Veryx ATTEST™ BFD-IPv4 Conformance Test Suite DATASHEET

Veryx ATTEST™-CTS Bidirectional Forwarding Detection for IPv4 (BFD) automated test suite provides Equipment Manufacturers and Service Providers an easy and efficient solution for verification of BFD implementation in Carrier Ethernet access and core devices. ATTEST enables significant speeding up of testing cycles and reduces the "time-to-market".

Veryx ATTEST BFD Conformance Test Suite is designed for conformance testing of Bidirectional Forwarding Detection in IPv4 networks. ATTEST BFD relies on ATTEST-- a powerful test framework that requires minimal time for set-up and enables efficient use of time and resources.

Veryx has devised 148 test cases that comprehensively test for BFD conformance. These test cases have been grouped into 10 convenient test groups based on the IETF specifications for each category of functions.

ATTEST-CTS BFD test cases perform conformance testing for session initialization, session establishment, and association of the received BFD packets for asynchronous and demand mode based sessions. Tests also verify the reception and transmission of echo packets. The Authentication support, BFD timer negotiation and timer manipulation are also tested.

SPECIFICATIONS
IETF RFC 5880
IETF RFC 5881
Draft-ietf-bfd-mib-07.txt

BFD TESTS
* Authentication Support
* Timer Handling
* Echo Packet Handling
* Demand Mode
* Frame Format
* Session Handling
* State Machine
* Management Support
* BFD Packet Handling
* Backward Compatibility

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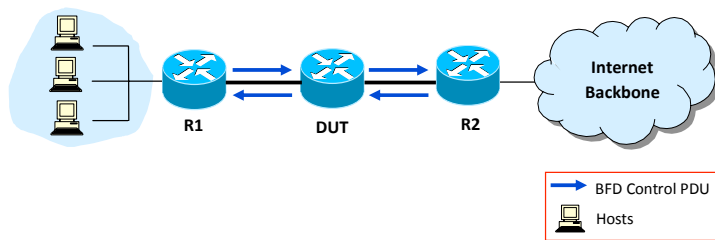* Serial or additional Ethernet port for DUT management

Figure 1. An Example of a network supporting BFD

The BFD State Machine changes, BFD Management configuration in the system and handling of invalid BFD control PDUs are also verified. Frame format checks and backward compatibility checks are also handled by the test cases.

ATTEST BFD 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 and ATTEST-XP test suites for IPv4 protocols, Veryx provides one of the widest ranges of test suites for verification of IPv4. Test suites for IPv6, Layer-2 bridging and Carrier Ethernet 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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