- 3Com — Tom Maufer & Tom Lemaire
- Bay — Eric Crawley
- cisco — Dino Farinacci
- PARC — Bill Fenner
- SAIC/Bellcore — Ken Carlberg
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Agenda (Detail)

(4) status reports on multicast traffic management mechanisms (for “best-efforts” traffic only, i.e., excluding resource reservation approaches, which are addressed elsewhere)

- mcast rate limits & priority dropping — Steve Deering
- administrative scope control — Van Jacobson
- RED — Van Jacobson
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Agenda (Detail)

(5) next steps for growing/improving the MBone

- replacing tunnels with native mcast forwarding
- repositioning tunnels, e.g., across MCI
- using DVMRP routing through transit PIM clouds
- using route aggregation & default routes in DVMRP
- scheduling MBone downtime for re-engineering
- banning mcast routers that don't support pruning, mtrace, longest-match routing, and admin. scoping?
- configuring & using administrative scope boundaries
- raising the 500 Kbps MBone bandwidth ceiling
- developing/deploying mcast-capable SLIP/PPP servers

Agenda (Detail)

(5) next steps for growing/improving the MBone (continued)

- create an MBone Ops mailing list? more BOFs? a WG?
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