



Introduction of TAHI Project

Yokogawa Electric Corporation, University of Tokyo and YDC launched TAHI Project in September 1998 as a joint effort with the objectives of developing and providing verification technology for IPv6.

In the earlier phase TAHI project had strong relationship with KAME Project, who had been developing and providing IPv6 protocol stack for BSD like OS, to improve their implementation. Recently TAHI Project is focusing on industrial IPv6 deployment. Therefore TAHI Project is working with IPv6 Ready Logo Program, operated by IPv6 Forum, cooperating worldwide partners represented by UNH-IOL.

The activities of TAHI Project in more concrete are hereinafter. All the fruits of TAHI Project are available FREE.

- a) Developing conformance test specifications and test tools.
- b) Developing interoperability test scenarios.
- c) Holding annual face to face interoperability test event.

a) Developing conformance test specifications and test tools.

TAHI Project have been developing conformance test specification and test tools. Today, a great variety of functionalities are covered as shown in Appendix B - coverage. Some of them are contributed to IPv6 Ready Logo Program to develop unified test specification. Large part of current activities are cooperated with IPv6 Ready Logo Program and publicized as a part of it.

The test tools, which TAHI Project provides, consist of two parts as described in Appendix A-Test Tool Structure.

b) Developing interoperability test scenarios.

TAHI Projects have been developing interoperability test scenarios as well as conformance test specifications. Large part of current activities are cooperated with IPv6 Ready Logo Program and publicized as a part of it.

c) Holding annual face to face interoperability test event.

TAHI Projects have been holding face to face interoperability test event. Also TAHI Project has been supporting other international scale face to face interoperability test events (e.g., Connectathon, ETSI-Plugtests) as a test coordinators since 2000.

The 9th TAHI Test Event is scheduled on May 14th to 18th, 2007 in Japan.

APPENDIX A – Test Tool Structure

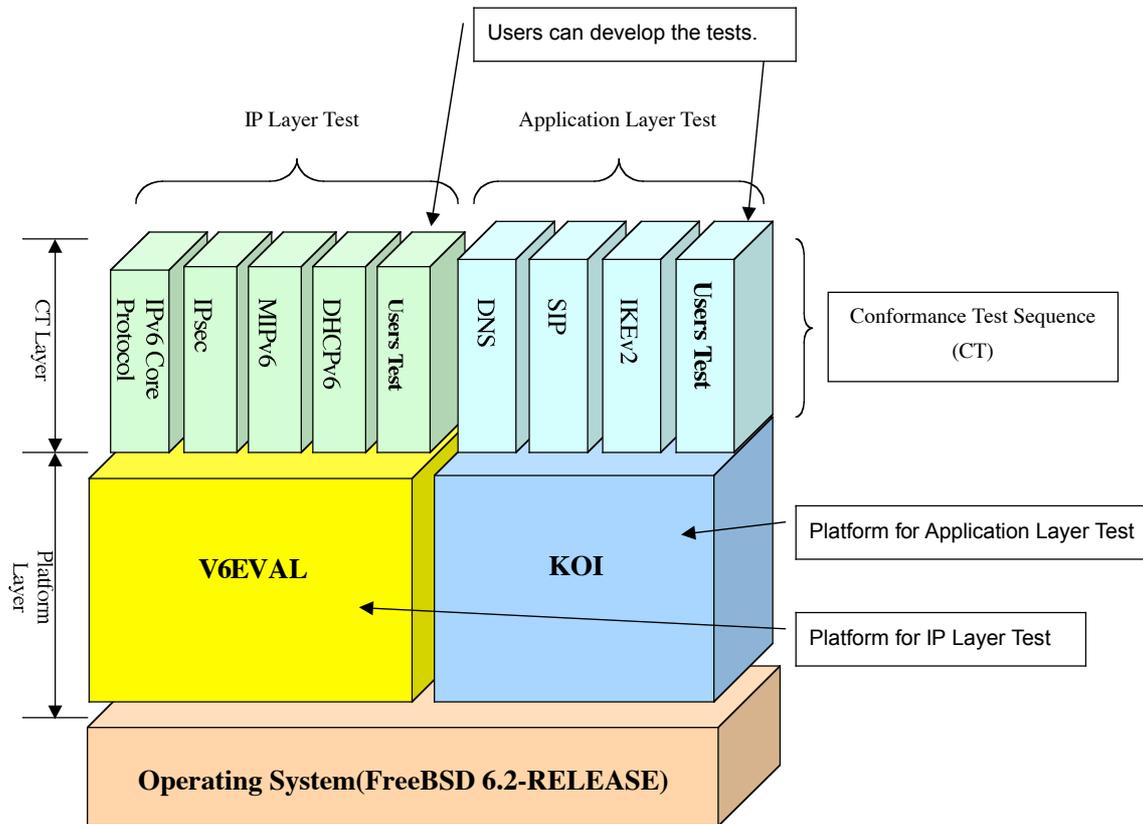


Fig. 1 TAHI Test Tool Component Chart

- TAHI Test Tool consists of two layers, Platform Layer and CT Layer.
- Platform Layer consists of two parts, V6EVAL and KOI.
- V6EVAL is designed to develop tests for IP layer protocol test enabling creation of Ethernet frame accord to test sequence requirement. It is not good for protocol using TCP nor TLS.
- KOI is designed to develop tests for Application Layer protocol test, using sockets API of operating system it works on. It is good for protocol using TCP or TLS.
- V6EVAL and KOI are designed to complement each other, therefore CT can use both V6EVAL and KOI function in a test sequence.
- Officially, TAHI Test Tool works on FreeBSD 6.2-RELEASE.



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APPENDIX B - Coverage

This is the list of RFCs, which are covered by conformance test tool of TAHI Project.

IPv6 Core Protocol:

- RFC 2460(IPv6 Spec)
- RFC 2461(ND)¹
- RFC 2462(Stateless Addr. autoconf)²
- RFC 2463(ICMPv3)³
- RFC 1981(PMTUD)

IPsec

- RFC 2404(HMAC-SHA-1-96)
- RFC 2410(NULL-Encryption)
- RFC 2451(CBC Mode)
- RFC 3566(AES-XCBC-MAC-96)
- RFC 3602(AES-CBC)
- RFC 3686(Counter Mode)
- RFC 4301(Security Architecture)
- RFC 4303(ESP)
- RFC 4305(Implementation Req.)

MIPv6:

- RFC 3775(MIPv6)
- RFC 3776(IPsec for MIPv6)

NEMO:

- RFC 3963(NEMO)

DHCPv6:

- RFC 3315(DHCPv6)
- RFC 3315(DHCPv6)
- RFC 3646(DNS Configuration)
- RFC 3736(Stateless DHCPv6)

IKEv1:

- RFC 2406(ESP)
- RFC 2407(ISAKMP)
- RFC 2408(Key Mng. For ISAKMP)
- RFC 2409(IKE)
- RFC 3526(MODP D.H. Grp for IKE)
- RFC 4109(Algorithms for IKEv1)

SIP:

- RFC 3261(SIP)
- RFC 3264(Offer/Answer Model)
- RFC 4566(SDP)
- RFC 2617(HTTP Digest Auth)
- RFC 3665(SIP Basic Call Flow)

DNS:

- RFC 1034(DNS Concepts)
- RFC 1035(DNS Impl. And Spec.)
- RFC 1123(Host Requirement)
- RFC 1995(Zone Transfer)
- RFC 1996(DNS Notify)
- RFC 2181(DNS Clarification)
- RFC 2308(DNS NCACHE)
- RFC 2671(EDNS0)
- RFC 2782(DNS SRV)
- RFC 3401(DDDS)
- RFC 3402(DDDS Algorithm)
- RFC 3403(DDDS Database)
- RFC 3404(DDDS URI)
- RFC 3405(DDDS URI-ARPA)
- RFC 3425(Obsoleting IQUERY)
- RFC 3596(DNS extension for IPv6)

¹ will be obsoleted soon
² will be obsoleted soon
³ obsoleted by RFC4443