

Deprecating ASM for Interdomain Multicast

draft-acg-mboned-deprecate-interdomain-asm-02

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v1.0

Update since IETF 101

- IETF 101: discussed
 - draft-acg-mboned-deprecate-interdomain-asm-00
 - Evolution from prior drafts: Now only discussing INTERDOMAIN deprecation
 - Not touching Intradomain ASM – widely used
 - Not replaceable by ASM for e.g.: Bidir-PIM applications
 - Can start to think how to recommend move to Intradomain SSM in another step
 - Primarily an issue of new applications: SP (Interdomain) have a higher chance to force applications to support what they want. Enterprises less so. But when “Internet” SSM applications start to appear more because of “Intradomain ASM” deprecation, these will hopefully also trickle into enterprises
 - Research / Internet 2 etc. may start the trend if our Stds. work helps with deprecation.
 - Many good details – and some open text to add more detail

Update since IETF 101

- draft-acg-mboned-deprecate-interdomain-asm-01
 - Various textual clarifications (BCP target, ...)
 - Clarifying Interdomain scope because of dependency on SSM app support (as in previous slide)
 - Added text discussing MSDP challenges, and why there is no MSDP for IPv6, and therefore why there is no real interdomain IPv6 (other than embedded RP)
 - Details about main application ASM issue: No interdomain protection against unwanted sources!!
 - Interdomain there are no good standards solutions, but a lot of hacks. Not so interdomain
 - Explaining how SSM interdomain is just subset of PIM-SM
 - == nothing new, just less of the same == very safe to use
- Expanded scope of “Interdomain”: Includes single PIM-(S)SM routing domain, but multiple operators involved !!!
 - Key use case: SP IPTV going to homes: Every home user is a separate operator, even though they only operate IGMP proxy home gateways (but not PIM routers).
 - So operationally this is a very fair definition of interdomain, and it’s a key use case where we want to get rid of ASM.

Update since IETF 101

- draft-acg-mboned-deprecate-interdomain-asm-01 continued
 - Adding text to also suggest to prefer SSM intradomain when possible
 - Application dependencies discussed
 - Added stub to suggest documenting BCP for how to develop SSM apps
 - Logical dependency for this document
 - Hopefully we can avoid making this an actual document dependency
 - Would love to work on this type of document, but may take more time than finishin this deprecation BCP
- draft-acg-mboned-deprecate-interdomain-asm-01
 - Typo level fixes

Associated (candidate) work

- Upgrading IGMPv3/MLDv2 to (full) STANDARD, deprecating older versions
 - See separate presentation
 - May include another informational MBoned document.
- Fully deprecating MSDP, ... AFTER:
 - IMHO: Dependency: Enhance RFC4610 so that nobody would have to rely on MSDP for Intradomain Anycast-RP:
 - IMHO: Need RFC4610 YANG for managing RFC4610
 - IMHO: need reliable RP-to-RP transport (TCP == registers for PIM-PORT)
 - draft-anish-reliable-pim-registers
 - Will discuss details (including MIB etc.) on that PIM preso
 - This step shows to concerned PIM-SM/AS operators our commitment to support intradomain PIM-SM/ASM when there is no better option (Bidir-PIM or SSM), but eliminates the experimental leftover (MSDP) that we are carrying around now.
 - >90 % intradomain Multicast is still PIM-SM !!!
- SSM application development recommendations
- More ?...

Conclusion

- Authors think document is in good shape
- All strategic concerns for adoption should be eliminated
 - Through -00, refined 01/02 text and overall strategy across documents (previous slide)
- Currently in adoption call- please respond on list

Thank You!