

# draft-ietf-pim-eckert-rfc1112bis-08

PIM-WG, IETF125 Shenzhen

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# Changes since IETF124

- Early reviews requested after IETF124
  - SECDIR: Brian Weis
  - INTDIR: Pascal Thubert
  - IOTDIR: Erik Nordmark
  - RTGDIR: Sandy Zang
  - TSVDIR: Michael Tüxen (still outstanding)

Good set of textual nitpicking/improvements applied

- E.g.: emphasized that IP means “IPv4 or IPv6” (IPv6 RFCs never use term “host group”)
- IGMPv1 “backward compatibility” specified: if document also mandates IGMPv2, v3

## New 10.14 Terminology

“SSM channel address” – bad. Is it the (S,G) or just the G of the (S,G) ?

RFC8200/RFC4291 – if semantic described applies equal to ASM/SSM, just say multicast addresses.

New doc requirement: specify if/how spec applies to ASM vs. SSM (same, only ASM, different ASM, SSM).

# Changes since IETF124

- New IANA registry from recent RFC must be changed RFC1112->THISRFC  
"IANA Multicast 48-bit MAC Addresses"
- New text for Appendix A.2 (transient IP multicast addresses)
  - Existing text from Steve Deering theorizing about different options. Opened the door to amend with new information since 1990: Three paragraphs
  - Most widely deployed: SAP/SDP in MBone
  - RFC6308 summary of all the tried and non-working multicast address solutions (MADCAP,...)
  - Explanation of evolving solution I-D.ietf-pim-zeroconf-mcast-addr-alloc-ps, I-D.ietf-pim-gaap
- Appendix A.3 rewritten/split
  - A.3 now only link-local considerations
  - A.4 now multicast router considerations

# Open Issue: Applicability to router host stack

- What if an IP multicast router has an IP multicast host stack ?
  - Do all the same requirements/solutions apply as to hosts who are not IP multicast routers?
- Do the “MUST use IGMP/MLD” membership reports ?
  - We know they need to receive all multicast traffic anyhow – to work as a (PIM) router
  - They can also always argue that they can “invisibly” run IGMP/MLD internally on loopback  
So external (LAN) interfaces just need to use PIM, but not IGMP/MLD host side
- But: link-local scope multicast is never a router thing
  - But e.g.: IoT routers never used MLD to subscribe to those groups eg: RPL LL multicast
- What is the best requirements text to make all “Well Working” current deployments in compliance with rfc1112bis
  - Current text proposal:
    - Routers “SHOULD have host stack” - “MAY optimize (leave our requirements) – very hand waiving routers..
  - But want to rethink/refine
  - Also ensure text is well written for readers to understand this (not just context free requirements)

# Open Issues (2)

- Pascal Thubert:
  - Low-Power (RPL) nodes not using MLD memberships – but now RFC9685
  - Still need to understand if/how to think about this.
  - RFC9685 could just be an alternative to PIM (not MLD) - logically
    - But unclear if all RPL nodes are routers or also just hosts.
  - Tentative optionn:
    - broaden/expand “MUST do IGMP/MLD”
    - How to talk about alternatives ? Explicitly mention RFC9685 ?
- Another early review from IANA arriving @125. Registry text changes

# Next steps

- One more rev (infamous last words) to close open issues
  - Very little changes (but may be fundamental re. MLD/IGMP requirement)

# The End