Veryx ATTEST™-CTS Protocol Independent Multicast - Dense Mode Version 6 (PIM-DMv6) automated test suite provides Equipment Manufacturers and Service Providers, an easy and efficient solution for the verification of PIM Dense Mode implementation in Ethernet Switches and Routers deployable in IPv6 networks. ATTEST enables significant speeding up of testing cycles and reduces the "time-to-market".

Veryx ATTEST PIM-DMv6 Conformance Test Suite is designed for conformance testing of PIM Dense Mode implementation in IPV6 networks using ATTEST -- a powerful test framework that requires minimal time for set-up and enables efficient use of time and resources.

Veryx has devised about 139 test cases that comprehensively test for PIM-DMv6 conformance. These test cases have been grouped into 8 convenient test groups based on the ETF specifications for each category of functions.
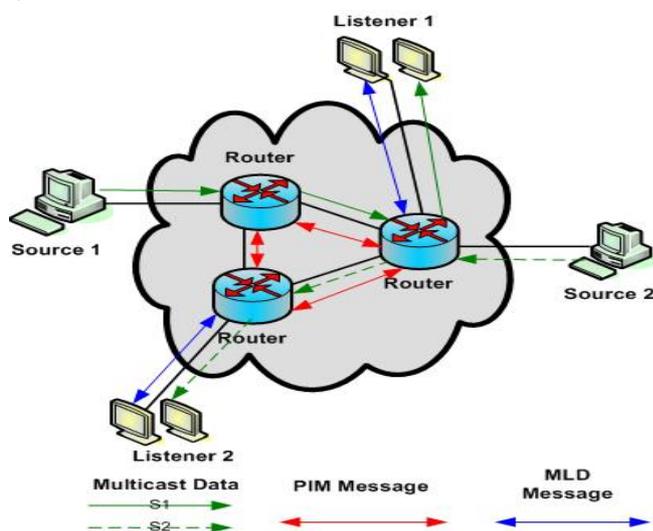

Figure 1: An Example IPv6 network with multicast routing capability

SPECIFICATIONS
IETF RFC 3973

PIM-DMv6 TESTS
* Assert functionality
* Finite state machine support
* Multicast data forwarding
* PIM Neighbor behavior
* State Refresh packet handling
* Packet format support
* Incorrect packet handling
* Management support

PLATFORM REQUIREMENTS
* ATTEST 6.x Framework
* 3 Ethernet ports
* Serial or additional Ethernet port for DUT management

ATTEST PIM-DMv6 test cases verify the PIM-DMv6 support for both Leaf/Edge router (device connected with MLD hosts and connected with other PIM routers) and Core router (device connected with other PIM routers) implementations

PIM-DMv6 Test cases verify the generation and handling of valid and invalid Hello, Assert, Join, Prune, State Refresh, Graft, Graft-Ack PIM messages from neighboring PIMv6 Routers. Test cases verify (S,G), upstream and downstream Finite state machine implementations. Tests also verify the functionality in both ASSERT Winner and Loser situations. Multicast data forwarding based on downstream membership is also verified. Multicast Listener interoperability is also verified for both MLDv1/v2 listeners.

ATTEST PIM-DMv6 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 PIM-SMv6, MLD-R and MLD-H, Veryx provides one of the most comprehensive solutions for Layer 3 IPv6 Conformance testing. Carrier Ethernet, Layer 3 IPv4 and Layer 2 test suites like STP, RSTP, MSTP and VLAN are also available.

About Veryx Technologies

Email : info@veryxtech.com

Web : www.veryxtech.com

USA : +1-408-850-1247

International : +44-203-371-8691