



Veryx ATTEST™ MLD - Router Conformance Test Suite DATASHEET

Veryx ATTEST™-CTS Multicast Listener Discovery (MLD) Router automated test suite provides Equipment Manufacturers and Service Providers an easy and efficient solution for verification of MLDv1/v2 router implementation in IPv6 multicast routing application enabled devices. ATTEST enables significant speeding up of testing cycles and reduces the "time-to-market".

Veryx ATTEST MLD Router Conformance Test Suite is designed for conformance testing of the Router role implementation of Multicast Listener Discovery using ATTEST -- a powerful test framework that requires minimal time for set-up and enables efficient use of time and resources.

Veryx has devised 103 test cases that comprehensively test for MLDv1/v2 Router conformance. These test cases have been grouped into six convenient test groups based on the IETF specifications for each category of functions.

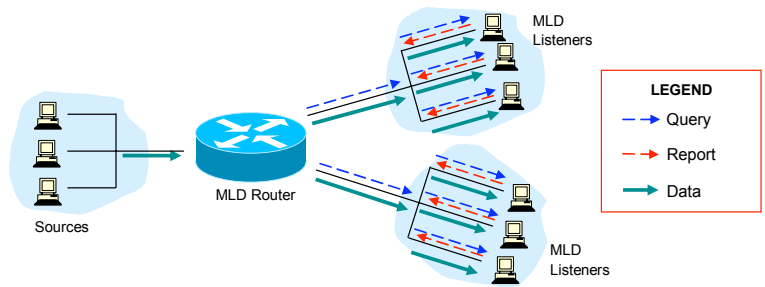


Figure 1. An example of a network supporting MLD

SPECIFICATIONS

- IETF RFC 2710
- IETF RFC 3810

MLD TESTS

- * Frame Format
- * Data Forwarding
- * Multicast Router
- * Query Handling
- * Interoperability
- * Packet Handling

PLATFORM REQUIREMENTS

- * ATTEST 6.x Framework
- * 2 Ethernet ports
- * Serial or additional Ethernet port for DUT management

ATTEST MLD Router test cases perform conformance testing for Multicast Router functionality, Query handling and interoperation of MLDv2 router with MLDv1 router/listener.

The multicast data forwarding behavior of the MLD router device is also tested. Comprehensive tests verify the router state transition behavior between querier and non-querier. Tests also verify the possible states of a querier for a multicast group such as 'No listeners present', 'Checking listeners' and 'Listeners present' simulating the events that would cause the state transitions. Tests also verify the packet format of MLDv1/v2 messages and the processing behavior of the DUT on receiving invalid MLD messages.

ATTEST MLD Router Conformance Test Suite is written in industry standard Tcl scripts. Well-defined APIs and source files provide the flexibility to add, customize or modify the test cases for specific requirements.

Together with other ATTEST-CTS Test Suites like IPv6 (Basic, Advanced, Tunneling), BGP4+, ISISv6, OSPFv3, PIM-SMv6, PIM-DMv6, and MLD-Listener Veryx provides one of the most comprehensive solutions for Layer-3 IPv6 conformance testing. IPv4, Carrier Ethernet and Layer-2 Switch Test Suites such as MSTP, RSTP, STP and VLAN are also available.

About Veryx Technologies

Veryx Technologies (formerly Net-O₂ Technologies) provides innovative Verification and Measurement Solutions for the global communications industry. ATTEST solutions verify networking equipment being used for Access, Carrier Ethernet, Data Center, Edge, Enterprise, Industrial and Security. The unique offerings from Veryx enable customers to reduce the "time-required-to-test" and enhance their "time-to-market".

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