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Lightweight IGMPv3/MLDv2

draft-ietf-mboned-lightweight-igmpv3-mldv2-01

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Outline

- Changes from -00 to -01:
  - Substitute the message type IS_EX(NULL) by TO_EX(NULL) on the host side
  - Editorial changes, clarifications, and corrections
- Implementation and test status
- Next step

Record Types

Full Version	LW -00	LW -01	Description
IS_EX()	**IS_EX()**	**TO_EX()**	query response for (*,G) join
IS_EX(x)	**N/A**	**N/A**	query response for EXCLUDE (x,G) join
IS_IN(x)	**ALLOW(x)**	**ALLOW(x)**	query response for INCLUDE (x,G) join
ALLOW(x)	**ALLOW(x)**	**ALLOW(x)**	INCLUDE (x,G) join
BLOCK(x)	**BLOCK(x)**	**BLOCK(x)**	INCLUDE (x,G) leave
TO_IN(x)	**TO_IN(x)**	**TO_IN(x)**	change to INCLUDE (x,G) join
TO_IN()	**TO_IN()**	**TO_IN()**	(*,G) leave
TO_EX(x)	**N/A**	**N/A**	change to EXCLUDE (x,G) join
TO_EX()	**IS_EX()**	**TO_EX()**	(*,G) join

Host-Side Implementation

- Open source implementation
  - NetBSD-current
    - Hopefully, ported to other BSDs
  - LW-IGMPv3 implementation will be ready around the end of Aug.
  - LW-MLDv2 implementation will be ready before the next IETF
- Others?

Router-Side Implementation

- Software-based router implementation (by Huawei)
  - XORP1.4
    - On NetBSD-3.1 / GNU make 3.80 / gcc 3.3.3
  - LW-IGMPv3 implementation was done
  - LW-MLDv2 implementation will be ready soon
- Others?

Implementation Test

- Done
  - Router behavior with a full IGMPv3 host and application was confirmed
  - Router compatibility with IGMPv3/v2/v1 messages (given by a packet generator) was confirmed
- Next
  - LW-IGMPv3 test for the host-side implementation
  - Router behavior with a LW-IGMPv3 host
  - LW-MLDv2 test for both sides

Next Step

- Implementation completion and public release of host-side implementations
- Router-side implementations (i.e. XORP modification) will be opened to public, too
- Compatibility and interoperability test
- Improvement of the documentation quality
  - Seek the documentation review