Veryx ATTEST™ OSPFv2
Conformance Test Suite DATASHEET

Veryx ATTEST™-CTS Open Shortest Path First Protocol (Version 2) automated test suite provides Equipment Manufacturers and Service Providers an easy and efficient solution for verification of OSPFv2 implementation in routers deployable in IPv4 networks. ATTEST enables significant speeding up of testing cycles and reduces the "time-to-market".

Veryx ATTEST OSPFv2 Conformance Test Suite is designed for conformance testing of OSPFv2 protocol using ATTEST -- a powerful test framework that requires minimal time for set-up and enables efficient use of time and resources.

Veryx has devised over 350 test cases that comprehensively test for OSPF conformance. These test cases have been grouped into convenient test groups based on the IETF specifications for each category of functions.

ATTEST OSPF test cases perform conformance testing of the formation and maintenance of adjacencies over multi-access networks. Tests also verify the synchronization of link state databases, the flooding procedure and the route calculation for the OSPF spanning tree.
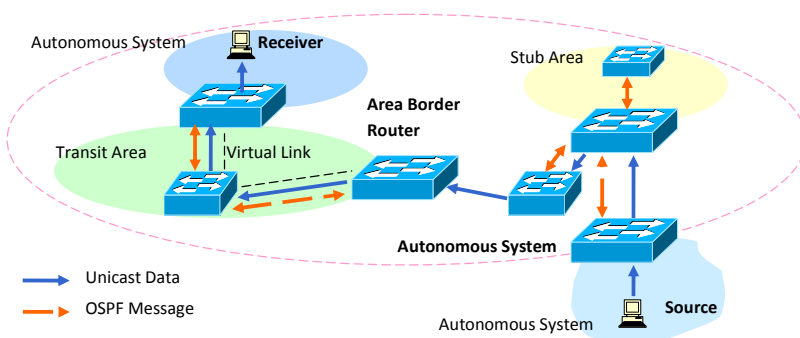
SPECIFICATIONS

IETF RFC 1850

IETF RFC 2328

OSPFv2 TESTS
* Frame Format
* Generic Packet Handling
* OSPF Management
* State Machines
* Route Calculation
* Neighbor Data Structure
* Neighbor Adjacency - Multi Access
* Link State Database
* Virtual Link
* Flooding Procedure
* LSA Generation
* LS Acknowledgement Generation

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

Figure 1. An example of a network topology supporting OSPFv2

The test cases verify the Interface State Machine and Neighbor State Machine functionality. In addition, the handling of virtual links and the generation of LSAs and LS Acknowledgements are tested for conformance with the RFCs. ATTEST OSPF test cases verify packet formats, packet processing and the configuration of OSPF parameters.

ATTEST OSPF 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 IPv4, RIP, BFD-MPLS, BGP4 and ISIS, Veryx provides one of the most comprehensive solutions for Layer-3 version 4 conformance testing. Carrier Ethernet, Layer-3 IPv6 and Layer-2 Switch Test Suites such as MSTP, RSTP, STP and VLAN are also available.

About Veryx Technologies

Veryx Technologies (formerly Net-O$_2$ 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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