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## Veryx ATTEST™ OSPFv3 Conformance Test Suite DATASHEET

**Veryx ATTESTTM-CTS Open Shortest Path First Protocol - version 3 (OSPFv3)** automated test suite provides Equipment Manufacturers and Service Providers an easy and efficient solution for verification of OSPFv3 implementation in routers deployable in IPv6 networks. ATTEST enables significant speeding up of testing cycles and reduces the "time-to-market".

Veryx ATTEST OSPFv3 Conformance Test Suite is designed for conformance testing of OSPFv3 protocol in IPV6 networks 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 405 test cases that comprehensively test for OSPFv3 conformance. These test cases have been grouped into convenient test groups based on the IETF specifications for each category of functions.

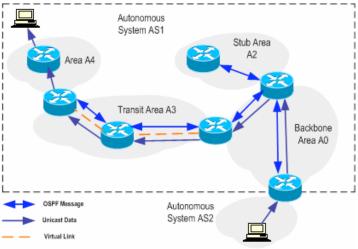


Figure 1: Example autonomous network supporting OSPF3functionality

### **SPECIFICATIONS**

IETF RFC 2740 IETF RFC 2328

#### **OSPF3 TESTS**

- \* Frame Format
- \* Generic Packet Handling
- \* OSPFv3 Management
- \* State Machines
- \* Route Calculation
- \* Neighbor Adjacency
- \* 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

OSPFv3 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. The test cases verify the Interface State Machine and Neighbor State Machine functionality. In addition, the handling of virtual links, Route calculation, generation of LSAs such as inter and intra area prefix LSAs, Link LSAs, LS Acknowledgements are tested for conformance with the RFCs. OSPFv3 test cases also verify packet formats, packet processing and the configuration of OSPF parameters along with deployment scenarios in ABR, ASBR, Stub area and Transit area.

ATTEST OSPFv3 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 ATTEST-CTS ISISv6, 6PE, RIPng, IPv6 – Basic, Advanced, Tunneling and v6BGP4+, Veryx provides one of the most comprehensive solutions for Layer-3 version 6 conformance testing. Carrier Ethernet, IPv4 and Layer-2 Switch Test Suites are also available.

#### **About Veryx Technologies**

Veryx Technologies (formerly Net-O<sub>2</sub> 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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