AMT Status

draft-ietf-mboned-auto-multicast-05.txt

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Summary

• Comments received on -05
• Pre-draft-06 sent to AMT mailing list, additional comments received.
• Expect updated draft -06 soon.
Changes Already in Pre-06

- Added IGMP/MLD Query to AMT Membership Query message to allow gateway to know what version of report to respond with. The query version should match the query version on the upstream interface of the relay, if acting as an IGMP/MLD proxy.
  - Now looks just like IGMP after a request for query
  - Allows passing other info in the query (QQIC, etc)

- Added text to say the UDP checksum SHOULD BE calculated on control messages but MAY be 0 on the multicast data messages.

- Clarified that the IP header is included in IGMP/MLD messages as well as the multicast data messages.
Comments Received on Pre-06

• Editorial:
  – A couple places still have IPv4-specific text
  – IANA considerations omit mention of anycast prefix for public relays

• Technical:
  – Support for sourcing
  – IPv6 unicast prefix length
  – Data encapsulation
Support for sourcing

• A couple folks suggested removing support for sourcing
• Others responded saying AMT will be more widely deployed and accepted if gateways can source too
  – MLM BOF had sourcing as a req
• Sourcing is already supported in existing implementations

• Proposal:
  – Gateway MAY support sourcing
  – Public relays MUST support sourcing
  – Private relays SHOULD support sourcing
**IPv6 Unicast Prefix Length**

**Group address:**

```
| SSM prefix | low 64 bits of real src| variable |
+------------+------------------------+-------------+
```

**Source address:**

```
| 64-bit AMT unicast prefix| high 64 bits of real src|
+-------------------------+-------------------------+
```

- Supports 32-bit group IDs (per RFC 3307)
- 64-bit subnet prefix consistent with IPv6 Addr Arch (RFC 3513) for addresses that don’t start with binary 000
- Results in using more of FF3x::/32 (SSM range) than just what’s in FF3x::/96 (RFC 3306 is confusing)
  - Alternative is a /16, or no support for sourcing
Data Encapsulation

• Some routers can do GRE in hardware but UDP only in software
• GRE doesn’t go through NATs which is one of the core requirements for AMT
• Have to either negotiate, or just say UDP
• Currently we don’t expect mass deployment faster than routers can get UDP supported as fast as GRE
• If/when there is mass deployment, we expect the masses to be NAT’ed

• Proposal: Keep it simple. Just say UDP (no change).