

IPv6 (Tunneling) Conformance Test Suite

The Net-O₂ ATTEST™ Internet Protocol version 6 automated test suite provides Equipment Manufacturers and Service Providers an easy and efficient solution for verification of IPv6 router implementation. ATTEST enables significant speeding up of testing cycles and reduces the “time-to-market”.

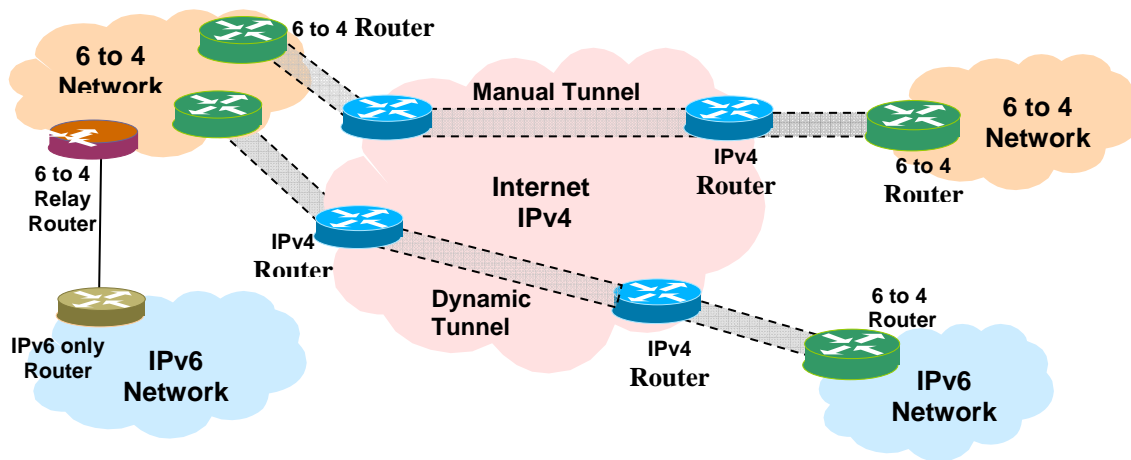


Figure 1. Example Network supporting IPv6 Tunneling

Product Overview

ATTEST IPv6 (Tunneling) Conformance Test Suite a companion product of ATTEST IPv6 Basic and Advanced, is designed for conformance testing of the tunneling features of Internet Protocol version 6 using ATTEST -- a powerful test framework that requires minimal time for set-up and enables efficient use of time and resources.

Net-O₂ has devised 88 test cases that comprehensively test for IPv6 (Tunneling) conformance. These test cases have been grouped into 8 convenient test groups based on the IETF specifications for each category of functions.

IPv6 (Tunneling) tests

- ❖ Virtual Ethernet
- ❖ Common Tunneling Mechanism
- ❖ Neighbor Discovery Over Tunnel
- ❖ Dual Stack
- ❖ Configured Tunneling
- ❖ Automatic Tunneling
- ❖ Tunneling Router Specification
- ❖ Anycast Relay Router

Specifications

- ❖ IETF RFC 2529
- ❖ IETF RFC 2893
- ❖ IETF RFC 3056
- ❖ IETF RFC 3068

ATTEST IPv6 (Tunneling) test cases verify the Neighbor Discovery Protocol over tunnel interfaces, address selection, specification of anycast 6to4 relay routers, stateless auto-configuration, mapping of Ipv6 addresses into Ipv4 virtual Link Layer addresses for 6over4 tunneling and compatibility with IPv4-only nodes.

In addition, the test cases perform conformance testing for the formation of link-local addresses, 6to4 prefix handling, system role in automatic tunneling, fragmentation and decapsulation of tunneled packets. Point-to-point tunnel checks are also handled by the test cases.

ATTEST IPv6 (Tunneling) 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 Test Suites like Advanced and Basic IPv6, MLD, IPv4, OSPF, IGMP and PIM, Net-O₂ provides one of the most comprehensive solutions for Carrier Ethernet and Layer-3 conformance testing. Layer-2 Switch Test Suites, such as MSTP, RSTP, STP and VLAN, are also available.

Minimum Platform

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

ABOUT Net-O₂ TECHNOLOGIES

Net-O₂ is an innovative communications products company that provides solutions in the Testing and Test Automation domains. The unique offerings from Net-O₂ enable customers to drastically reduce the "time-required-to-test" and enhance their "time-to-market". Net-O₂ offers a wide range of automated test suites to address IP Protocols, Layer 2 Protocols and related standards.

For more information contact:
Net-O₂ Technologies Pvt. Ltd.
E mail : info@net-o2.com
Web : <http://www.net-o2.com>

