USGv6 Test Selection Tables*

IPsec-v3

F16-Conformance: IPsec-v3-v1.3

Applicable Profile: NIST SP 500-267 A profile for IPv6 in the U.S. Government - Version 1.0, July 2008.

Configuration Option: IPsec-v3

Test Specification Id:

- [IPsec-Conformance] IPv6 Ready Logo Phase-2 Test Specification IPsec, Version 1.10.0, May 31, 2010, [editor: IPv6 Ready Logo].

Reference:

- [RFC4301] Kent, S. and K. Seo, "Security Architecture for the Internet Protocol", RFC 4301, December 2005.
- [RFC4303] Kent, S., "IP Encapsulating Security Payload (ESP)", RFC 4303, December 2005.

Device Type Definitions:

- **ROUTER:** A device capable of forwarding packets.
- **HOST:** A device which is not a ROUTER.
- **End-Node:** Both HOSTs and ROUTERs can be End-Nodes.
- **SGW:** A SGW is a specialized ROUTER.
  * NOTE: if the Device Under Test is a ROUTER and it supports Tunnel Mode, it should be tested as a SGW.

IPsec-v3 Test Check List				
Reference	**Test Specification Id**	**Test Number**	**Device Type**	**Passed**
RFC 4301, 4303	IPsecv3-Conformance	5.1.1. Select SPD	End-Node	
RFC 4301, 4303	IPsecv3-Conformance	5.1.2. Select SPD (ICMP Type)	End-Node	
RFC 4301, 4303	IPsecv3-Conformance	5.1.3. Sequence Number Increment	End-Node	
RFC 4301, 4303	IPsecv3-Conformance	5.1.4. Packet Too Big Reception	End-Node	
RFC 4301, 4303	IPsecv3-Conformance	5.1.5(A). Receipt of No Next Header	End-Node	
RFC 4301, 4303	IPsecv3-Conformance	5.1.6. Bypass Policy	End-Node	
RFC 4301, 4303	IPsecv3-Conformance	5.1.7. Discard Policy	End-Node	
RFC 4301, 4303	IPsecv3-Conformance	5.1.8. Transport Mode Padding	End-Node	
RFC 4301, 4303	IPsecv3-Conformance	5.1.10. Non-Registered SPI	End-Node	
RFC 4301, 4303	IPsecv3-Conformance	5.1.11. ICV	End-Node	
RFC 4301, 4303	IPsecv3-Conformance	5.3.1. Tunnel Mode with End-Node	End-Node	
RFC 4301, 4303	IPsecv3-Conformance	5.3.2. Tunnel Mode with SGW	End-Node	
RFC 4301, 4303	IPsecv3-Conformance	5.3.3. Select SPD for 2 End-Nodes behind 1 SGW	End-Node	
RFC 4301, 4303	IPsecv3-Conformance	5.3.4. Tunnel Mode Padding	End-Node	
RFC 4301, 4303	IPsecv3-Conformance	6.1.1. Select SPD	SGW	
RFC 4301, 4303	IPsecv3-Conformance	6.1.3. Select SPD for 2 End-Nodes behind 1 SGW	SGW	
RFC 4301, 4303	IPsecv3-Conformance	6.1.4. Sequence Number Increment	SGW	
RFC 4301, 4303	IPsecv3-Conformance	6.1.5. Packet Too Big Transmission	SGW	
RFC 4301, 4303	IPsecv3-Conformance	6.1.6. Packet Too Big Forwarding (Unknown Original End-Node)	SGW	
RFC 4301, 4303	IPsecv3-Conformance	6.1.7(A). Receipt of No Next Header	SGW	

RFC 4301, 4303	IPsecv3-Conformance	6.1.8. Bypass Policy	SGW	
RFC 4301, 4303	IPsecv3-Conformance	6.1.9. Discard Policy	SGW	
RFC 4301, 4303	IPsecv3-Conformance	6.1.10. Tunnel Mode Padding	SGW	
RFC 4301, 4303	IPsecv3-Conformance	6.1.12. Non-Registered SPI	SGW	
RFC 4301, 4303	IPsecv3-Conformance	6.1.13. ICV	SGW	
RFC 4301, 4303	IPsecv3-Conformance	6.1.14. Tunnel Mode with End-Node	SGW	

NOTE: The following tests have been omitted from the USGv6 Test Program for the IPv6 Basic Requirements. These tests are considered SHOULDs as defined by the IETF.

Not Required			
Reference	**Test Specification Id**	**Test Number**	**Device Type**
RFC 4301, 4303	IPsecv3-Conformance	5.1.5(B). Recept of No Next Header	End-Node
RFC 4301, 4303	IPsecv3-Conformance	5.1.9. Transport Mode TFC Padding	End-Node
RFC 4301, 4303	IPsecv3-Conformance	5.3.5. Tunnel Mode TFC Padding	End-Node
RFC 4301, 4303	IPsecv3-Conformance	6.1.2. Select SPD (ICMP Type)	SGW
RFC 4301, 4303	IPsecv3-Conformance	6.1.7(B). Receipt of No Next Header	SGW
RFC 4301, 4303	IPsecv3-Conformance	6.1.11. TFC Padding	SGW

* The objective of this test selection sheet is to provide a reference for available test specifications that identifies tests applicable to the USGv6 IPv6 Profile.