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Lightweight IGMPv3/MLDv2

draft-ietf-mboned-lightweight-igmpv3-mldv2-02

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Changes

- Editorial changes, clarifications, and corrections
 - Terminology section is added
 - LW message type is illustrated in a separate section
 - Better wording and clearer expression
- Fix
 - Update router's process for the new record set
- Preserve full version's merging report operations, not being as "Optional"

Implementations

- Host-side implementation
 - NetBSD-current
 - LW-IGMPv3 implementation was done
 - <http://www.sfc.wide.ad.jp/~asaeda/LW-IGMPv3/>
 - LW-MLDv2 implementation is in progress
- Software-based router implementation (by Huawei)
 - XORP1.4
 - On NetBSD-3.1 and Linux 2.6.16
 - Both LW-IGMPv3 and LW-MLDv2 implementations were done

Compatibility Test Environment

- Router Side
 - OS: Linux 2.6.16, NetBSD
 - Platform: XORP1.4
 - Multicast protocols
 - PIM-SM, LW-IGMPv3, IGMPv3, IGMPv2/v1, LW-MLDv2, MLDv2, MLDv1
- Host Side
 - OS: Windows XP (IGMPv3), NetBSD-current (LW-IGMPv3)
 - Self-developed emulator: generating packets of (LW)IGMPv3/v2/v1 and (LW)MLDv2/v1
- Other Software
 - EtherealPro4.6: capturing testing packets

Router-Router Compatibility Tests

LW-IGMPv3 router vs. other routers

	IGMPv3	IGMPv2	IGMPv1
Case 1	●		
Case 2		●	
Case 3	●	●	
Case 4		●	●

LW-MLDv2 router vs. other routers

	MLDv1	MLDv2
Case 1	●	
Case 2		●

Host-Router Compatibility Tests

LW-IGMPv3 host vs. other routers

	IGMPv3	LW-IGMPv3
Case 1	●	
Case 2		●
Case 3	●	●

LW-IGMPv3 host vs. other routers and/or host

	IGMPv3 host	IGMPv3 router	LW-IGMPv3 router
Case 1	●	●	●
Case 2	●		●

Next Step

- Finish implementations and tests
- Revise the draft
 - Thanks for all comments sent to the ML and authors
 - We appreciate more comments
 - The future's direction
 - Goal: PS
 - After the next revision, we'll start the WGLC