

Veryx ATTEST™ RSTP Conformance Test Suite DATASHEET

Veryx ATTEST™-CTS Rapid Spanning Tree Protocol (RSTP) automated test suite provides Equipment Manufacturers and Service Providers, an easy and efficient solution for verification of RSTP implementation in Ethernet Switches. ATTEST enables significant speeding-up of testing cycles and enhanced "time-to-market".

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

Veryx has devised more than 144 test cases that comprehensively test for RSTP conformance to IEEE 802.1w-2001 and 802.1D-2004. These test cases have been grouped into 10 convenient test groups based on the IEEE specification for each category of functions.

ATTEST RSTP test cases perform conformance testing for various scenarios of active topology and RSTP port role types. Port state tests verify for slow and rapid transitions from Discarding to Forwarding states. Data Forwarding and Filtering Database test cases verify for Relay and Filtering behavior. In addition, the test cases support verification for compatibility to legacy (STP) switches and networks.

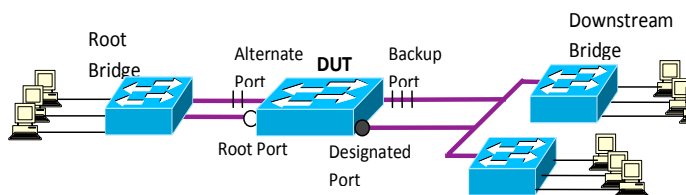


Figure 1: An example of a Bridged Local Area Network showing RSTP functionality

SPECIFICATIONS

IEEE 802.1w-2001
IEEE 802.1D™-2004

RSTP TESTS

- * BPDU Format
- * BPDU Handling
- * Active Topology
- * Port Roles
- * Port States
- * Filtering Database
- * Data Forwarding
- * Topology Change
- * STP Compatibility
- * Bridge Management

PLATFORM REQUIREMENTS

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

ATTEST RSTP Test Suites have been developed using 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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