# 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.