Ready to Use Test Solutions Based on TTworkbench

Spirent TTsuite-IPv6
Analyzing the IPv6 Stack in Hosts, Routers, and IPv6 Implementations

Features
- 610 full featured tests for
  - Core functionality
  - Neighbor Discovery
  - Stateless Address Autoconfiguration
  - ICMPv6
  - IPSEC (IKEv2)
  - Router Renumbering
- Tests for IPv6 protocol behavior and syntax variations in IPv6 messages
- Exhaustive set of context parameters for flexible adaptation of IPv6 tests to the IPv6 implementation under test
- Fully automated test execution
- Platform-independent test execution
- Test tracing on different levels of detail
- Summary of test results
- Test definition and documentation in the standardized test notation TTCN-3

Applications
- All applications using IPv6 like Hosts/Routers with IPv6 stack, IPv6 implementations, VoIP, etc.
  - Telnet/SSH/VNC
  - WWW
  - Email
  - FTP
  - IRC
  - VoIP/Videoconferencing/Streaming
  - Fileserver/Webserver/FTPServer

Benefits
- Standards-based testing according to IPv6 specifications
- Fast and simple test execution and analysis
- Repeatability of tests and full support of test automation
- Platform independence and rapid integration in existing test environments
- Flexibility through usage of the constantly evolving standardized test notation TTCN-3

Reference platforms
- Java 8
- Microsoft Windows 7/8/10
- Linux (GTK2, x86-32, x86-64)
Standards

- ETSI TS 102 514 v 2.1.1 IPv6 Core: Requirements Catalogue
- ETSI TS 102 515 v 1.1.2 IPv6 Core: Conformance TSS & TP
- ETSI TS 102 516 v 3.1.1 IPv6 Core: Conformance Test Suite
- ETSI TS 102 558 v 1.1.1 IPv6 Security: Requirements Catalogue
- ETSI TS 102 593 v 1.2.0 IPv6 Security: Conformance TSS & TP
- ETSI TS 102 594 v 1.2.0 IPv6 Security: Conformance Test Suite
- ETSI TS 102 559 v 1.1.1 IPv6 Mobility: Requirements Catalogue
- ETSI TS 102 595 v 1.2.0 IPv6 Mobility: Conformance TSS & TP
- ETSI TS 102 596 v 1.2.0 IPv6 Mobility: Conformance Test Suite
- ETSI TS 102 599 v 1.1.1 IPv6 to IPv4 Transitioning: Requirements Catalogue
- ETSI TS 102 518 v 1.1.1 IPv6 to IPv4 Transitioning: Conformance TSS & TP
- ETSI TS 102 751 v 1.1.1 IPv6 to IPv4 Transitioning: Conformance Test Suite
- RFC 1981, Path MTU Discovery for IP version 6, August 1996
- RFC 2461, Neighbor Discovery for IP Version 6 (IPv6), December 1998
- RFC 2462, IPv6 Stateless Address Autoconfiguration, December 1998
- RFC 2484, Default Address Selection for Internet Protocol version 6 (IPv6), February 2003
- RFC 2529, Transmission of IPv6 over IPv4 Domains without Explicit Tunnels, March 1999
- RFC 2765, Stateless IP/ICMP Translation Algorithm (SIIT), February 2000
- RFC 3056, Connection of IPv6 Domains via IPv4 Clouds, February 2001
- RFC 4213, Basic Transition Mechanisms for IPv6 Hosts and Routers, October 2005
- RFC 3775, Mobility Support in IPv6 (MIPv6), June 2004
- RFC 3776, Using IPsec to Protect Mobile IPv6 Signalling between Mobile Nodes and Home Agents, June 2004
- RFC 4068, Fast Handovers for Mobile IPv6, July 2005
- RFC 2473, Generic Packet Tunnelling in IPv6, December 1998
- RFC 4301, Security Architecture for the Internet Protocol, December 2005
- RFC 4302, IP Authentication Header, December 2005
- RFC 4303, IP Encapsulating Security Payload (ESP), December 2005
- RFC 4305, Cryptographic Algorithm Implementation Requirements for Encapsulating Security Payload (ESP) and Authentication Header (AH), December 2005
- RFC 4306, Internet Key Exchange (IKEv2) Protocol, December 2005
- RFC 2405, The ESP DES-CBC Cipher Algorithm With Explicit IV, November 1998
- ETSI ES 201 873-1 TTCN-3 Core Language V4.11, June 2009