

73<sup>rd</sup> IETF, November 2008, Minneapolis

# Requirements for IP Multicast Session Announcement in the Internet

draft-ietf-mboned-session-announcement-req-00

Hitoshi Asaeda (Keio University)

Vincent Roca (INRIA)

# Goal

- Clarify the issues SAP has, and show the requirements for IP multicast session announcement protocols / procedures
- No protocol definition or solution mentioned in this draft

# Requirements

- Information consistency
- Low information update latency
- Low bandwidth consumption
- Scalability
- High availability
- Scope control
- No dependency on a routing architecture
- Sender and receiver control
- Security consideration

# Information Consistency

- Information consistency, which warrants that end users have a consistent view of session announcement, is of major importance.

# Low Information Update Latency

- The list of multicast channels should be updated rapidly after the creation, modification, or removal of the session information.

# Low Bandwidth Consumption

- IP multicast session announcement should effectively consume the network bandwidth so that it does not affect other communications or services

# Scalability and High Availability

- Session announcement can be used by a large number of end users spread throughout the Internet, and can manage a very large number of sessions
- The scheme must be robust in front of host/link failures and packet losses. This can be fulfilled either by transmitting messages periodically or by keeping track of failures and recovering them

# Scope Control

- Scope control is required to preserve bandwidth resources and offer a certain level of confidentiality in IP multicast communication.

# No Dependency on a Routing Architecture

- The session announcement scheme must accommodate (or be independent of) any kind of multicast routing protocol or communication model

# Sender and Receiver Control

- Administrators must be able to allow to announce multicast sessions only from approved multicast senders and only to approved multicast data receivers in their network. They must be able to filter out malicious users.

# Security Consideration

- In order to provide secure multicast communication, session announcement should have a function that enables to encrypt session information and distribute it to only the legitimate users

# Next Steps

- Revise the draft
  - Need comments and inputs from mboned members
  - Detail the requirements