Veryx ATTEST™ VLAN
Conformance Test Suite DATASHEET

Veryx ATTEST™-CTS Virtual LAN (VLAN) automated test suite provides Equipment Manufacturers and Service Providers an easy and efficient solution for verification of VLAN implementation in Ethernet Switches being deployed for applications in networks such as Metro Ethernets and Enterprises. ATTEST enables significant speeding-up of testing cycles and enhanced "time-to-market".

Veryx ATTEST VLAN Conformance Test Suite is designed for conformance testing of VLAN with ATTEST -- a powerful test framework that requires minimal time for set-up and enables efficient use of time and resources.

Veryx has devised around 115 test cases that comprehensively test for VLAN conformance to IEEE 802.1Q™-2003, IEEE 802.1Q™-2005. These test cases have been grouped into 8 convenient test groups based on the IEEE specification for each category of functions.

ATTEST VLAN test cases perform verification of VLAN related aspects such as Filtering Database, Ingress Egress Rules, Static VLANs and Dynamic VLANs using GVRP (as defined by IEEE Standards 802.1D-1998 and 802.1D™-2004).

ATTEST VLAN test cases also perform conformance verification of Port and Protocol based VLANs for various Protocols and Frame types. All spanning tree modes, STP, RSTP and MSTP, are supported as the underlying active topology.
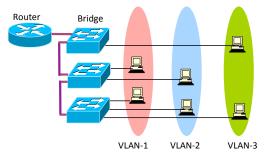
SPECIFICATIONS
IEEE 802.1D 1998
IEEE 802.1D™-2004
IEEE 802.1Q™-2003
IEEE 802.1Q™-2005

VLAN TESTS
* Frame Formats
* Basic Spanning Tree
* Ingress Egress Rules
* Filtering database
* GVRP
* VLAN Bridge Management
* Port and Protocol based VLAN Ingress Egress
* Port and Protocol based VLAN Bridge Management

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

Figure 1. An example of a Local Area Network with multiple VLANs

ATTEST VLAN Test Suites are 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 ATTEST-CTS MSTP, RSTP, LLDP, VLAN and 802.1X Veryx provides one of the most comprehensive solutions for Layer-2 conformance testing. Layer-3 IPv4, BGP4+, ISISv6, RIPng, OSPFv3, IGMPv1v2/v3, PIM-DM/SMv6, Carrier Ethernet and Layer-2 Switch Test suites such as VLAN, RSTP, STP, 802.1X and LACP 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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