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# Veryx ATTEST™ DHCP Relay Agent Conformance Test Suite DATASHEET

Veryx ATTEST™-CTS DCHP Relay Agent (DRA) automated test suite provides Equipment Manufacturers and Service Providers an easy and efficient solution for verification of DHCP Relay Agent implementation in routers and switches. ATTEST enables significant speeding up of testing cycles and reduces the "time-to-market".

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

Veryx has devised about 130 test cases that comprehensively test for DRA conformance. These test cases have been grouped into 5 convenient test groups based on the IETF specifications for each category of functions.

ATTEST DRA test cases verify the handling of DHCP Client and Server messages. DUT support for enabling and configuring Relay Agent options and the addition / deletion of the Relay Agent options are also tested. Tests also verify the interoperability of the DUT with BOOTP clients, and the handling of DHCP messages with respect to the various DHCP options.

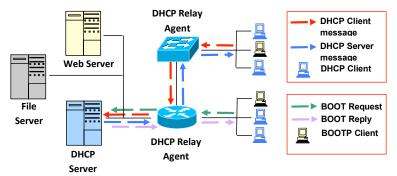


Figure 1. An example of a network showing DHCP Relay Agent functionality

## **SPECIFICATIONS**

IETF RFC 1542

IETF RFC 2131

IETF RFC 2132

IETF RFC 3046

## **DHCP RELAY AGENT TESTS**

- \* DHCP Relay Agent Option
- \* DHCP Client Message Handling
- \* DHCP Server Message Handling
- \* DHCP Options Handling
- \* BOOTP Message Handling

#### **PLATFORM REQUIREMENTS**

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

ATTEST DRA 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, OSPF, 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<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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