Multicast Service Models

draft-acg-mboned-multicast-models-00

Mikael Abrahamsson, <u>mikael.abrahamsson@t-systems.de</u>
Tim Chown, <u>tim.chown@jisc.ac.uk</u>
Lenny Giuliano, <u>lenny@juniper.net</u>

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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 ^M

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?