

IETF 121 Updates:

draft-ietf-pim-zeroconf-mcast-addr-alloc-ps
draft-ietf-pim-updt-ipv6-dyn-mcast-addr-grp-id
draft-ietf-pim-ipv6-zeroconf-assignment

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draft-ietf-pim-ipv6-zeroconf-assignment Refresher

1. Random group ID in range 0x90000000-0x9FFFFFFF
2. Generate link-scoped IPv6 multicast address
3. Public PTR record of corresponding MAC address using “eth-addr.arpa” suffix

Example

0x9abcdef0

ff32:00ff:a12:34ff:fe56:7890:9abc:def0

33:33:9A:BC:DE:F0

0.f.e.d.c.b.a.9.3.3.3.eth-addr.arpa

Proof-of-Concept

- Garmin Marine allocated IPv6 multicast addresses ff02::2c0 to ff02::2ff
- Use a subset of those addresses for dynamic allocation
- Use “bluenet” suffix to avoid interfering
- Example:
ff02::**2e5**
33:33:00:00:**02:e5**
5.e.2.0.0.0.0.3.3.3.3.bluenet