



Veryx ATTEST™ Y.1731 Conformance Test Suite DATASHEET

Veryx ATTEST™-CTS Y.1731 (OAM functions and mechanisms for Ethernet based Networks) automated test suite provides Carrier Ethernet Equipment Manufacturers and Service Providers an easy and efficient solution for verification of Y.1731 implementation in devices deployable in carrier Ethernet network. ATTEST enables significant speeding up of testing cycles and reduces the "time-to-market".

Veryx ATTEST Y.1731 Conformance Test Suite is designed for conformance testing of service OAM functions in Carrier Ethernet networks. ATTEST Y.1731 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 about 165 test cases that comprehensively test for Y.1731 conformance. These test cases have been grouped into 15 convenient test groups based on the ITU-T specifications for each category of functions.

ATTEST Y.1731 test cases verify the Service OAM support in the following implementation scenarios:

- Maintenance Entity Group End Point (MEP)
- Maintenance Entity Group Intermediate Point (MIP)

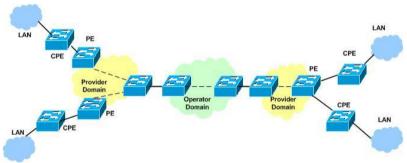


Figure 1: An example of a network with Ethernet OAM functionality

SPECIFICATIONS

ITU-T Rec Y.1731 - Feb. 2008

Y.1731 TESTS

- * Alarm Indication Signal
- * APS PDU Reception
- * Continuity Check Protocol Reception
- * Continuity Check Protocol Transmission
- * Frame Delay Measurement
- * Frame Format
- * Frame Loss Measurement
- * Independent MEG Level support
- * Linktrace Protocol Reception
- * Linktrace Protocol Transmission
- * Locked Signal
- * Loopback Protocol Reception
- * Loopback Protocol Transmission
- * MCC PDU Reception
- * Test Signal Message Transmission

PLATFORM REQUIREMENTS

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

The test cases verify generation and handling of valid and invalid OAM messages. The verification is done for customer, provider and operator levels. Verification is done on both VLAN Aware (CVLAN and SVLAN) and VLAN Unaware switches. ATTEST Y.1731 test cases verify the Continuity check (ETH-CC), Loopback (ETH-LB) and Link trace (ETH-LT) functions. In addition it verifies the Remote defect indication (ETH-RDI), Test (ETH-TEST) and OAM performance functions. Alarm indication signal (ETH-AIS) and Locked signal (ETH-LCK) functions are verified in both 1 second and 60 seconds interval. Independent MEG Level support is also verified. ATTEST Y.1731 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 Carrier Ethernet protocols, Veryx provides one of the widest ranges of test suites for verification of Carrier Ethernet. Test suites for IPv4, IPv6 and Layer-2 bridging 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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