



Veryx ATTEST™ IPv4-IPSec Conformance Test Suite DATASHEET

Veryx ATTEST™-CTS IP Security (IPv4-IPSec) automated test suite provides a wide range of test cases to verify the security services offered by the IPSec protocols implemented in Hosts/Routers/Gateways. ATTEST enables significant speeding up of testing cycles and reduces the "time-to-market".

Veryx ATTEST IPv4-IPSec Conformance Test Suite is designed to verify the security services provided by IPSec protocols (ESP & AH) through different encapsulation modes (Tunnel & Transport) for IPv4 traffic. ATTEST-CTS IPv4-IPSec relies on ATTEST -- a powerful test framework that requires minimal time for set-up and enables efficient use of time and resources.

Veryx has devised over 107 test cases that comprehensively test for IPSec conformance. These test cases have been grouped into 8 convenient test groups based on the IETF specifications for each category of functions.

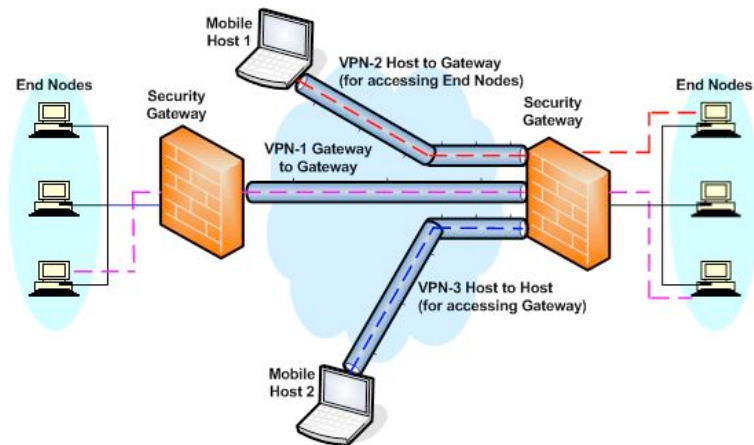


Figure 1. Typical IPSec Topology

ATTEST IPv4-IPSec test cases verify the IPSec support in Gateway to Gateway, Host to Gateway (For accessing end nodes) and Host to Host -(For accessing security gateway) scenarios. Test cases in ATTEST IPv4-IPSec test suite verify Authentication header(AH) support for both tunnel as well as Transport modes. Test cases verify the processing of inbound and Outbound IP Traffic. Test cases also include verification for Anti-Replay Support, Error handling and ESN support. Test cases in ATTEST IPv4-IPSec test suite verify Encapsulated Security Payload (ESP) for both Tunnel as well as Transport modes. Test cases verify the processing of inbound and Outbound IP traffic. Test cases include verification for Anti-Replay and ESN support. Error handling and TFC padding Handling are also verified.

ATTEST IPv4-IPSec 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 and ATTEST-XP test suites for IPv4 protocols, Veryx provides one of the widest ranges of test suites for verification of IPv4. Test suites for IPv6, Layer-2 bridging and Carrier Ethernet 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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SPECIFICATIONS

IETF RFCs – 4301, 4302, 4303, 4835, 2403, 2404, 2410, 2451, 3602, 4306, 4307, 2409, 4109

IPv4-IPSec TESTS

- * Security Protocols – ESP & AH
- * Encapsulation modes – Tunnel & Transport mode
- * Encryption algorithms – 3DES-CBC, AES-CBC & NULL
- * Authentication algorithms – HMAC SHA-1-96, HMAC MD5-96
- * Key Management – Manual & Automated (IKEv1 & IKEv2)

PLATFORM REQUIREMENTS

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

