Multicast Lessons Learned

draft-mcbride-mboned-lessons-learned

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Background

- During a side meeting last summer it was mentioned that we really need a document discussing multicast lessons learned.

- The three of us met to discuss in Philly and came up with the draft as an initial effort with much more to go. This is not a BCP.

- Purpose is to help understand the previous development work to help understand the current work. Perhaps this will help with broader understanding of multicast and ongoing efforts for improvement.

- We start with DVMRP because that is really how multicast started on the Internet. We solved problems w/DVMRP and made design choices.

- IGMPv1 -> IGMPv3 and MLD

- DVMRP -> PIM-DM -> PIM-SM w/MSDP -> PIM-SSM

Current protocols/topics addressed

3. Lessons learned about IP Multicast over the last 30 years

3.1. DVMRP

3.2. Shared vs Source Trees

3.3. Data Driven State Creation and RPF

3.4. MPLS MVPNs

3.5. SD and SDR

3.6. All or Nothing Problem

3.7. Network Based Source Discovery

3.8. Premature Optimization

3.9. Kernel vs User Space

3.10. IGMP

3.11. 802.11

Next steps

- mboned/pim chairs agree this would be better in pim.

- We added a new author. We added BIDIR.

- Haven't included MSDP, Auto-RP, BGMP, MOSPF, MADCAP… perhaps we should. But we are focusing on major issues/lessons learned and don't plan to include all protocols.

- Should probably reference: draft-zzhang-pim-multicast-scaling-considerations

- We appear to (mostly) have support to adopt this draft, so the authors request we do so.