Multicast Service Models

draft-acg-mboned-multicast-models-00

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Draft history

• Original purpose:
  – Document multicast service models (at a high level)
  – Discuss their use cases; document deployment examples
  – Recommend use of SSM

• Got some feedback at IETF96
  – Some interest in the draft
  – Strip back on text on the models
  – Focus on promoting SSM

• Been parked for a year since then
Advocating SSM

• It seems the mboned WG has no recent, clear document advocating SSM usage, explaining its advantages
  – But we talk about that a lot in the WG

• Proposal
  – Refocus draft on positive use cases of SSM
  – And give draft an appropriate new title

• Hopefully this isn’t too contentious 😊
What about ASM?

• Interesting proposal by David Farmer on Internet2 multicast list
  – See https://lists.internet2.edu/sympa/arc/wg-multicast/2017-06/msg00001.html

• “I propose that **general purpose classic IPv4 ASM be deprecated** on the Internet2 R&E Backbone. The primary propose of this change is to simplify multicast support for the new MPLS based R&E Backbone, by mostly eliminating the need for MSDP. SSM for both IPv4 and IPv6, and Embedded-RP for IPv6, should continue to be supported on the Internet2 R&E Backbone, as they do not require MSDP.”

• David also mentions some ways that “legacy” MSDP could be supported during a phase-out (see the link above), but the goal is longer-term simplification of multicast support
Do we want IETF action here?

• Do we want to take IETF action here?
  – If so, what are our options for deprecating ASM?
  – For example, make RFC3618 (MSDP) Historic?

• Is it just about making backbone simpler to operate?
  – What about ASM and RP use on campuses, for example?
  – (which may include Anycast RP, MSDP, ...)

• We can make our draft a BCP for SSM use
  – Noting the wording used in RFC3569 and RFC4607
  – And appropriate guidance for applications and source discovery
Also...

- What about IPv6?
  - Embedded-RP isn’t too hard to support - but should we make RFC3956 Historic as well, leaving just SSM for IPv4 and IPv6?

- What about bidirectional PIM?

- What about IGMP/MLD?
  - RFC6434bis makes MLDv2 support a MUST
  - Should also make a statement about IGMPv3

- How to understand which applications use ASM vs SSM?
  - Engage with Applications and Real Time Area?
Thoughts?

• What do we actually want to do?
• Focus on inter-domain SSM recommendation?
  – Or promote SSM everywhere?
• What language to use?
  – MUST, (NOT) RECOMMENDED?
• Carrot (SSM BCP) or stick (RFCs to Historic)?

• Agreed actions and next steps?